APPROXIMATELY 150 SUPERVISORS AND COORDINATORS OF PUBLIC SCHOOL VOCATIONAL EDUCATION PROGRAMS IN CALIFORNIA PARTICIPATED IN TWO CONFERENCES TO CONSIDER THE METHODS OF LABOR FORCE ENUMERATION, THE ASPECTS OF THE LABOR SITUATION MOST PERTIENT TO CHANGES IN VOCATIONAL EDUCATION, THE PROBLEMS OF WORKING WITH MANPOWER DATA, AND THE SALIENT FEATURES OF PROGRAMS ESPECIALLY RESPONSIVE TO CHANGES IN THE MANPOWER AND EMPLOYMENT SITUATION. SPEECHES PRESENTED WERE—(1) "EMPLOYMENT AND UNEMPLOYMENT—CONCEPTS OF MEASUREMENT" BY M. BARLOW, (2) "MANPOWER—OUTLOOK AND OUTCOME" BY W. REDMOND, (3) "MANPOWER—OUTLOOK AND OUTCOME" BY G. PITTS, (4) "LABOR AND MARKET ANALYSIS FOR VOCATIONAL EDUCATION" BY D. MAYALL, (5) "OFFICE OCCUPATIONS LABORATORY" BY V. CLAPP, (6) "PRECISION LENS GRINDING AT CITRUS COLLEGE" BY G. GULBERG, (7) "VALLEY VOCATIONAL CENTER" BY T. JOHNSON, (8) "INSTRUCTIONAL MATERIALS AVAILABLE" BY K. CUTLER, (9) "THE REVOLUTION IN AGRICULTURE" BY J. MAYNARD, (10) "BUSINESS EDUCATION" BY J. MCDANIEL, AND (11) "OFFICE EDUCATION" BY T. NEFT. TWO WORKSHOPS DISCUSSED FEATURES OF SUCCESSFUL PROGRAMS AND PROGRAM IMPROVEMENT. A PANEL AND A SYMPOSIUM ON THE MANPOWER DEVELOPMENT AND TRAINING ACT (MDTA) WERE TITLED—(1) "MDTA—THE STATE OF THE ART" AND (2) "MDTA—PROGRAMS, PROGRESS, AND PROGNOSIS." SMALL GROUP MEETINGS CONSIDERED MANPOWER MEANINGS FOR VOCATIONAL EDUCATION. SUMMARIES OF THE SMALL GROUP AND WORKSHOP PROCEEDINGS, TRANSCRIPTS OF QUESTION-ANSWER SESSIONS, OUTLINES OF SYMPOSIUM PRESENTATIONS, THE CONFERENCE AGENDAS, AND A LIST OF PARTICIPANTS ARE INCLUDED. (PS)
LEADERSHIP FOR VOCATIONAL
EDUCATION IN CALIFORNIA
THEORY AND PRACTICE OF
PROGRAM DEVELOPMENT

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Summary Report of the
COASTAL, CENTRAL, & SOUTHERN
REGIONAL CONFERENCES
January-February, 1966

DIVISION OF VOCATIONAL EDUCATION
UNIVERSITY OF CALIFORNIA
IN COOPERATION WITH
THE VOCATIONAL EDUCATION SERVICES
CALIFORNIA STATE DEPARTMENT OF EDUCATION
STATEMENT OF PURPOSE

CALLED BY:

Vocational Education Section of the California State Department of Education
   Wesley P. Smith, Director

DIRECTED BY:

Division of Vocational Education
   University of California
   Melvin L. Barlow, Director

REASON:

To provide regularly scheduled study meetings of supervisors and coordinators of public school vocational education programs in California.

PURPOSES:

1. To study current leadership practices.
2. To study vocational education programs as related to national, state, and local requirements.
MANPOWER
AND
EMPLOYMENT

Summary Report of the
COASTAL, CENTRAL, & SOUTHERN
REGIONAL CONFERENCES
January-February, 1966
Manpower and Employment is the topic for consideration in the summary materials enclosed in this report. Since the problem of effective manpower utilization in a period of continual technological change requires a fluid labor force, and a fluid labor force is dependent upon a sensitive and adequate system of education and training, an understanding of manpower and employment is central to the administration of vocational education. The administrators at the Fresno and Anaheim conferences, in focusing on their role in the changing manpower situation, approached the vast area of manpower and employment through their consideration of (1) the methods of labor force enumeration, (2) the aspects of the labor situation most pertinent to changes in vocational education, (3) the problems of working with manpower data, and (4) the salient features of programs especially responsive to changes in the manpower and employment situation.

Dr. Barlow opened the conference by presenting the rationale for labor force enumeration; he also outlined an explanation of the process of household enumeration, and in so doing gave us a much better idea of what lies behind the complicated tables of figures that so often come to our desks.

The State Department of Employment was represented by William Redmond, Gaylord F. Pitts, and Donald Mayall. Mr. Redmond presented the conference with a survey of the labor market situation and em-
Leadership for Vocational Education in California

phasized the dominant trends pertinent to vocational education. Gaylord F. Pitts related his work as a labor market analyst to the special characteristics of the employment situation in Southern California. Donald Mayall described the labor market analysis program of the Department of Employment, a program of special interest to vocational educators. These three addresses give us a picture of the vital services that the Department of Employment can provide for vocational educators.

In the small group discussions which followed, the participants investigated job placement, program development and a number of other problematical areas. The report of these discussions, "Manpower Meanings for Vocational Education," records the views of the participants on these related topics.

Both the southern and the northern regions explored aspects of programs they felt were especially adaptive to the needs of the labor force. The northern regions took a look at some of their successful programs and lifted out for closer scrutiny those elements which might be advanced for a "Design for Excellence." The southern region investigated the exemplary features of program development through special presentations. Both approaches stressed a desire for the best and offered some ideas about what makes the best possible.

Finally, both conferences marked the Manpower Development and Training Act for special consideration. By studying the reports presented here, the reader may readily appraise the programs and the progress of MDTA at this stage of its development in California.
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Counting the employed and the unemployed is a very difficult task. The numbers are large, the population is mobile, and the decisions about what kinds of questions should be asked to get the desired information are complex. We might agree, however, that we could inquire about a person's ability to work or his willingness to work. In fact, these questions are somewhat traditional and even have a long history reflecting public attitudes about the employed. English experience concerning the numbers of employed persons in the 1600s reflects the concepts of ability and willingness. Our own Employment Act of 1946 reads in part, "for those able, willing, and seeking work."

Prior to 1940, the "gainful worker" concept was used to obtain occupational data. It was effective, but did not reflect unemployment in any way. Absent in the concept was a time reference in which activity was to be measured. This led to the introduction of the "Activity Concept," which does not inquire about willingness or ability, but instead gives us information about activities of people such as those:

- in the labor force
- not in the labor force

1 Adapted from Seymour L. Wolfbein, Employment and Unemployment in the United States, Science Research Associates, Inc., Chicago, 1964, pp. 1-64. This reference is a MUST for vocational educators. Its comprehensive treatment of the topic provides many guidelines useful in contemporary vocational education problems.
To the Activity Concept has been applied a time reference known as the Survey Week. The survey week is the week in each month that contains the 12th of the month.

All current labor force information is based on people's activities during one specified week's time.

The survey is made by the Census Bureau. The 3,100 basic governmental units (counties, parishes, etc.) were grouped into 1,891 primary sampling units, and these in turn were grouped into 357 strata which are the basic sampling areas. About 42,000 households are included in the sample and these are moved into and out of the sample according to a schedule so that during any one sampling period about 35,000 households are actually visited. The number of persons (actual head count) in any particular category, multiplied by a factor, provides the statistical data for the category and for the country as a whole.

Any sampling technique will hold the possibility of error, and this situation is appropriately noted in the enumeration techniques. For example, suppose that a particular month's unemployment figure was 3,500,000. From tables for these data one standard error for unemployment is 100,000. "This means that the chances are about 2 out of 3 that the true figure is 3,500,000 (our sample estimate) plus or minus 100,000--or somewhere in the interval 3,400,000 to 3,600,000."2

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2 Ibid., p. 58.
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This process is a bit more involved and complicated than indicated above, but you can depend that the possibilities of error are known and that the best statistical procedures are applied so that our estimates of employment and unemployment are reasonably sound. Therefore we should have no fear of accepting such information in planning for vocational programs.

Certain basic definitions must be introduced into the procedure. First, let us consider the employed persons. In this area we have two concepts, (1) active employed and (2) inactive employed.

An active employed person is one who works at least one hour for pay during the survey week, either in a part-time, full-time, temporary, or regular year-round job. In addition, persons working without pay in a family enterprise for at least 15 hours during the survey week are counted as active employed.

An inactive employed person is one who has a job but was not at work during the survey week because he was on vacation (paid or unpaid), temporarily ill, engaged in a labor-management dispute, prevented from working by bad weather, or taking time off for personal reasons.

The second consideration concerned with unemployed persons. As in the case of the employed, the concepts of (1) active unemployed and (2) inactive unemployed are used.
An active unemployed person is one who is actively seeking work during the survey week. Persons who fall into this group are experienced workers who have recently lost their jobs, new graduates in search of their first job, housewives searching for employment, and retired workers looking for additional income. It is important to note that all are making an active effort to secure employment.

The inactive unemployed consists of those persons who, when interviewed during the survey week, reported that they had no job and (a) were waiting to be called back to a job from which they had been laid off, (b) would have been actively seeking work except for temporary illness, (c) would have been actively seeking work except that there was no work in their line available in their community, or (d) were waiting to start a new job to begin within 30 days.

When reference is made to the labor force it must be recalled that:

\[
\text{LABOR FORCE} = \text{Employed} + \text{Unemployed}
\]

It is important to note again, in putting these concepts to work, that every person in a visited household is accounted for, but a person is counted only once. Persons who are not in the labor force consist mostly of homemakers, students, and retired persons.
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There are, however, certain groups that are not counted. These are (1) persons under 14 years of age, (2) persons in institutions, and (3) members of the armed forces. "With these three groups excluded, the population enumerated each month therefore represents the non-institutional civilian population fourteen years of age and over."  

The data thus obtained are reported in the Employment and Earnings Monthly Report on the Labor Force, a publication of the U.S. Department of Labor. [Note: Prior to February, 1966, the data were reported in the Monthly Report on the Labor Force.] The publication is available from the Superintendent of Documents, Governmental Printing Office, Washington, D.C. 20402; the subscription price is $7.00 per year.

With a little effort and a small amount of money, any vocational educator can have in his possession current information about employment and unemployment. In addition, many other special publications are available from the Department of Labor or the Superintendent of Documents. These data, together with state and local publications, provide ready access to the nature of the labor force. Other data are available concerning employment and unemployment such as "establishment reporting," which is not a part of the household survey, and information obtained from social security programs. In addition, business firms, banks, chambers of commerce, and other groups frequently provide useful information related to a facet of the total labor force problem.

Ibid., p. 33.
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This presentation has included only a very brief introduction into the general problem of employment and unemployment. In order to upgrade and update one's information about the American labor force, its patterns, trends, demographic setting, and projections, one should consult the Wolfbein book, which is excellent in its treatment of these topics. In addition, Wolfbein discusses changing industrial and occupational patterns, changing geographic patterns, the dynamics of the American labor force, and the nature and conditions of unemployment.

This is part of the theory so essential for leadership for vocational education in California.
QUESTIONS TO DR. BARLOW

Question: How are the families to be enumerated chosen?
Answer: By random sample. There are 357 sampling areas; 100 families in each area are chosen. Each household is enumerated.

Question: Do they still use the sample from the 1960 census?
Answer: Yes, but it is constantly being updated.

Question: What percent of the total national families is involved?
Answer: About one in every 150,000 people.

Question: What is meant by "seasonally adjusted"?
Answer: Seasonal variation of a job. There may have been more people unemployed in one month of the year due to weather (being snowed in, etc.). An adjustment is made for this.

Question: Is there any adjustment made for "moonlighting"?
Answer: No. A person is only counted ONE time. There is no real way of telling HOW MANY jobs an individual has, only whether or not he is employed. (Note: Mr. Pitts added that there is a survey of multiple job holdings; about 5% of the labor force is involved.)

Question: What are the current statistics on mobility of families?
Answer: There are no real statistics on this.

Question: If the figures were limited to the 16-65 age bracket, wouldn't they be of more value?
Answer: I don't think so. The idea is to find out what's happening in a household.
Question: Is a seventeen year-old who is going to school "unemployed"?

Answer: Students are not counted in the labor force. It is possible, though, that some students may have been in the labor force and dropped out, and would thus be counted. Also, some do get into the labor force by working vacations.

Question: Who is the publisher of Wolfbein's book?


Question: What about a retired person who works an irregular number of hours for the city parks, for example? Is he counted as employed?

Answer: If he was working one hour a week, he would be counted.

Question: What is the definition of "actively seeking employment"?

Answer: If a person is actively seeking work in any way, shape, or form during our sampling period, he is counted in this category.
MANPOWER: OUTLOOK
and OUTCOME

William Redmond
Gaylord F. Pitts
Donald H. Mayall
William Redmond was born in St. Louis, Missouri, and attended public schools in Kansas City, Missouri.

He majored in Public Personnel Administration at the University of Southern California, from which he graduated magna cum laude with a Bachelor of Science degree.

He spent six years in the military service, and was released in 1945 as a First Lieutenant.

He was for one year Administrative Assistant in Germany for the United Nations Relief and Rehabilitation Administration.

Since 1947 he has been on the staff of the California State Employment Service, where he has served successively in the following capacities: Interviewer, Counselor, Occupational Analyst, Continued Claims Supervisor, Claims Supervisor, Alternate Local Office Manager, Benefit Determination Guide Specialist, Supervisor Benefit Payment Technical Section, and Deputy Chief of Employment Service. He was appointed to his present position of Chief of Employment Service in January, 1963.
This is the second time in less than a year that I have had the pleasure of keynoting a Vocational Education Conference. I tell you this just to warn any who heard me in Long Beach last March that they will not hear anything new. Our labor market is dynamic, true, but not so much so that major changes in outlook and outcome normally occur in less than a year.

You in Vocational Education and we in the Employment Service are basically concerned with the same goal -- the maximum development and utilization of the work force. Realizing that goal will be difficult, at best, and will require close cooperation and effective planning between those in Vocational Education and Employment Service -- cooperation and planning conceived and implemented as part of an active manpower policy for the State of California.

Perhaps as never before, there is an awareness of the need for raising the skill level and the technical capability of our labor force. We must recognize that investment in education and training is investment in our most important asset -- our human resources, that in the 1960s, such investment has at least as high a priority as investment in new plants and equipment. We now know that innovation -- invention and creative effort leading to increased employment opportunities -- turns on such investment.

It is proper, then, that you in Vocational Education and we in the Employment Service should work closely together in trying to
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realize our mutual goal -- the maximum development and utilization of the work force -- each doing that for which he is best equipped.

Dr. Bruce Reinhart, in inviting me here, asked me to give you "a survey of the manpower situation with a projection of changes which affect vocational education today and in the near future." That is a pretty big order. In order to determine vocational training needs so that you can shape your curriculums accordingly, you need specific information pinpointed to a given community. For this type of specific information, you should work with the nearest office of the California State Employment Service. For this morning, however, I think that the best we can hope to accomplish is to give you some understanding of the dynamics of our labor force in California. Let me begin by reviewing some basic background facts about our labor force.

It is now three years since Governor Brown declared a state holiday to celebrate California's becoming the biggest state. The growth which spurred us into the number one spot was properly a cause for celebration, but it was also cause for sober reflection because growth has its attendant problems.

Since April, 1960, our seasonally adjusted rate of unemployment has been fairly consistently above the national average. In November of 1965, California's seasonally adjusted unemployment rate was 5.6%. This represented a welcome decline from the 6% figure about which our unemployment rate has hovered since 1960. But, for the same month of November the national rate had declined to 4.2%. So we are still well above the national average.

Why is this? Well, one answer could be that the economy is not
producing new jobs fast enough to accommodate the new entrants to the labor market. But this could be phrased another way. The growth of California's population and labor force has outstripped the growth of the economy. The rapidity of this population growth is illustrated by data from the Population Research Section of the State Department of Finance. From 1960 to 1964, California's population increased from 15,900,000 to 18,300,000 - an increase of 2,400,000 or 600,000 persons per year. That breaks down further to 1,700 people per day, or just over one person a minute. In the 1960s, it is expected that the population will increase by more than six million. At the end of this decade, the population of California should exceed 22 million, and by 1975 be near 26 million.

But, despite the continually increasing population and the continually increasing numbers of unemployed, employers are having difficulty finding qualified workers for many of their job openings. Why this apparent paradox? Let's analyze some of the supply and demand factors of California's labor market.

I have referred to California's growth. An important aspect of this growth is that two-thirds of it came by migration. A substantial part of the migration to California was not well prepared to earn a living, judging by its education, skill, or work experience. The number of people aged 25 and over who lack an eighth grade education increased to 1,300,000 in 1960 - an increase of 17% between 1950 and 1960. Since California has compulsory school attendance through high school, this growth must have been largely from migration.
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Another factor affecting California's labor market relates to age groups. As is the case in the country as a whole, the age distribution of California's population has been shifting, will continue to shift in a way which creates some easily identified manpower problems. The age group 18 to 25 has been expanding rapidly and will continue to do so through this decade. At the same time, the age groups in which we find most of our skilled, experienced labor force have been growing less quickly, and will constitute a continually smaller proportion of our population. The alternatives posed by this situation are:

1. Employers continue to bypass the younger worker, thus leading to even higher unemployment rates among this age group and to even more severe labor shortages in many communities; or

2. Employers will hire more younger workers, even though many of these workers lack skills and knowledges, and attempt on-the-job training. This could lead to lower productivity, at least initially, which could affect our rate of economic growth; or

3. We will attempt, through gigantic training and retraining programs, to give these younger workers the skills and knowledge which they need to make them competitive on today's and tomorrow's labor market.

I think that the Vocational Education Act of 1963, the Manpower Development and Training Act, and others tell us that we are embarked on the third alternative. Still another factor complicating the supply and demand picture relates to the employment and unemployment problems of minorities in the labor force. Last August, we witnessed a vicious explosion in the Watts area of Los Angeles. The report of the McCone Commission, which investigated the Watts riot, tells us that the lack
Lasd'orship for Vocational Education in California

of jobs was one of the primary factors behind the riot. The report warns, furthermore, that unless the situation is improved, "the August riot may seem by comparison to be only a curtain-raiser for what could blow up one day in the future."

Unemployment among nonwhite males, according to the 1960 census, was almost twice that for white males, and the figures for nonwhite females were not much better. And for nonwhite youth age 18-19, with an unemployment rate of 22%, the picture was bleak indeed. To some extent, these disproportionate unemployment rates among nonwhites can be traced to lingering discrimination in employment. However, racial bars to employment are being lowered on all fronts, with many employers actively seeking qualified minority workers. But qualified they must be and there's the rub. The supply of qualified minority workers is about exhausted and what we have left are those without skills, without abilities, frequently without education. We are reaping the effects of 100 years of persistent discrimination - 100 years which have left their toll in the form of low educational attainment, low aspiration and a concentration of nonwhites in low skilled, menial occupations. For example, in 1960, 80% of Negroes worked in semiskilled, unskilled, service and farm occupations as opposed to only 35% of whites. On the educational side of the picture, the 1960 census showed that 174,200 or 27% of all nonwhites over 25 in California have completed fewer than 8 years of school. This compares with a white percentage of 13.7%. And these statistics are equally applicable, if not more so, to Mexican-Americans.
Two other groups in our labor market deserve special mention -- the handicapped worker and the older worker. I do not have any figures on rates of unemployment among handicapped. However, all available information forces a conclusion that they are very disproportionately represented among the unemployed. Older workers, on the other hand, do not have a disproportionately high unemployment rate. However, the average length of unemployment of the older worker is much longer than his younger counterpart in the labor market. Accordingly, we find that the older worker is disproportionately represented among the long-term unemployed.

These, then, are some of the people in our labor force. What is the significance to us in the Employment Service and to you in Vocational Education of the information I have given you? To me, the message is unmistakably clear - the poultice must be applied where it hurts the most. If our mutual goal is the maximum development and utilization of the work force, we must concentrate on those groups which most need development before they can be fully utilized.

Now that we have discussed people, what are the factors with which they have to contend? Let us first consider automation.

The terms "technological change" and "automation" have won prominent places in our national vocabulary in the past decade. They have been the subject of much discussion, debate and concern, as reflected in Congressional hearings, union negotiations, and special reports to the President and to our Governor. Much of the comment has been directed toward the problems arising out of technological
change - obsolescent skills, job displacement, retraining, and other symptoms of occupational maladjustment.

A critical aspect of the problem is the rapidity with which technological change is being applied. Substantial increases in expenditures for new plants and equipment and on scientific research in the post-World War II period resulted in an acceleration in the rate of technological advance. During the 1950s alone, new plant and equipment expenditures in the nation totaled the astronomical sum of $300 billion. As a result of this regeneration of American industry, the nation has acquired a more efficient capacity to produce. Between 1947 and 1963, productivity in the non-agricultural sector of the economy increased by 2.4% a year, compared with a long-term rise of 2.1%; in agriculture, productivity advanced about 6% a year.

At the same time, this huge flow of investment continues to result in mass obsolescence of existing plants and equipment, outmoding of existing techniques and methods of production, and the development of new and substitute materials. Use of new materials and the emergence of new products result in a significant change in occupational composition of the work force and require new skills to be developed. These economic changes have had significant implications for the industrial and occupational structure of the nation. Let's examine some of these implications:

1. Some occupations have become obsolete and are tending to disappear. These are usually the simpler types that involve processes replaced by automation, as well as the lower levels of supervision and management.
Leadership for Vocational Education in California

2. Technology is changing the content of occupations. At the professional and skilled levels, there is a stronger tendency to combine disciplines and knowledges.

3. Workers need more skill, more technical know-how, and more educational attainment. In the last 30 years, the professional segment of the labor force has expanded by about 50%, growing faster than almost any other major occupational group. Today there are twice as many groups in the occupational classification structure for professional, technical, and managerial occupations as there were some 10 years ago.

Let us move now to another factor affecting our work force — poverty. In California, there are 4 million families and 14.1% of them earn less than $3,000 annually. In addition, 49.5% of all single unattached individuals earn less than $2,000. And if we include persons living at the deprivation level, which is a family of four with an annual income of $5,000 or less and single unrelated individuals with an annual income of $3,000 or less, we find that we are talking of 30% of California's total population. These are facts reported in April, 1964, by the State Office of Planning of the Department of Finance. But what is the significance of these facts to you and to me?

The significance lies in the fact that the poor are generally under-educated and under-trained, that they generally have to rely for employment on the lower-skilled jobs which are fast disappearing from the scene (if, indeed, they find any employment at all), that they bequeath their poverty to their children and their children's children. Many of the Californians living in poverty or deprivation are youngsters under the age of 18. Some of them are second, third,
fourth, and fifth-generation poor. No blueprint for a Great Society, no active manpower policy can be successful if it ignores the problems of the poor. For these people, the services which you provide and the services which we in the Employment Service provide have special significance.

There is still another factor which I have previously mentioned -- occupational change. Traditionally, education has been the occupation of youth, and the acquisition of an occupational skill came early in life. The worker, having mastered the skills of his vocation, normally considered himself prepared for lifetime employment, without need for further training. It appears now that for a substantial portion of the labor force this kind of occupational stability will no longer be possible. The rapid pace of change in the labor market -- in job content, in varying demand for different kinds of skills -- requires us to view education and training in a new light. Much more flexibility will be required of workers to permit them to adjust to change.

There is considerable evidence that major career changes and basic occupational shifts may occur several times in the average person's working lifetime. This gives a new importance to vocational education. The traditional concept of education as a part of most individuals' lives to be completed prior to entrance into the labor market must give way to a concept of continuing education for adults. This consideration is reflected in the overhaul of education called for in the Vocational Education Act of 1963. The central objective is to provide counseling services and occupational training and retraining
for workers who need such aid because of shifting skill demands.

In connection with occupational changes, I have several times mentioned the shift to white collar occupations. At the turn of the century, over two-thirds of all workers were laborers, farm, or private household workers, and factory operatives. Less than one-fifth of the labor force were white collar workers. Over the years, the proportion of less-skilled jobs has steadily declined, while the demand for white collar workers has so increased that, by 1956, they out-numbered the blue collar workers in the nation. Looking specifically at California, the 1960 census showed the following breakdown of the employed work force:

- Professional and Managerial - 20.8%
- Clerical and Sales - 25.3%
- Service - 10.9%
- Skilled - 14.7%
- Semiskilled - 15.3%
- Unskilled - only a meager 4.9%

So, it is easy to see that our job, yours in Vocational Education and ours in the Employment Service, is to get as many people as possible shifted from the dwindling lower end of the occupational scale.

Now, let me turn briefly to the role of educators in relation to the things I have been discussing.

Education and training have always been held in high regard in our society. That they have grown steadily in importance over the years is a measure of both the significance attached to learning and the changes in our national life that demand a constantly rising level of skill and competence on the part of the work force.
I mentioned earlier that you were part of the implementation of an active manpower policy. I don't know if you had thought of yourselves in that context. However, ours is a job-centered economy. The welfare of the individual and his family and their place in the community are dependent, for the vast majority, upon a job. Loss of a job or failure to obtain employment represents a severe blow to economic and personal security. The importance of social and economic institutions, programs, and activities geared to improving job preparation, job finding, and job retention has grown with the constantly increasing complexity of our highly urbanized and industrialized society. This trio of job preparation, job finding and job retention is the heart of an active manpower policy, and the first of these is your responsibility.

All education is, in a sense, a preparation for work. Increased recognition of this fact must lead to a greater involvement of all the many institutions that shape the individual in the effort to develop his employability. Training for employability must begin in the home and continue through the schools, and into the work setting itself.

The enormous changes that have taken place in the job structure of the economy require a re-orientation to our approach to preparation for work. The economy is complex, fast changing, and highly competitive. Heavy demands are made upon the worker in terms of his preparedness for work and his ability to adjust to a world of work characterized by rapid change. In this setting, job preparation cannot be considered
limited to the acquiring of an occupational skill. It must involve a total preparation for work - a development of the individual as an employable member of the labor force.

The setting in which training is provided and the methods of presentation may need modification for some groups of workers. The young school dropout to whom the very word "school" may have unpleasant connotations and the older worker who may feel embarrassed about attending school may be more comfortable and may perform more satisfactorily in a setting that more nearly approximates a job. Classrooms that look more like a workshop than a schoolroom may become commonplace.

The new patterns in manpower training recognize the importance of prevocational training for youth - especially the school dropout and the disadvantaged. This means greater attention to basic education and the development of literacy skills, and broad orientation to the labor market - learning the fundamentals of punctuality; carrying out instructions; working with others; regard for safety; care of property, tools and equipment; and other aspects of preparing for fitness for work.

The new patterns recognize, too, that occupational obsolescence hits the experienced worker, who often is also an older worker, especially hard, particularly if he is a school dropout of an earlier generation. Here the problem is to salvage what is useful from the worker's past experience and skills, and to supplement this with additional occupational training and any other necessary aid so as to
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provide him with competitive capability in the job market.

Frequently, these workers also need help in job-seeking techniques. They need guidance in self-assessment of occupational assets, and in such skills as preparing resumes and application forms, and in proper conduct during job interviews.

During the past 20 to 25 minutes, I have tried to give you some understanding of California's manpower and the factors affecting that manpower. Now let me briefly summarize what, in my opinion, is the significance of these facts to you in Vocational Education:

1. There will need to be close cooperation and effective planning between Vocational Education and the Employment Service, partners in the implementation of an active manpower policy.

2. You will need to concentrate your attention on those groups in the labor market most needing it - the unskilled generally, but most especially Negroes, Mexican-Americans, youth, and the handicapped and older workers. You can best concentrate your attention on certain groups through selective recruiting. We in the Employment Service have had to develop out-reach techniques to contact and recruit those individuals most needing our services but who, nevertheless, do not normally come to us for service. I suggest that you in Vocational Education might also need out-reach techniques - Community Workers who would go into the disadvantaged neighborhoods seeking candidates for the services you offer. If our active manpower policy is to be effectively implemented, we can no longer afford simply to open our doors and prepare to serve all who enter; we must also take our services to those who do not enter.

3. Technological change has had, and will continue to have, a great impact on our occupational structure. You need to know which occupations are obsolete or are likely to become so; which new occupations are emerging; how occupations are changing in their content. I recommend that you work with the Employment Service to obtain the specific information you need. The Vocational Education Act of 1963 permits
the Employment Service to conduct special studies of the labor market to provide you with the information, such studies to be financed by Vocational Education. We should take advantage of this provision.

4. You may need to revise some of your educational concepts. The person whom you train today may well be back every 10 years or so to be retrained. Much more flexibility will be required of workers to permit them to adjust to change, and I believe that this flexibility is more likely to be assured when workers have a good basic education. Vocational education, yes, but integrated with basic education.

5. The need for a good basic education is emphasized by the shift to white collar occupations, which now outnumber the blue collar.

6. The need for a good basic education is also emphasized by the large number of unemployed youth and adults who lack reading, writing and arithmetic skills. For these workers, basic education frequently must precede any effective vocational education. And I believe that it will not suffice to send them to some other site or some other discipline, to obtain that which they need. You will need one-stop, integrated service.

7. You may need to revise your educational techniques, and even your educational sites, in order to attract, to hold and to serve adequately those groups which reject "schools," and school atmospheres and school techniques.

8. For many youth and adults, you will need to go beyond even basic education and vocational education. Many of these people will need counseling and training on things which many of us take for granted: such things as punctuality, carrying out instructions, working with others, how to look for a job and proper conduct during job interviews. Your Employment Service might be of assistance to you in meeting these needs.

9. Finally, you will need to constantly motivate many of the youth who will need your service, especially our minority youth. I stated before
that our minority youth are reaping the heritage of over 100 years of discrimination and prejudice and segregation and denial. You have to understand this before you can really understand the plight of a Negro or Mexican-American youth who, as frequently as not, suffers from poverty as well as the legacy of the past. A youth who probably all his life has known little except denial and deprivation, fear and frustration, hostility and hate. A youth who may have completed 10 or 12 years of school, but whose education stopped at the 5th or 7th grade. A youth for whom Horatio Alger is not even a name, let alone a symbol. A youth who gave up all hope 100 years before he was born. These youth will be difficult to motivate, but motivate them we must if our active manpower policy is to be effective. Again, let me suggest a partnership with the Employment Service in working on this problem.

This completes my portrayal of the outlook and outcome of California's manpower. If what I have said suggests to you that we have a lot of hard work ahead, you have drawn the right conclusion. But I hope that it also has suggested to you that the work is necessary, will be gratifying and will be a real service to California's manpower and to California's economy.
Gaylord F. Pitts received his B.A. degree from St. Olaf College in Minnesota. He did graduate work at U.C.L.A. and at the University of Wisconsin, where he received an M.A. in Political Science and a Ph.D. in Education.

After three and a half years of military service, Mr. Pitts became a resident of California along with thousands of returning servicemen who contributed to the rapid population growth of the state in the post-war period.

Mr. Pitts is currently Labor Market Analyst for the Los Angeles Metropolitan Area with the California Department of Employment. He has been with the agency for twenty years, thirteen of which have been spent as Director of Research in the Los Angeles Area office.
I have been asked to review the manpower situation in Southern California and to project changes that might call for adaptations in vocational education. This frequently asked question is reasonable, but deceptively simple. It actually involves a multi-faceted problem that does not lend itself to a one-dimensional solution. Labor market conditions reflect the converging of many diverse and complex influences, many of which are in fact unknown quantities and therefore highly unpredictable. Who would be willing to claim to have been in the position just a few years ago to foresee the development in the aerospace field with the resultant impact on occupational trends? Or for that matter, who would say that he could have predicted the strong resurgence in aircraft production schedules in the Los Angeles area in 1965 after years of consistent retrenchment? Apart from the usual pitfalls underlying almost any type of forecasting, those of us in labor market analysis are aware that there are still vital gaps in available data, especially as that data relates to developments in the occupational field. All this is to forewarn you that I am not in a position to provide capsulized solutions. What I have to say is more apt to raise questions than to provide needed answers.

Today, as never before, we recognize that investment in education
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and training is an investment in our most important asset - our human resources. At a hearing of the Joint Economic Committee of Congress last month, the Director of the Budget attributed as much as one-third of the growth of United States productivity to increased education. "In the last three decades," he said, "schooling has been a larger source of growth than material capital represented by structures, equipment and inventories." Recent legislation, such as the Manpower Development and Training Act, the Vocational Education Act, and the Equal Opportunities Act, reflects the active federal policy to promote the maximum development and utilization of the labor force. A constructive approach to this goal requires not only effective cooperation among the many agencies involved in the various related programs, but also a close liaison with industry in order to identify current and prospective labor needs. Before detailing the many problems we need to consider, let me review some basic facts concerning our labor force.

In January, 1966, California's seasonally adjusted unemployment rate was down to 5.4 percent, the lowest proportion of the labor force in several years. The comparable rate in Los Angeles County was 5.1 percent, the lowest since early in 1960. While these declining rates reflect considerable alleviation in the unemployment problem, they are well above the national rate of 4.0 percent, a nine-year low. Although rates in Orange and Santa Barbara counties were under the 5 percent level at the start of the year, San Diego, San Bernardino-Riverside,
and Ventura reported unemployment rates which exceeded 6 percent.

Why the lag in California? We must consider two key influences to find the answer - our population growth, and the prominence of defense-related activities in our industrial economy.

Population in California has been doubling every twenty years. Our rate of increase for many years has been twice that for the nation as a whole. Moreover, in Southern California we have some of the fastest growing counties in the state. While California's population increased by 19 percent in the span from the 1960 census to July 1, 1965, comparable period gains of 64 percent occurred in Orange County, 52 percent in Ventura, 44 percent in Santa Barbara and 36 percent in Riverside. Los Angeles County alone has a population approaching 7,000,000. If Los Angeles were ranked in size with all of the United States, its population would be exceeded by only seven states. What all this means is that California needs over 200,000 new jobs each year just to keep pace with its labor force expansion before we can even begin to make inroads on the volume of unemployment.

Other aspects of population growth also have special significance. In the 1950-1960 census period in the Los Angeles area, for example, while total population increased by somewhat less than 50 percent, Negro population more than doubled. Moreover, in the city of Los Angeles in 1960 over 55 percent of the non-white residents were born outside of California, with about 43 percent of them having been born
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in the southern region of the United States. Many of these non-white residents were newcomers to the city. The current trend is essentially unchanged and is having obvious effects on unemployment trend developments. Compared with the white population, there is among the non-whites a significantly lower median age and also a lower average of school years completed. On the other hand, the non-whites have a much higher proportion of unskilled and service workers. Many, therefore, not only lack the education and skill demanded in our industrial economy, but they also have problems adjusting to urbanized life. These factors contribute to the disproportionately high representation of Negroes in the unemployed group.

Comparatively limited data are available concerning the Mexican-American population. According to the 1960 census, persons with Spanish surnames constituted the largest minority group in Los Angeles County and certainly in the other counties of Southern California. The finding showed that the foreign-born, primarily natives of Mexico, comprised almost 21 percent of the group, or more than twice the proportion of foreign-born in the total population. In addition, their median age was about 22 years as compared with 31.5 years for the total, while median school years completed was 9.0 as against 12.1 years for all county residents.

The age distribution data reported in the 1960 census support the conclusion that Negroes and Mexican-Americans have a disproportionately high representation among the young people now reaching the working
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As for our industrial economy, California firms, and especially several major ones in Southern California, have long been among the leaders in terms of the dollar volume of defense contracts awarded. Changes in defense procurement therefore have exerted strong influence on local employment and unemployment trends. Adverse developments began to emerge late in the 1950s, even though the dollar value of local contracts consistently has remained high, with the shift in emphasis away from mass production of manned military aircraft to research and development in connection with missile and space programs. Mainly because of this shift, there was an almost immediate reduction in total employment needs in defense activities and a radical change in the pattern of the occupational demands that continued. A persistent surplus of routine production workers developed at the same time that there were widespread shortages of highly trained professional, technical and skilled personnel qualified for assignment to the new programs.

We know that adjustment problems stemming from technological changes are not new. The industrial revolution and its impact on worker productivity began many decades ago. The trend toward automation over the years limited the development of manpower needs in the performance of simple and routine jobs. The rapidly accelerated rate of technological change in recent years, however, has in turn magnified the problem of worker displacement and skill obsolescence. The process
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was stimulated as the new techniques developed for the aerospace programs were adapted for use in the general economy. The impact is still only vaguely understood and the ultimate influence cannot be weighed at this point. Computers and electronic data processing equipment are coming into ever-widening use in business. Certainly they have already affected the demand for bookkeepers and related clerical personnel. Given the required specification, a computer can develop the needed design and produce the appropriate blueprint. Computers can control high precision machine tooling. Such a listing could go on endlessly. The point is that technological change not only has continued to undermine job prospects for the unskilled, under-skilled and undereducated, but it has produced displacement problems for skilled workers, for middle management personnel, and for those in the professions. Added to this, new techniques are closing out the usual labor force entry channels for many young workers.

Inasmuch as the program lists my subject as Outlook and Outcome, I must address some specific remarks to the kind of a job market we can expect in 1966. As a staff writer of the Los Angeles Times indicated in an article last Sunday, "the aerospace industry is once again back in orbit, especially in California, most emphatically in Los Angeles County." It may surprise some of you in the audience to know that Orange County has a higher proportion of its jobs in manufacturing (highly defense-oriented) than does any county in Southern California. This labor market area, known officially as
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Anaheim-Garden Grove-Santa Ana, has benefited from relocations and expansions of Los Angeles-based firms, particularly in recent years. In the Los Angeles Metropolitan Area, with which I am most familiar, the complex and widely diversified "aerospace industry" did reverse a long downtrend in the first quarter of 1965, sparked by hiring for production of commercial aircraft. The resurgence of factory payrolls through the last half of 1965 and the continued increases which are forecast in the near future will remove the "sluggishness" that has tinged the growth of economy during the business expansion now in its fifth year. Upwards of 100,000 new jobs will be added in Los Angeles County during 1966, and manufacturing will lead the upswing for the first time since 1962. The largest employment growth will be in aircraft and electronics, but the metals and machinery industries will benefit from widespread subcontracting. The impetus of new workers added to factory payrolls will stimulate growth in the nonmanufacturing sector, particularly trade, services, and government. The only real question mark is the construction industry, which has been affected by sharp declines in residential building throughout Southern California.

The relatively high unemployment which Los Angeles has experienced will trend downward through 1966. Although the local rate may break the 5 percent level in the first quarter, it will continue to exceed the national rate through 1966. Job opportunities will far exceed the local supply of engineers and related scientific and technical personnel. In other professional fields, shortages of general duty nurses and auxiliary medical personnel, teachers, and social case workers will
persists. The job market for experienced machine shop workers, assemblers, and various mechanics and repairmen has tightened appreciably and shortages have already emerged because the aerospace employers are recruiting for essentially the same occupational skills. If these employers are to meet their manpower requirements, training programs must be greatly expanded during the year ahead. This has important implications for administrators of vocational education and Department of Employment personnel. You can provide the opportunity to strengthen the partnership of seeking out and training those in our labor force in need of such training — for job preparation, job finding and job retention is the heart of an active manpower policy.

What makes the question of projecting changes in manpower requirements to permit adaptations in vocational education deceptively simple is that the answer is so obvious. We need to direct training away from those fields where job opportunities are diminishing and to gear the educational processes to those fields that are emerging and expanding. The difficulty is that technological changes are swift and unpredictable, national security expenditures and needs fluctuate sharply, and consumer preferences are subject to marked changes. It is not impossible to initiate training today in a new occupation and see that training become obsolete before it is completed. The consensus is that not only will the employed workers require periodic updating of their training to keep pace with changes, but
many new workers now preparing for a career will have to prepare for several career changes during a working lifetime. Nevertheless, the official manpower policy has been clearly stated, and our job is to implement it. Some deep-rooted changes in thinking and methods will be needed to accomplish this task. An effective approach involves the need to overcome some obvious deficiencies in labor market information. We certainly need better information than we now have about developments in the occupational structure, job vacancies and the characteristics of the labor supply. Then again, even if such information should become available there would remain the need to resolve the problems underlying the high rate of school dropouts and the resultant functional illiteracy in an economy that will be putting progressively more stress on the need for educational attainment and technical skill.

I would be remiss in my duties as a staff researcher in the Department of Employment if I did not review some of the occupational information that is currently available for counseling and curricula planning:

1. Occupational Guides. This program, now in its tenth year, has a creditable inventory of high quality information on more than 400 individual occupations. Widely distributed throughout the public school system, these studies supply information on job duties, working conditions, employment outlook, pay and hours, hiring requirements, promotion channels, methods of training, and ways to find jobs, etc.

2. Skill Surveys. These provide industry-occupation projections of from two to five years based on employer forecasts. The first of this type of survey in California was the San Diego Manpower Resources Survey of 1960. A similar
survey for Ventura County was co-sponsored by their County Board of Education, the California State Employment Service, and the Industry-Education Council of Southern California in 1962. Other surveys of this type have been prepared for the Coachella Valley, and one is nearing completion in Santa Barbara County.

3. Job Vacancy Study. This pilot survey was conducted in the Los Angeles Metropolitan Area about a year ago to determine the feasibility of collecting such information by industry and occupation directly from employers. Although data from this project substantiated much of what we knew about hard-to-fill occupations, a continuous series over a long period of time would point up changing employer requirements more accurately than we can now measure. To date, however, additional funds have not been allocated for an extension of this type of survey.

4. Special Industry Surveys. These are detailed studies on staffing patterns and projections of occupational needs of selected industries such as hospitals, electronic data processing, banking, insurance, hotels and restaurants. They are conducted primarily in larger metropolitan areas where complete skill surveys are not feasible.

5. Community Labor Market Surveys. Published bi-annually, these surveys provide data on the characteristics of the industrial base of the economy and the labor force for approximately ninety communities throughout California.

6. Shortage and Surplus Occupations. This is a semi-annual report to be published quarterly in 1966 for all major metropolitan areas. It delineates the relationship of current local demand and supply for workers by specific occupation.
QUESTIONS TO MR. PITTS

Question: Do you make any breakdown for age groups in labor force estimates?

Answer: No. The only characteristic is sex. There is no age breakdown. The Department of Finance provides current population data which gives an idea of the number of youth in the labor force. The number of unemployed youth has been dropping because of the draft, job corps, and other youth programs.

Question: Will medical service, aerospace, and government take care of the 200,000 jobs you say we will require yearly?

Answer: Growth has to come in all segments, not just the three mentioned. Areas competing for factories make things increasingly difficult for Los Angeles. The markets California presents should provide incentives for Eastern firms to relocate here, but for long-term growth the jobs must be primarily in the manufacturing sector.

Question: What can we do for youngsters with limited abilities who can't be trained for highly skilled jobs?

Answer: I'm a generalist. I believe in reading, writing and arithmetic as basic requirements in the world of work. There will be many more opportunities for employment in our expanding economy during the year ahead and retraining programs can be more effective.

Question: What about the restrictive clauses in labor contracts which gear automation to keeping the labor force static? How much effect does this have on entry level jobs for youth?

Answer: That would be difficult to measure although we know of instances such as longshoring where this is the case. I might state that the greatest strides in employment this past year have been made on the unskilled job level. This indicates that aggregate demand in the economy is important in achieving full employment.
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Question: With entry level jobs paying one and a half or two dollars per hour, welfare gives a man more money for his family and he pays no taxes on it. How can we get employers to pay more than welfare?

Answer: That differential constitutes a problem. Many workers without skills are not realistic and talk in terms of two and two and a half dollars per hour.

Question: Manufacturing will alleviate unemployment problems. What are the problems of attracting industry?

Answer: The environmental task force of the Chamber of Commerce in Los Angeles is studying the local advantages. The trouble is that competition for new industries is growing and many attractive incentives may be offered. Our large banks and utilities have special staff sections to stimulate industrial development.

Question: How has the composition of the work force changed?

Answer: White collar occupations have grown most rapidly. Women are entering the labor force in large numbers and more part-time workers are used. On the other hand, the unskilled make up 25% of the unemployed, five times as much as their percentage of the work force. The reprint of a speech by Stanley Rutenberg which I noted in your folder provides a comprehensive analysis of occupational change.

Question: Has the definition of what makes up the unemployed changed since 1960?

Answer: No.

Question: What about retraining programs for construction workers?

Answer: There've been limited efforts for retraining in this field. The emphasis would be on upgrading to teach new techniques in building.
Donald Mayall attended public schools in Oklahoma and in Los Angeles. He holds a Masters degree in Sociology from the University of California at Berkeley. He has been with the Employment Service for ten years, spending five years as a Labor Market Analyst, and five years as a Research Analyst.

His current title is Labor Market Analyst, Coastal Area, California Department of Employment. In this capacity Mr. Mayall does economic analysis for labor markets in the metropolitan area and provides occupational information for local guides and MDTA.
I have been asked to describe the Labor Market Analysis Program and other programs of the Department of Employment of interest to vocational educators. I will concentrate my remarks on the Labor Market Analysis Program, as this is my chief responsibility. My title is Area Labor Market Analyst, and there are four of us in California, one for each of the four administrative areas of the Department. This reflects our concern with the needs of local labor markets -- conditions in a small city like Fresno are not the same as those in a large metropolitan center like San Francisco.

Let me begin with brief definitions of the terms "labor market area" and "labor market information." A labor market area is the geographical area that supplies workers for a particular market. One could also speak of the labor market for a single occupation, industry or employer. In order to develop a definition of maximum usefulness we have settled upon the concept of the area that supplies workers for all the jobs within a central city or cities. Another way of putting it would be to describe the labor market as the commuting area around a central city. Each of the thirteen standard metropolitan areas of California meets this definition.
In addition, the non-metropolitan counties of the state form smaller labor market areas. These areas form the basic data unit for most of the labor market information programs. For some purposes we are interested in the labor market for a particular kind of worker—as in the case of the Occupational Guides. In this case the geographic area could be larger or smaller accordingly. We also break out job centers within the metropolitan areas, as in the case of the Community Labor Market Surveys. This is a costly process, however, and for most purposes we restrict ourselves to the metropolitan area definition.

Labor market information refers broadly to knowledge about the supply of and demand for labor and the factors affecting this supply and demand. Examples range from data on the current rate of unemployment and on the number of persons working in various industries to forecasts of the training requirements in particular occupations.

The educator's need for labor market information stems from a number of sources:

a) The need of counselors for realistic information on future job prospects, employers' entry specifications and hiring channels.

b) The need of administrators and curriculum planners for long-range projections of labor supply and demand for the occupational area which they serve. The Vocational Education Act of 1963 made such consideration a prerequisite to eligibility for funds under that program.

c) The need of school placement officers for information on the current job market.
The very specialized information on current and short-range job prospects required for establishing vocational training under the Manpower Development and Training Act of 1962.

The Labor Market Information program which the California Department of Employment now carries on produces a considerable amount of data that should be of vital concern to the vocational education specialists in California. Our manpower research activities have grown over the years from a system centered primarily on the operations of the Employment Service to a program aimed at serving all organizations which require information on the operation of the state's labor markets. This is a tremendously complicated task which requires a continuous flow of new information and the development of new techniques to meet the ever-expanding demand of the different kinds of data. There was a time when the Area Analyst and the Regional Research and Statistics sections of the Department of Employment were limited to the collection of internal data only. That day is long past!

The Labor Market Information program has two major orientations:

1. Industrial Information.
   Here we produce statistics on such topics as employment by industry and labor market area; unemployment levels by area; the number of firms in various industries and in various regions. This information is entirely economic in nature and is based on "hard" source materials, e.g., the quarterly tax reports filed by employers and the applications for unemployment insurance filed by workers. This industrial information is, generally speaking, a by-product of the operations of the Unemployment Insurance Service.
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2. Occupational Information.

Here we develop analytical data on occupational requirements of employers; for example, data on worker traits, aptitude and job tests, all kinds of job descriptions, and so on. These data are all based on on-site observations of workers on the job. The Department also produces socio-economic occupational studies which are based on contacts with employers, labor unions, and educational institutions. These data are, generally speaking, by-products of the operations of the Employment Service.

Together the data from these two operations, the Unemployment Insurance Service and the Employment Service, fuse to bring into being our manpower research program and to provide the bulk of the information about it. What are the major components of this research program?

There are about four major kinds of reports in the labor market information system at the present time: employment and unemployment statistics; occupational and industry studies; labor demand and supply; and special worker studies. I will deal with each in turn.

First, in the area of current employment and unemployment statistics, California Employment Service produces a wealth of information on the current employment levels in industry in each of California's metropolitan areas, and to a lesser extent in smaller communities in the state. The Employment Service has data on employment levels in each community in the state in each industry in the state. These data are based on tax returns filed by almost all employers in California, and as a result are extremely reliable and detailed. It would be no exaggeration to say that we can tell you many things you would want to know about the current level of employment in any community or industry.
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in the state. These data are published in such reports as: Employment and Unemployment in California; Labor Market Bulletins; and California Employment and Payrolls. For a full listing you should look at our Selected Bibliography of Labor Market Information, which encompasses California and the Coastal Area.

With respect to unemployment statistics, we have a great deal of information on unemployment levels in California and we know a great deal about the characteristics of the people who draw unemployment insurance payments. However, we do not have all the information we desire in this area. We can, for example, give you estimates of total unemployment for the state and the metropolitan areas, but not for the cities and for the "critical" areas within these cities. We also know very little about the total volume of unemployment among youth. This lack of data on the number of people who do not qualify for unemployment insurance is a severe handicap in planning vocational programs for the underprivileged in our cities because we do not know everything about them. To get this information we have to use special censuses, a process which is extremely expensive. A special census was recently completed in Watts, for example, and it cost the Office of Economic Opportunity about $275,000.

The second major kind of report in our Labor Market Information program is exemplified by Occupational Guides. The Employment Service has prepared over 400 Guides on significant occupations in California since this program began in late 1956. These Guides, which are based primarily on personal interviews with persons who are actually
performing the work, contain detailed information on the following topics: Job Duties; Working Conditions; Employment Outlook; Entrance Requirements; Methods of Training; and Hiring Channels.

The Occupational Guide program in California is one of the largest of its kind in the nation. Only the U.S. Bureau of Labor Statistics, with its Occupational Outlook Program, covers more jobs than we do, and only by a small margin. No other state has produced a larger volume of occupational information in this form.

The purpose of the Guide program is to provide accurate, local counseling materials for use in local offices of the Department of Employment and by counselors in the public school system. The program is, however, used by a large number of other organizations for purposes which are far beyond our original intentions. Although this program is very well known to most school counselors and curriculum planners in the school system, I sometimes come across someone who has never heard of them. Part of this problem may be that there are difficulties in distributing the Guides within the local school system. All schools are supposed to get these Guides, however.

The Employment Service publishes on an intermittent basis a series of industry studies which attempts to draw together all we know about the occupational and employment patterns within single industries. These industry briefs contain information on such matters as production processes, occupational structure of the work force, trends in technology, wage information, hiring practices, and hiring channels used. Unfortunately, this report is generally not available to the school
system since it is written primarily for the use of our Employment Service personnel. The briefs, I think, would be quite useful to the vocational school system since they attempt to lay bare the labor market realities of the industry studied. The third major category report in our Labor Market Information program deals with occupational labor demand and supply. The Employment Service has been engaged in the past year in experimental Job Vacancy Studies for the Department of Labor. These studies have attempted to gather information on the total number of vacant jobs within a specific labor market area. For example, we have collected information on job vacancies in Los Angeles by industry and by occupation. However, this program is still in the pilot stage and the Department of Labor has not yet gotten it into an on-going program. When the program does get going, it will fill a major hole in the manpower research program.

The Employment Service is engaged in continuous reporting on the current demand for various occupations in the state's labor markets. These reports, Shortage and Surplus Occupations, are published about twice a year and attempt to provide a quick overview of the present state of the labor market. They are not occupational studies in the sense of the Occupational Guides, and are not based on a systematic employer survey of the market for these jobs. Essentially, these reports are an interim measure to fill a need for a bird's eye view of the labor market. They are experimental. I mention these reports because they are available to you in all parts of the state. However, they have certain drawbacks. They are not strictly comparable; the
definitions used are slightly different in each area and the report is extremely subjective in nature. In addition, the data for the report is gleaned from data collected through the operations of the Employment Service and therefore may not be truly representative of the market in all occupations. To illustrate, job opportunities in many blue collar occupations are controlled by the unions, and as a result we have little direct information on the dynamics of the job market for these occupations. In spite of these drawbacks, I think the Shortage and Surplus report would be useful to vocational educators because it does offer suggestions for the development of vocational programs.

Of greater significance to the vocational counselors are the Employment Outlook reports. The large and complex reports include projections of employment by occupation and industry for specific labor markets in the state. In my administrative region, the sixteen counties along the coast from San Luis Obispo to the Oregon line, we are presently engaged in preparing employment outlook reports for Oakland, and for the counties of Santa Cruz, Monterey, and San Benito. We have also prepared other reports in this series, for example, the Manpower Resources of the San Francisco-Oakland Bay Area, which covers the six San Francisco Bay Area counties.

We use two methods in preparing these studies:

a) The Skill Survey Technique
   We ask a sample of employers what their current employment needs are and from these data we produce a series of projections of employment by occupation and industry. This is a simple mechanical process which has been largely discontinued in the Employment Service.
b) The Economic Analysis Technique

This method involves an analysis of current and expected trends in population, labor force and industry. Essentially, what we do here is to assess the probable labor supply by a detailed analysis of population and labor force trends and then match this up with an analysis of the probable demand for labor by looking at the industrial structure of the area.

These techniques are not mutually exclusive; in fact, they must be combined if we are to produce the data required by the school system and if the Employment Service is to meet its obligations under the Vocational Education Act of 1963. For example, both surveys now underway in the Coastal Area will use elements of both techniques. To be really valuable, these surveys should completely cover all the labor markets in the state and should be revised periodically. Unfortunately, at the present time we are not equipped to do this on a continuous basis.

We have, through a number of years of experimentation, worked out the basic methodology for these occupational studies. However, we have not been able to put into action the kind of program we think you want and need. This I think is a critical problem in all our work and one which must be resolved if the Employment Service is going to produce the volume of outlook information required by recent legislation. We must find the where-with-all to prepare the long-range forecasts you require. Current information on job opportunities does you very little good, and yet this is all we are able to give at the moment.
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The fifth element in our Labor Market Information program is Special Worker Studies. From time to time, we publish reports on the labor market problems of special worker groups; for example: older workers, handicapped workers, and the special problems of the young. These reports are usually single time reports and cover a very specific area or range of problems. Occasionally we do prepare special reports on characteristics of the unemployed as a whole which draw together all available information on these workers. Included in these series are reports on the problems of minority groups in finding work, and possible solutions to those problems. An example of a special report is our report Merchant Moves South, which evaluated worker experience following the closing of a major manufacturing facility in the city of Oakland.

I hope this review of the California Department of Employment's labor market information program gives you some notion of the volume and variety of the information available to you. We in the Employment Service stand ready to help you in every way possible to draw up meaningful vocational education programs. We are trying, with our limited resources, to produce the long-term occupational and industrial projections you require. We are making representations to our federal colleagues for additional funds for this work, and we are hopeful we will get the required resources.
MANPOWER MEANINGS FOR VOCATIONAL EDUCATION

Robert L. Obrey, Chairman, Central and Coastal Regions

Small Group Leaders
Lloyd Livingston
Albert J. Riendeau
Arthur F. Walker
Edgar L. Smith
Gene Jensen

John R. Toothaker, Chairman, Southern Region

Small Group Leaders
William Steinberg, High School
Irvin Colt, Junior College
Keith James, Adult
MANPOWER MEANINGS FOR VOCATIONAL EDUCATION

"Small Group" Discussions

Editor's note: The material from this session was put into question and answer form because this was the mode of discussion adopted by most of the groups. The information contained herein represents the views of the participants as reported by the recorder. The editor has made no attempt to research or document this information.

A STATEMENT OF CAUTION

Many of the items were repeated; therefore, this report does not show which items were expressed most often.

Many items had to be interpreted by the editors (for largely grammatical errors, etc.); but, the items may not yet say exactly the intent of the participants.

Any written report does not tell all that goes on in the groups; thus, these "end products" are only suggestive of the total product and not of the process at all.

There was no standard (nor should there have been) with which to compare each item reported; and so, no item is to be considered as representative of the Conference.
Leadership for Vocational Education in California

MANPOWER MEANINGS FOR VOCATIONAL EDUCATION

JOB PLACEMENT

Question: WILL THE LOCAL DEPARTMENT OF EMPLOYMENT REALLY PROVIDE PRACTICAL COOPERATION WITH SCHOOLS?

Answer: Schools can support the Department of Employment by helping students become interested in specific occupations and then by helping them seek appropriate training and education, i.e., exploratory work experience at students' levels and pre-vocational preparation.

The Department of Employment is initially responsible for MDTA.

Local requests should be made to local offices of the Department of Employment; on-the-job training might involve the school and the Department of Employment; local advisory and/or coordinating committees may be necessary (work experience education programs can bring about cooperation); departments of Schools, Welfare, and Employment can create cooperative programs using the Youth Opportunity Act, Neighborhood Youth Corps (in and/or out of school), and MDTA.

Job development is a crucial issue. The Youth Opportunity Act provides for job development by the Department of Employment, but local requests (pressure) must be made.

The school can support, coordinate, and initiate cooperation with the Department of Employment in pre-employment preparation, job development, work experience education, job placement, aptitude testing and job counseling.

Question: HOW CAN WE BETTER FACILITATE JOB PLACEMENT FOR THE HIGH SCHOOL STUDENT?

Answer: CSES places only 10% of the total labor force. City, county, and state jobs in government, education, etc., are apparently not handled by CSES, yet these are the employment fields for a great many 17-21 year-olds.

Perhaps placement and job information in these areas can become a school responsibility. This is being done in some cases.
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We need more adequate and continual follow-up information and further definition of job content in our vocational education programs.

Question: CAN STUDENTS GET JOBS BEFORE AGE 21?

Answer: Santa Barbara County Office of Education (Fred Orr) stated that 75% of the jobs in California are available to qualified high school graduates. Also, age requirements fluctuate according to the employment pool, i.e., the shortage of skilled older persons requires that the employer dip into the lower age brackets.

Question: WHAT ARE THE REALITIES OF THE SITUATION; I.E., WILL EMPLOYERS HIRE HIGH SCHOOL STUDENTS VS. DO THEY HIRE THEM?

Answer: Major industries do not generally hire those under 21; advisory committees often say one thing and do another. Though schools often place 18-year-olds in small businesses, service occupations need these youngsters and will continue to need them.

PROGRAM DEVELOPMENT

Question: HOW DO WE SET UP PROGRAMS?

Answer: We make a survey of regional needs and develop statistics to verify those needs and future needs and trends; contact professional organizations; work through advisory committees.

We must consider:

1. The need for the program
2. Ways to attract numbers of students to the program
3. How to finance the program
4. What kind of physical facilities are available
5. The availability of teachers
6. The placement of students

Question: WHAT ARE SCHOOLS DOING IN THE PARA-MEDICAL PROGRAM?

Answer: Multi-optional programs will provide a partial solution to para-medical programs by offering core programs for a family of occupations. "Off-the-shelf" courses and special
courses take care of options. The first part of the training should consist of "cluster" courses; the second part should be specialized.

**Question:** HOW LONG SHOULD THE PROGRAMS BE?

**Answer:** We must develop programs for from one semester to two years in length. All programs need not and should not be two years in length; in fact, industry often takes students with less than two years' training.

**Question:** HOW CAN WE DESIGN OUR PROGRAMS TO TRAIN ALL LEVELS OF ABILITY?

**Answer:** We should stop pricing ourselves out of the market by requiring less pre-requisites for our program.

**Question:** HOW CAN WE BETTER KEEP PACE WITH THE RAPID TECHNOLOGICAL ADVANCES IN THE WORLD OF WORK?

**Answer:** If the schools are to keep up with the technological changes of today, the members of the advisory committees must have a closer relationship to the job involved and actual knowledge of what the job entails.

Education must become more flexible, must learn to set up and change courses and programs more rapidly.

Since workers will be changing jobs several times in a lifetime, they should be provided with the basics necessary in many areas. This has been successful in the MDTA program.

We must project our thinking ahead. Agriculture, for example, has an advisory committee to try to identify agricultural needs of the future.

**Question:** ARE LOCAL MANPOWER STUDIES NECESSARY?

**Answer:** The "big picture" concerning occupational trends is informative and interesting, but it is doubtful that district surveys or county-wide surveys are the best approach to curriculum and program development.
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Question: WHAT CAN WE DO ABOUT "DROP-OUTS"?
Answer: A "reclamation service" should be started to give drop-outs a second or third chance.

We must avoid replications of the programs which were found unpalatable by these disadvantaged students and make an effort to develop training innovations which will attract and hold these students.

Question: WHAT CAN WE DO WITH THE LOW-ABILITY STUDENT?
Answer: We must identify and develop jobs for which the low ability student can be trained.

Question: HOW SUCCESSFUL ARE REDMOND'S "OUTREACH TECHNIQUES"?
Answer: One district's efforts to tailor classes to the style of "deprived" areas met with initial success, and then with resistance by self-styled spokesmen who decried "low-level education" (waitress training, custodial services, etc.). Resistance came also from some workers who felt that their jobs were being threatened.

Question: WHAT IS NEEDED TO MAKE THESE OCCUPATIONAL CLASSES WORK?
Answer: According to the March issue of California Education: administrative support, tireless staff, interdepartmental cooperation, and community interest and participation.

Question: WHAT FACTORS OF SUCCESS HAVE BEEN NOTED AS PROGRAMS GREW?
Answer: An increasing number of job placements has created a more vigorous demand for these classes. One report quoted a 7-1 dollar return on the investment in the MDTA program.

Question: WHAT KINDS OF SERVICE-ORIENTED PROGRAMS ARE NOW IN OPERATION IN SOUTHERN CALIFORNIA HIGH SCHOOLS?
Answer: Homemakers' Service (Los Angeles City), Child Care Aides, Food Service, Nurses' Aides, among others.
Leadership for Vocational Education in California

Question: WHAT CAN BE DONE TO GFT PROGRAMS SUCH AS THESE OFF THE GROUND?

Answer: We should add glamour to these programs in the form of uniforms, name badges, etc.

We must base these programs on expressed community need. To do this, we must know what kinds of jobs 17-21 year-olds have gotten within the last year or two. We request that the California State Employment Service provide us with this information, which we sorely need.

OTHER PROBLEMS

Question: WHAT CAN WE VOCATIONAL EDUCATORS DO TO BUILD UP OUR IMAGE TO THE REST OF OUR COLLEAGUES? HOW CAN WE COMPETE MORE EFFECTIVELY WITH ACADEMIC EDUCATORS?

Answer: We must utilize more than one source of information, e.g., surveys, to strengthen our position in curriculum developments.

We should invite academic people to our advisory committee meetings.

We must start selling vocational education at the elementary level.

We should use other departments in our schools to augment vocational majors. We must get them on our team.

We must orient counselors to the philosophy of vocational education, provide more information for counselors.

Question: HOW CAN WE MAKE COMMUNICATION BETWEEN THE WORLDS OF WORK AND EDUCATION MORE EFFICIENT?

Answer: Better surveys would facilitate the communication of needs.

Centers emphasizing particular subject areas would concentrate all our resources in one place.

Job analysis is vital. The "worker" should be included in advisory committees.
Question: WHAT CAN WE DO TO GIVE MORE STATUS TO JOBS GENERALLY?

Answer: We can add prestige in the classroom and with the certificate, but in reality prestige depends on the employer and the social situation. Therefore, we had rather build a healthy respect for work.

Question: HAVE WE OVERSOLD THE IDEA OF A HIGH SCHOOL DIPLOMA FOR ADULT EDUCATION?

Answer: We ought to make distinctions between what basic skills are, what vocational skills are, and what a high school diploma means. Though it is a fact that employers want high school diploma people at a ratio of 7:1, they also demand employees with basic skills.

Question: WHAT ABOUT THE ORGANIZATION OF PROFESSIONAL GROUPS FOR VOCATIONAL EDUCATION?

Answer: The "Work Experience Coordinator's Association," a new organization in a bay area county, is very helpful.
Program Innovations

William A. Stanton, Chairman

AGENDA:

THE OFFICE OCCUPATIONS LABORATORY ............... Virginia Clapp

PRECISION LENS GRINDING AT CITRUS COLLEGE .... Glen R. Guldberg

VALLEY VOCATIONAL CENTER ......................... Thomas Johnson
I was asked to describe for you today one of the innovations in vocational education we have introduced into the vocational education curricula in our school district. Thanks to Bill Stanton of the San Diego County Office of Education, we are able to bring to you a short film that shows the activities being carried on within the Office Occupations Laboratory at our new Santana High School. Before we show the film, I want to comment on the reason for this innovation and how it was brought about - probably of more interest to you than the curricular details.

The idea for this office occupations course (and other courses we are now field testing or in the process of developing) grew from research on average and below average youngsters we carried on in the district during 1962-63-64. The boys and girls we studied were C or below students. They were largely unmotivated and indifferent academic students, either unable or unwilling to do acceptable work in almost any course - including industrial arts, business, etc. Under the leadership of Dr. Leon Lessinger, who is now superintendent of San Mateo Union High School District, we set about finding out what makes them like they are. Very little research had been done in this area, and it was a fascinating study.

We found out many things about their unique needs, desires,
abilities, and values - all of which are described in the published
Studies in Success report, which was distributed by the California
Department of Education to all the high schools in California and to
all the departments of education in the United States (this study is
still in progress). What we are trying to do now is to build curricula
for these students by applying the information we obtained. Business
Education is only one of the departments where this effort is being
made.

We have another reason - and this is an entirely different one -
for doing this experimentation in vocational education on the second-
ary level.

In California, and now in other states where the junior college
system is burgeoning, one increasingly hears the argument that high
schools should provide good basics and a broad general education.
Vocational education should be left strictly to the junior college.
By the 13th year, we are told, the young person becomes magically
mature enough to fix on a proper occupational goal. Or at least
he or she can then, at 18, begin to dabble in some meaningful voca-
tional experiences which will eventually provide the proper spark
and direction.

Do we detect here a perfect example of the application of
Parkinson's Law? Since fourteen years of schooling are going to be
available to all, why not make use of every bit of it - regardless
of the waste of time involved?

It is true that vocational education is more costly than most general education courses; it requires special staffing and equipment that rapidly becomes obsolete; we know this - and all the other cliches about college status symbols and not getting the right students, ad nauseum. Is not this argument really based on the fact that it is much easier for teachers and administrators to abandon vocational education in the high schools than to make it attractive and meaningful to those youngsters who need it and to really fit them for jobs in the modern work world?

We had to ask ourselves two questions in the beginning of our study: The first was, does vocational education belong in today's comprehensive high school? And then, can it be successfully taught there? Our answers to both questions now in the Grossmont District are emphatically (1) that it does; and (2) that it is.

Thousands of the Johnny Joneses and Mary Smiths in our schools do not want four years of general education crammed down their throats in high school and will not stand still to take it. As we found in our Studies in Success research of 1962-1964, average and below average students want a job they like, the admiration and friendship of their peers, and a good marriage. They may eventually see junior college as a means to reach their goals, but it is not - as it is to the legitimately college-bound - a consciously felt need and a method.
Leadership for Vocational Education in California

of self-realization.

So what we are planning is a comprehensive high school district. Such vocational and occupational instruction as we will offer will be available to all students by transfer from other campuses. The office occupations laboratory which you are going to see now is therefore only a sample of the courses which we plan to integrate into the district curricula. It is a result of the philosophy which I have described to you; that average and below-average students need special educational methods and processes applied to them, and that vocational training can and should be designed especially for them at the high school level.

The curriculum you will see demonstrated is designed around the identified needs of these students - and to say it seems to be highly successful is to put it mildly.

Two of our most creative business teachers (at times assisted by others) were given the challenge of designing this curriculum.

The needs which were to be met - and you will be able to see this clearly in the film - are:

More teacher help and closer association with the teacher (students become teachers)

More time to learn and to master each step as they go, without the scornful connotation that this makes them "dumb"

Activities to do, not just to be told how to do

The supportive atmosphere of a group of their peers
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To work in a realistic setting at work that is meaningful to them now.

To have opportunities for the small successes that encourage them to try harder tasks.

To try out real work, with adult standards of production and conduct expected of them.

To acquire the confidence and poise that come from a positive self-image and the knowledge that they have been successful at what they have tried.

Film Commentary

The office occupations laboratory training plan includes all jobs normally found in an office of 32 persons, and all the departments such as marketing, personnel, accounting, office services.

Students work at the various work stations, performing the duties of each to the best of their abilities. Some may be promoted regularly, moving eventually to supervisory duties – others may not progress beyond the first training level but they will have an opportunity to try out all positions on that level.

The laboratory itself is fitted out as a modern business office so that students work in a realistic setting, approximating as closely as possible their surrounding after employment. Psychological research on the learning process indicates that learning takes place faster and is retained longer when students can work in such a realistic setting. Desks and equipment are the same as those used in local businesses. Each trainee performs his or her duties at a work station which is in every possible respect identical to a work station.
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in an office where similar work is performed.

Two of the most important results of this type of laboratory situation are:

Because each trainee must train her successor, she must become not only proficient in it but able to verbalize about it so as to train another - quite another skill.

A trainee soon learns that sloppy work at her desk brings on swift retribution from the next station where her work goes. The peer pressure for accuracy and quality is tremendous.

The team spirit, impossible to develop in an ordinary business education room, springs up naturally. Employees of each division (there are three) cooperate on projects, negotiate for wages, assist those behind in their work, take pride in their department. In short, they learn just how team work pays off.
PRESENT PROGRAM:

At the present time Citrus College is engaged in the training of persons to enter into the occupation of the grinding and polishing of precision optics that are of a kind not normally mass-produced. Much handwork is involved, and working to extremely close tolerances is stressed.

This program is being operated under the provision of the Manpower Development Training Act and is a cooperative effort between the Department of Employment and Citrus College. The Employment Service is responsible for identifying those persons eligible and qualified to benefit from the course, and Citrus College assumes the responsibilities of administering and conducting the training.

The original training in this program began January 6, 1964, and is a continuing program. The length of the program is 1600 hours.

THE OCCUPATION FOR WHICH TRAINING IS BEING OFFERED:

The precision optical industry is responsible for the development and building of research and test equipment where precise tolerances must be maintained. These tolerances are beyond those achievable under the best production control methods where quantity must be maintained in order to keep prices competitive.
As a precision optician, the trainee will work on optical components that require the absolute in perfection, since their use may be oriented to the space programs in tracking and guidance systems (atmospheric and space environments), test and alignment controls, research and measurement devices (medical and industrial research, and commercial quality control).

A machine is capable of achieving a specific point of precision; thereafter, the tedious, meticulous, time-consuming job of handwork must begin in order to bring the component to the required degree of perfection. These units of perfection are measured in millionths of an inch (0.000001) on items that can be many feet in diameter (Palomar reflector) down to no larger than the period at the end of this sentence.

**ANTICIPATED OUTCOMES OF TRAINING:**

Listed here are some skills, knowledges and appreciations that are outcomes of this training program. The items listed are quite general; they would be burdensome if details were included.

**Skills:**

1. **Maintain** the equipment, work area, records and schedules, and develop safe work habits

2. **Operate** equipment to include generator, glass saw, edger, hand spindles (roughing), fine grinding and polishing machines, and coating equipment

3. **Produce** precision diameters, radii, and thickness, angles and parallelisms on optical components using various grinding and polishing compounds
4. Be able to test optical flats, radii, physical dimensions, angles, and optical surface quality utilizing monochromatic light, micrometers, spherometers, lens bench, and auto-collimators.

5. Use with accuracy auto-collimators, optical test bench and related gear, interferometers, Ronchi and knife-edge tests in maintaining tolerances and testing for optical properties.

6. Build own test set-ups to inspect the results of grinding and polishing operations.

7. Interpret the tests performed toward a usable optical component.

8. Operate coating machine on various surfaces to prepare material for test purposes.

Knowledges:

1. Fundamental theory of light waves as they pass from one media to another.

2. Principles of refraction and defraction.

3. Characteristics of glass in relationship to expected outcomes.

4. Procedures for processing glass or optical material from rough part to finished product.

5. Solve mathematical problems up to three unknowns.

6. Interpretation of blueprint specifications, tolerances, and tests on components at various stages of development.

Appreciations:

1. Importance of handling, storage, and physical limits of materials, raw and finished.

2. Necessity for a clean routine of handling and developing good work habits.

3. Economics of labor invested in the development of new utilization of optics.
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4. Role of basic skills acquired as applicable to each phase of the optical industry, including precision production, precision research, precision test, and technical applications.

PHYSICAL FACILITIES:

The operation of this program is presently being accommodated in an off-campus building. Some of the ideal conditions that are a part of the building are air conditioning, controlled temperature and dust control.

Equipment that is currently being utilized and with which students become familiar includes:

- Glass saw and diamond dust blades
- Precision centering and edging machine
- Universal grinder and generator
- Single spindle grinders
- 1, 2, and 4 spindle polishers
- Diamond core drill
- Coating machine
- Auto-collimators
- Interferometers
- Slide comparator
- Circle spectrometer
- Lathe bed optical bench

JOB OPPORTUNITIES:

Citrus College and the Department of Employment were privileged to announce the graduation of the first class through a newsletter mailed by R. Howard Strasbaugh, Inc., of Lynwood, California. This newsletter reached employers throughout the United States. Job opportunities were offered to students from employers all over the country.
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All of the students are presently employed and working in the occupation for which they were trained, the grinding and polishing of precision optics.

THE FUTURE OF THIS TRAINING PROGRAM:

The machines, tools, and supplies that are presently utilized in this training program are reserved for the Manpower Development and Training Program now in progress. It is anticipated that a need for other training can be identified within the optical field and offered at Citrus College. Announcements of new courses will be made as rapidly as accommodations are made available.
Our Garigus Rating should be high. We committed ourselves to the building of the Valley Vocational Center, and now we are learning what the district learned two years ago.

Let me start with our present convictions and work back; then maybe I can make it sound as if we knew what we were doing from the beginning.

The comprehensive day high school is noble in concept and effective and economical in operation. The ideal of serving all of the children of all of the people is truly democratic, but like all ideals unattainable. If this were not so, adult education (which is my specialty) would not exist, nor would drop-outs.

If you concede, as most of us do, that adult education should be an operation separate and distinct from the comprehensive day high school for adolescents, then you need take only one simple, additional, and somewhat more controversial step to find yourself well on the way to being committed to our approach. That step is to believe that continuation education can best be operated ideally outside the limits of a comprehensive day high school facility.

Let us suppose that you agree thus far: Adult education AND continuation education are best when they are separate and distinct.
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From the day high school. Pass the obvious -- that they can and have frequently shared facilities and administration -- and examine critically our major thesis.

Comprehensiveness of educational institutions is desirable, effective, efficient, economical and supportive of the ideals of democracy. Failure of our "comprehensive" high school to be 100% inclusive is not an indictment of the concept, but rather cause for us to seek out those things which are compatible and best done elsewhere and to develop a program of school functions which again may achieve a degree of comprehensiveness.

In a single separate physical facility under a single administrative head we have collected the following:

1. A daytime adult academic program, including literacy education and English for foreign-speaking students, under a federal grant; elementary and high school diploma programs.
2. A continuation high school with all necessary remedial and academic subjects for high school graduation.
3. A vocational center presently offering:
   1. Data processing
   2. Typing, office machines, secretarial practice
   3. PBX receptionist
   4. Power sewing
   5. Upholstery

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6. Welding - gas and electric
7. Auto body
8. Radio & T.V. repair

4. Offices of three centralized district functions
   1. The adult high school (classes in 32 locations)
   2. Driver education and training
   3. Neighborhood Youth Corps
   4. Vocational Coordinator

5. Special classes for day school students

**How does it work?**

**Day adult academic program -- 8 to 12 noon daily**

**Continuation high school -- 1 to 5 p.m. daily**

**Vocational Center -- Adults: mornings, daily and Saturday**
   **Adults: 7 to 10 p.m. daily**
   **Continuation: 1 to 5 p.m. daily**

All five offices (Adult School, Continuation, Driver Training, Neighborhood Youth Corps, Vocational Coordinator) are open from 8 to 4:30 daily, and the adult school keeps our office staff from 5:30 to 9:30, Monday through Thursday.

While the clerical staff has definite assignments, it also functions as a pool to handle emergency work and the unavoidable absences.

What are the advantages of the clustering of services other than that of better space utilization?

1. This pattern meets the needs of La Puente. We have an extremely young low-income community of low achievement.
Many of the community work night jobs. There is a real need for every service mentioned.

2. We are able to tailor programs to student problems - crazy schedules, etc. We can do whatever whenever; we can make the simple combination of literacy and upholstery. Things inconceivable to separate agencies in separate locations under separate administrations - Day Adult Center, Vocational Center, Continuation School – can be transferred to and from all of these programs. Day school and multiple enrollments are permitted when justified, with the exception that adults are not permitted in comprehensive day high school programs or continuation classes. In continuation school, we emphasize that students may earn their way into other programs, back to day school, and into day adult and/or evening adult by good performance at continuation.

3. Staffing multiple operations has proved easier than has staffing fractions of positions, a policy which attracts some personnel unwilling to work full time. Peak student loads can be absorbed by overtime.

Historically we did not set out with a long-range pattern such as I described in mind. As administrators of adult education for a rapidly expanding district, we sensed a need for a day program requiring separate facilities and were aware of a lack of short-term specific vocational training. Because there were no organized
programs for dropouts, we offered to serve those who we thought might succeed in any facilities that could be obtained. V.E.A. funds gave us our start by allowing a lease on factory buildings as a temporary home.

We did not realize how comprehensive we had become until we received a questionnaire from Lee Ralston. The questionnaire is included herein.
QUESTIONNAIRE ABOUT OCCUPATIONAL PREPARATION CENTER OR VOCATIONAL CENTER AS IT IS NOW OPERATING

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### Kinds of Students

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### Attendance

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### Building

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### Leadership for Vocational Education in California

#### Finance

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Public Relations (continued)

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General Information

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Contemporary Programs

AGENDA:

AGRICULTURAL EDUCATION

Instructional Materials Available . . . . Kenneth B. Cutler

The Revolution in Agriculture . . . . James W. Maynard

BUSINESS EDUCATION

Business Education . . . . . . . . . . . . . . John McDannel

Office Education . . . . . . . . . . . . . . Tillie Neft
Below are listed some additional instructional materials that are now available. I urge that you take sufficient time to review thoroughly the material and avail yourselves of the many sources of information open to you.

I. Material sponsored by the Bureau of Agricultural Education and the University of California at Davis includes:

A. Plant Propagation Calendar
B. Seeds and Seedlings
C. Audio Visuals in Ornamental Horticulture

II. The California State Polytechnic College Instructional Materials Program (supported with funds from the Vocational Education Act of 1963 as a result of an application processed through the Bureau) has three new instructional aids available. They are:

A. Agricultural Chemical Safety


3. Demonstration Kit: A trunk of materials to use in demonstrating safe use of agricultural chemicals. Protective clothing, mixing equipment, safe chemical labels, a USDA film on pesticides, and a set of 20 large flipcharts are included. May be rented for a two-week period for $25.00.

B. Livestock Judging (Kit 2), by Richard Birkett, Animal Husbandry Staff Member. This is a set of 22 slides and a manual giving
Laadership for Vocational Education in California

placing reasons and other useful information. Six classes -- three of beef and three of sheep -- are shown (side, back, and front views). The seventh class is of beef carcasses. Price -- Slide set and one manual $6.50; additional manuals 50¢ each.


I have not reviewed the Livestock Catalog #2 or the Insect Identification Manual, but if they are similar to the Agricultural Chemical Safety material, then these materials should be most useful and helpful. Special interest should be given to the Agricultural Safety material. No vo-ag department should omit instruction in this most important area.

III. Films

A. The new Holland Machine Company, P.O. Box 338, Clovis, California 93612, has an excellent and highly recommended film available on agricultural careers. Entitled "A Step Ahead," it is narrated by Chet Huntley, and it covers a wide spectrum of types of careers available to youngsters who have a farm background. The showing time is 12 minutes. The price is only the return postage.

B. An excellent 19-minute, 16mm color sound film on "Mechanization in Agriculture" is available by request from the Department of Agricultural Engineering, University of California, Davis. When writing for this film, please give one or two alternate dates.

IV. Careers Book: Careers in Natural Resource Conservation, by Fred W. Herbert, published by Henry Z. Walck, Inc., 19 Union Square West, New York, New York 10003. Offers a detailed picture of the work and goals of each of the conservation careers and tells of the qualifications and preparation necessary for each field. A history of the conservation movement and a comprehensive picture of our natural resources and the problems inherent in their use and management are also provided to help an interested young person gain an understanding of the importance of conservation
work and an overall picture of the conservation program.


V. Ohio State University materials: The Center for Research and Leadership Development in Vocational and Technical Education, Ohio State University, 980 Kinneer Road, Columbus, Ohio 43212, has prepared many instructional materials that should be very useful. These materials were developed with assistance from Vocational Education Act funds.

A. Policy and Administrative Decisions in Introducing Vocational and Technical Education in Agriculture for Off-Farm Occupations (for boards and administrators of local schools, area schools, and colleges)
Unit Price -- 50c

B. Vocational and Technical Education in Agriculture for Off-Farm Occupations (for counselors, teachers, board members, and administrators at all levels)
Unit Price -- 50c

C. Summary of Research Findings in Off-Farm Agricultural Occupations
Unit Price -- 60c

D. Planning and Conducting Cooperative Occupational Experience in Off-Farm Agriculture
Unit Price -- $1.20

E. Occupational Guidance for Off-Farm Agriculture (for guidance counselors and students)
Unit Price -- 30c

F. Horticulture -- Service Occupations (course outline and twelve modules)
Unit Price -- $5.25

G. Agricultural Supply -- Sales and Service Occupations (course outline and twelve modules)
Unit Price -- $5.00

H. Agricultural Machinery -- Service Occupations (course outline and sixteen modules)
Unit Price -- $6.50
Leadership for Vocational Education in California

I. Agricultural Chemical Technology (course outline and nine modules). Available after January 1, 1966. Unit Price will be set when available.

J. Organizing to Provide Agricultural Education for Off-Farm Occupations (of primary value to state staffs when working with groups planning programs in off-farm occupations. Consists of 18 mimeographed sheets from which transparencies can be made).
   Unit Price -- 25¢

Copies of this information are available for your review in the following offices:

1. Bureau headquarters, Sacramento

2. Teacher Training offices, University of California, Davis and California State Polytechnic College, San Luis Obispo

3. Regional Supervisor offices, Oakland, San Luis Obispo, Chico, Sacramento, Fresno, Los Angeles

4. Copies of this material will also be available for your review at the 1966 CATA Summer Conference.
Many of us who were born on a farm or grew up in a rural area may still view agriculture as production on the land. We may not realize the degree to which agriculture is daily becoming more mechanized. During the past twenty-five years, food and fiber production by one farm worker in this country has trebled to the point where he now produces enough food to support himself and thirty-two others. Even more astonishing is the rate at which agricultural jobs are becoming highly skilled, highly technical, even professional. No longer can a high school graduate or school drop-out reasonably expect to find a place in industry or on a farm; even the semi-skilled jobs are disappearing. We are challenged to identify manpower needs and to determine ways and means of meeting these needs.

The film "Mechanization in Agriculture" will give you some ideas of the stunning impact of mechanization. To meet the new occupational demands for greater technical and scientific preparation, vocational agricultural education programs are being improved, adjusted, extended, and expanded. New courses are being added to provide exploratory occupational experiences and systematic training in broad fields of work as well as in specific skills. Flexibility and the ability to learn new processes are essential in today's agricultural market.
Agricultural Education Programs

In California, agricultural education is offered by high schools, junior colleges, and adult education programs under the V.E.A. and the George-Barden Act.

A. High Schools: Agricultural education in California secondary schools provides basic training leading to employment in production of food and fiber and in related industries and occupations requiring a knowledge of agriculture.

1. Class and laboratory instruction in agricultural science (use of school farm laboratory)
2. Agricultural mechanics
3. Supervised practice or project programs (training achieved through "learning by doing")
   a. Ownership projects -- livestock, crops
   b. Work experience
   c. Home improvement and/or beautification
4. Student labor income in the supervised practice program (Students learn how to handle finances, buy economically, and sell at a profit; they also learn how to establish credit.)
5. Future Farmer Program (Members learn to conduct and participate in public meetings, to speak in public, to compete in fairs, shows, judging contests, parliamentary procedure contests, etc.)

B. Junior College

1. Many technical training programs are offered by the junior colleges. Examples include:
   a. Agricultural engineering technician
   b. Animal husbandry technician
   c. Nursery and landscape
d. Technician in natural resource management (forestry, recreation and wildlife)

2. Agricultural training is offered in the following junior colleges:
   a. Mount San Antonio College
   b. Mount San Jacinto College
   c. College of the Desert
   d. Imperial Valley College
   e. Mesa College
   f. Orange Coast College
   g. Fullerton College
   h. Los Angeles Pierce College
   i. Modesto College (largest agricultural offerings, enrollment and staff)

C. Adult Programs

1. Farm Foreman and Supervisory Training Program
   (Initiated by the Bureau of Agricultural Education and the University of California, Davis, following a request by growers' representatives and crew supervisors in 1961, this program has been conducted at College of the Desert, Palo Verdes College in Blythe, and in Imperial and Ventura counties.) A person is employed for this school year on the staff of U.C.D. to assist in training teachers and to provide instructional materials.

2. Training in basic tractor operations and preventive maintenance.

3. Training of skilled farm workers, e.g., irrigators, power equipment operators, poultry workers, agriculture mechanics, tree and vine pruners.

4. Training in ornamental horticulture (plant identification and care, lawn and home yard maintenance, pest and disease control, pruning, fertilizing and
Leadership for Vocational Education in California

lawn irrigation, landscape design, flower arranging and corsage making.

D. Professional Programs are offered by:

1. State colleges: California State Polytechnic College (San Luis Obispo and Pomona), Fresno State, Chico, Humboldt, University of California (Davis, Berkeley, Riverside, Los Angeles.)

2. Private colleges: Seventh Day Adventist, La Sierra, Angwin

Avenues of Assistance

A. Regular adult programs, e.g., agricultural mechanics, welding, ornamental horticulture.

B. Federal aid

1. V.E.A., 1963; examples include:
   a. Agricultural mechanics -- preventive maintenance
   b. Poultry management
   c. Welding -- agricultural
   d. Ornamental horticulture

2. MDTA (3300 trainees in agriculture since 1962)

C. California Agricultural Teachers Association, Inc. (One of the oldest teacher professional groups in California, this organization has as its purpose to promote and improve the teaching of agriculture in California and to foster the welfare of those engaged in this work.)

D. In-Service programs (all levels)

1. Skills week provides specialized training during the summer.

2. Special workshops are offered by Swift Marketing School, Forestry and Ornamental Horticulture.
BUSINESS EDUCATION

John McDannel

A BUSINESS EDUCATION OVERVIEW

Business education is general education. General or basic business education is designed to give individuals the ability to handle their personal business affairs successfully. General business education is needed by every consumer of the products and services of business and is essential for an economically literate society. Consumer Economics, Economics, Business Law, Beginning Typing, and Introduction to Business are examples of general education courses.

Business education is vocational education. Vocational business education is designed to offer training for office, sales, and distributive occupations. It prepares young people and adults to render services to business and the categories of stenography, typing, general office work, bookkeeping, machine operating, and a variety of others. Business Machines, Advanced Typing, Shorthand, Secretarial Practice, Salesmanship, Merchandising, Record Keeping, Secretarial Practice, and Control Classes for Work-Experience programs are examples of vocational business education courses.

VOCATIONAL BUSINESS EDUCATION

Two of the seven major areas of vocational education are the business areas of distributive education and office education; both of these subjects are taught in high schools, adult schools, and junior colleges. Cooperative program development with
Leadership for Vocational Education in California

Homemaking, industrial, and agricultural education is common in both curricula. The junior colleges' certificate and/or degree programs frequently provide for courses in more than one discipline.

**DISTRIBUTIVE EDUCATION** (to which the main of this report is devoted)

The main functions of the distributive occupations are buying, selling, sales promotion, market research, operations, and management. These are the skills and understandings to be learned.

The emphasis and the variety of subjects depend upon the occupational area for which the training is designed. Students in high school usually enter general merchandising; hence the emphasis is on buying, selling, and sales promotion. Adult or junior college students usually are employed or have had some distributive work experience; they require training in all the functional areas. A student training for insurance or for real estate needs to learn in depth different skills and understandings than does a student training for transportation or warehousing.

The **PRINCIPLES** for a distributive education program are as follows:

**Objective:** To assist the student to acquire an entry job, to adjust to employment environment, to advance in his chosen occupation

**Instructional Content:** Marketing, Merchandising, Management

**Emphasis of Instruction:** Principles, Practices, Procedures
Leadership for Vocational Education in California

Two PLANS OF INSTRUCTION, summaries of which are available from the California State Department of Education, Bureau of Business Education, are the Project Plan and the Cooperative Plan.

I. THE PROJECT PLAN

A. Description

The lack of part-time employment opportunities in their communities prevented many high schools and junior colleges from offering distributive education programs. For the first time, these schools have the opportunity to offer such programs without meeting the continuous employment requirement. These preparatory programs will be conducted under the "project plan." Student participation activities will be utilized to provide many of the experiences that students otherwise would obtain through on-the-job training.

The major emphasis of this plan is to prepare students for entry jobs in the field of distribution.

The instructional program is developed around those occupational competencies needed in a specific distributive occupational field. Student participation activities are designed to stimulate those experiences usually acquired through on-the-job training in a distributive occupation. The activities may include individual and group projects, individual study, projects organized around classroom laboratory facilities, and the like.

Students should receive some employment experience in a distributive occupation.
during enrollment in the distributive education program. However, the extent of this experience may differ from program to program. Employment on Saturdays and in seasonal jobs may provide opportunity for students to have on-the-job experience in the field of distribution.

B. Reimbursement Policy

1. Instruction time (three school years) 50%  
   For single or double period

2. Program development (first-year only)  
   Teacher preparation allowance one period 50%  
   Instructional materials (including textbooks) per student -- $25  
   maximum -- $500

II. COOPERATIVE PLAN

A. Description

The cooperative plan is a working relationship between the school and business community to prepare persons for employment in the occupation of their choice. Under this plan students are employed in distributive occupations in which they use the skills and knowledge acquired in the classroom.

The major emphasis of this plan is to help students advance in the distributive occupations of their choice.

The instructional program is based on a realistic analysis of the tasks and duties students are expected to perform and the responsibilities they are
expected to assume in the training positions they are to occupy.

Students must be employed a specific number of hours per week in a distributive occupation concurrently with enrollment in the distributive education program. They receive credit for their on-the-job training, are paid for their services, and are under the direct supervision of a distributive education teacher.

B. Reimbursement

1. Instruction time -- one period 50%
2. Coordination time -- two periods 50%
3. Travel within the district and to meetings called by the Bureau of Business Education 50%
4. Brochure development 50%

These publications and the releases listed below are among the information available from the Bureau of Business Education. For additional information contact: Tillie Neft, Regional Supervisor, and John McDannel, Regional Supervisor.

D-E Curriculum Workshop, San Francisco, June, 1965
D-E Annual Descriptive Report, 1964-65
D-E Set of 13 Instructional Unit Guides
D-E Set of 60 cards for free films and free materials
California Retailing and You
Careers in Business
Selected Readings on Vocational Business Education
How to Teach Business Subjects
Leadership for Vocational Education in California

PREPARATORY INSTRUCTION IN DISTRIBUTIVE EDUCATION

Presentation of Theory

Curricula are identified with the competencies needed in distributive employment. These areas of instruction vary in emphases but are always taught in relation to one another and to the economy.

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<td>Service Knowledge</td>
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<td>Buying</td>
<td>Special Techniques</td>
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<th>COMPETENCY IN BASIC SKILLS</th>
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<td>Application of Math</td>
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<tr>
<td>Human Relations</td>
<td>Communications</td>
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<tr>
<td>Supervisory Skills</td>
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Methods to Assure Application to Employment Requirements

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<th>PROJECT PLAN</th>
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<td>Regularly scheduled part-time employment that gives students an opportunity to experience theory in practice while developing competencies through training on a job related to their career goals</td>
<td>A series of individually selected activities that gives students an opportunity to experience theory in practice while developing competencies through assignments related to their career goals</td>
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DISTRIBUTIVE EDUCATION CLUBS OF AMERICA

Provide opportunities to demonstrate and to refine the competencies required in employment.
OFFICE EDUCATION

Tillie Neft

ENROLLMENT

Every five years an enrollment study is made by the Bureau of Business Education. The last report, for the period ending 1961, showed a total enrollment in office education skill courses on the high school and junior college levels of nearly 400,000, an increase of forty-nine per cent over that of the previous five-year period. Considering the constant increase in school population and the new legislation which makes funds available for office education, it is anticipated that the forty-nine per cent will be exceeded for the next enrollment period.

OBJECTIVES

Office education trains students for those jobs which are related to the facilitating function of the office. Activities included are: recording and retrieval of data, supervision and coordination of office activities, internal and external communication, and reporting of information. Office education assists the student in acquiring an entry job, adjusting to employment environment, and advancing in the office occupation of his choice.

TRENDS

Curricula. The office education curricula consists of the following programs: general office, data processing, and stenography.
Leadership for Vocational Education in California

Schools are developing job-oriented curricula in order to prepare students for entry jobs, for needed retraining, and for upgrading on the job. On the high school level training is given for such entry jobs as general clerk, clerk-typist, stenographer, business machine operator, and bookkeeper; on the junior college level instruction is given for the technical secretary—administrative, legal, and medical—general secretary, accountant, and various data processing jobs; on the adult level retraining and upgrading instruction are given, as is preparation for the entry job.

In evaluating the curricula periodically in order to keep it up-to-date, schools are using such sources as federal, state, and local agencies; advisory committees; results of business and community surveys; student follow-up studies; businessmen’s conferences; and releases and publications from education, business, and industry.

I should like to discuss two releases of the Bureau of Business Education which have pertinent information for job-oriented curricula building and revision. The first one—a three phase project—is, "Selected Entry Office Jobs for the High School Student, Report of Conferences with Government, Business, and Industry."

Phase I of the study dealt with the collection of job descriptions from the following types of government agencies, business, and industry: all branches of civil service, the California Department of Employment, the United States Department of Labor, banks, aircraft and missiles,
savings and loan, retail, insurance, utilities, food processing, services, construction, manufacturing, and oil. Job descriptions for three entry office jobs—stenographer, clerk-typist, and general office clerk—were analyzed to determine the following: knowledge and abilities needed; duties performed; speed requirements for shorthand and typewriting; personality traits, attitudes, work habits, and grooming desired.

Phase II of the project was a series of three conferences with representatives from government, business, and industry to discuss present and future entry office job opportunities for the high school student and to review the entry requirements for these positions. Conferences were held in Los Angeles, Sacramento, and San Francisco.

Phase III of the study will be started in the near future. It will involve the building of job-oriented curricula with a selected team of teachers, office workers, job supervisors, personnel managers, training directors, curriculum coordinators, and members of the staff of the Bureau of Business Education. It is the plan of the Bureau to have a team of teachers spend at least one month on the job taking employment tests; observing job interviews; participating in orientation and in-service training programs; observing, conferring and working with clerk typists, general office clerks, stenographers, job supervisors, training directors, and personnel managers. The next step will be a series of meetings with the above-mentioned personnel, curriculum coordinators, and Bureau staff members to build the job-
Leadership for Vocational Education in California

oriented curricula for the three entry jobs named, to pool ideas on new training methods and techniques, and to develop up-to-date instructional materials and aids. Continuous study and frequent evaluation of the curricula developed will be provided for.

The second release is, "Impact of Automation on Office Occupations, Report of Conferences and Recommendations for Business Education Programs in the Secondary School." The purposes of the study were to determine the impact of automation and other changes of technology on office occupations and to make recommendations for meeting these changing needs through business education programs. Literature and reports in this field were reviewed, and three conferences were held with representatives from business. The recommendations, which are most valuable to schools in developing and updating job-oriented curricula in the office occupations, are given under the following headings: cooperation with businessmen and community, counseling, general preparation, skill preparation, new courses, methods, and attitudes.

Utilization of Staff. Large group instruction with one teacher and one or more aides is being used in the teaching of typewriting, shorthand, and some general business education subjects. Team teaching is another approach that makes for effective instruction with large groups.

Equipment. Equipment in being updated as a result of conferences
Leadership for Vocational Education in California

with businessmen and advisory committees, reports of equipment surveys, analyses of job descriptions, and funds made available through new legislation. Modern types of equipment found in office training classrooms are: electric typewriters, Selectrics with keypunch keyboard, ten key adding and printing machines, rotary calculators, transcription machines, duplicating equipment, automatic typewriters, keypunch machines, and PBX and telephones.

Instructional Devices. Some new teaching devices used in office education training courses are: TV for the teaching of typewriting; controlled readers and skill builders for instruction in shorthand, typewriting, ten key, key punch, filing, business mathematics; electronic laboratories—tape, disc, belt, record—for training in shorthand, typewriting, transcription machines, business machines, and office procedures; overhead projectors; slides combined with tape recordings.

With new instructional devices comes the need for in-service training for teachers. Montag states, "No electronic device is a teacher per se and effective use of such devices requires excellence in the teacher who uses them. So far little effort has been made to help teachers develop techniques applicable to the new equipment... new trends in language and business subjects are negated by the lack of personnel who can teach them effectively for their use demands a broad up-to-date knowledge of subject matter, a flexible approach to teaching, and the intelligence and imagination to adjust and adapt to
Some materials for use with new devices are available commercially; however, there is need to develop others locally. In a few districts, released time is provided for this activity; in others, pay for summer-time work on instructional materials is given.

**Office Work Experience Education.** More and more schools are including cooperative office-work-experience programs in the job-oriented curricula; this is on-the-job experience that is related to an office training program. Coordination with the counselor, teacher-coordinator, and employer makes for a worthwhile work-experience program.

**Other Curricula Needs.** There is a need to learn more about jobs which are available for the slower students. The training should be more intensive and less extensive so that students can handle simple jobs and be good at them. Surveys are needed to determine entry jobs for this class of student. Here is a good opportunity for "across the board training,"—business education combined with industrial, homemaking, and agriculture education. Some schools are now experimenting with these programs.

Short intensive training is needed for the college-bound student. A few districts are now offering special course sequences

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Leadership for Vocational Education in California

which are job preparatory.

**Vocational Counseling.** Provision for vocational counseling is being made in districts so that more adequate selection, testing, and vocational information can be provided. Counselors, business education teachers, business representatives, and the California Department of Employment are beginning to work together more closely than ever before.

**Economic Competency and Understanding.** The general business education part of the office education curricula is tending to include a course in economics as part of the preparatory course training or to include in each office course understanding of business organization and economics.

**HOW TO KEEP UP TO DATE**

Yearbooks by the National Business Education Association such as, "New Perspectives in Business Education," "New Media in Teaching Business Subjects," and "Recent and Projected Developments Affecting Business Education" include the thinking of the best authorities in the country in this field of education. Magazines such as "National Business Education Forum," "Journal of Business Education," "Business Education World," and "Data Processor" bring us up-to-date information in business education.

If we are to train for the business office, it is important that
Leadership for Vocational Education in California

we become familiar with some of the publications that business reads, for example, "Modern Office," "Administrative Management," and "Office."
Other means of keeping up-to-date are observation programs in business and industry, work programs for teachers of office training courses, and conferences sponsored by educational agencies, business, and industry.

Some releases and publications from the Bureau of Business Education that are of value in the office occupations field are: "Office Procedures," "Data Processing," "Legal Secretary," "Medical Secretary," "Suggested High School Programs for the Office Occupations," "Job-Oriented Course Sequences," "Forty Statements for the Improvement of Office Education," and releases from business on grooming, job performance, interviews, etc.

NEEDED RESEARCH

Some Bureau suggestions for needed research in business education are: the relation of basic education to occupational training programs, the use of programmed instruction, the use of team teaching and staff assistance, the potentials in business education for disadvantaged youth and for gifted or talented youth, the development of a new pattern for business teacher education, and the effects of automation and technological change on business education.
AGENDA:

DESIGN FOR EXCELLENCE..........James Herman, Chairman

VOCATIONAL EDUCATION CLINIC.....C. Kent Bennion, Chairman, Central and Coastal Regions
Thomas S. Ryan, Chairman, Southern Region

Small Group Leaders
Donald Sizer
David E. Fleckles
Stanley Everett
Glen M. Larsen
Norman R. Stanger

A STATEMENT OF CAUTION

Many of the items were repeated; therefore, this report does not show which items were expressed most often.

Many items had to be interpreted by the editors (for largely grammatical errors, etc.); but, the items may not yet say exactly the intent of the participants.

Any written report does not tell all that goes on in the groups; thus, these "end products" are only suggestive of the total product and not of the process at all.

There was no standard (nor should there have been) with which to compare each item reported; and so, no item is to be considered as representative of the Conference.
The conferees submitted the names and descriptions of successful programs in their areas; the conference then broke into small groups to discuss the salient points of these programs to discover what features the programs have in common. The following is a presentation of ideas which have been activated in the specific programs mentioned here. These programs are listed at the end of the article for your convenience.

CURRENT PROGRAMS

I. The Teacher

A. Short term in-service programs strengthen the link between industry and teaching. Swift and Company and California Redwood have successfully sponsored occupational workshops. The discussants noted that these programs:

1. Provide the teacher with first-hand experience in his occupational field.
2. Provide the teacher with vital information about employment trends in his occupational field.
3. Pay the teacher for work in industry during vacation periods.
4. Give college credit for work done.
5. Involve the teacher more closely with his occupational field.
Leadership for Vocational Education in California

B. The in-service teacher training program under contract to the university with a two-week workshop before the program starts is valuable. The program:

1. Provides in-service teacher training for the teacher outside his own field, e.g., the math teacher is instructed in lathe operation.

2. Pays teacher trainers.

3. Involves all people in teaching -- administrators, coordinators, and teachers.

II. The Counselor

A. Occupational workshops for counselors (and teachers) have been employed at San Jose State College and in the San Diego County Schools. An occupational workshop for counselors has been sponsored by the Eddington-Solano Company. Such programs:

1. Provide counselors with vital information about current employment trends.

2. Provide counselors an opportunity to discuss guidance techniques.

B. Leadership training is being developed for Fire Department officers, so that fire science personnel may be used as resource counselors in the interest of the Fire Science Program.

III. The Student

A. Occupations may provide scholarships for promising students. The Plumbing Contractors of Mendocino, Sonoma, and Marin Counties have provided scholarships which:

1. Provide incentive for students.

2. Are not awarded primarily on the basis of academic standing.
B. Youth-directed projects have proved successful in several areas.

1. The Youth Employment Service in Rio Grande School District in San Luis Obispo is such a project. It has been successful in finding employment for youth and in advising youth on how to find employment.

2. Youth-directed corporations, such as the Youth Project at Terra Nova High School in Pacifica in which students made wood products on a production basis, have proved successful in terms of motivation and involvement.

C. Work-experience programs are valuable in giving youth understanding of occupations.

1. The Opportunities Industrialization Center in West-East Palo Alto provides self-help pre-vocational and short-term skill training for minority group individuals. The center is a joint venture in cooperation of community, industry and school personnel.

2. The Neighborhood Youth Corps program gets students motivated and back into the main stream of school and society.

3. The San Juan Unified School District has developed a vocational-technical center. This center provides skill training in several areas and still furnishes the student an opportunity to be involved with his peer groups at the home school.

D. Teaching assistants or teaching aides have been used successfully in the R.N. program and also in MDTA. The discussants noted that the use of these competent students:

1. Brings down the ratio of pupil to teacher.

2. Helps motivate students by creating a situation in which students help other students.

3. Can be financed by Work-Study funds.
The need to communicate with parents of prospective students the value of the suggested program is met in part at Terra Nova High School in Pacifica, where the student gets additional credit in class assignment if a parent attends "Trade Nite." As an alternative, the student may write a term paper.

IV. The Curriculum: Administration

A. Area meetings among junior college administrators may function as an advisory committee to discuss and plan for occupational needs of the region. Such meetings were successful in Santa Clara County. The discussants noted that:

1. Cooperation avoids unnecessary duplication and competition within the programs of the several colleges.

2. Two or more junior colleges may present similar programs if the need exists, thereby creating healthy competition.

3. Core programs may be developed, with each school emphasizing special phases at the termination level.

4. Emphasis may be placed on training for entry-level jobs; over-specialization may thus be avoided.

5. Programs may be standardized so that industry "knows what it is getting."

6. The creative ideas of the various instructional staffs might be pooled to establish new programs.

7. A more realistic vocational education program considers what other institutions are offering and what the employment needs of the community are.

B. An Occupational Home Management (Institutional Housekeeping) program has been instituted in the Solano School District. A vocational program for senior girls, it consists of one hour class with two hour placement. The program:
Leadership for Vocational Education in California

1. Provides vocational training for a demand occupation.

2. Meets the rapidly growing need for trained personnel in this area of medical and nursing institutions and schools.

C. The Nursery School Assistant Curriculum at Bakersfield College has been successful in preparing young women, especially those in low-income minority group situations, for employment in nursery schools and/or child care centers.

PROPOSED PROGRAMS

I. A Youth Advisory Council to the San Mateo County Industry Education Council is being formed with the intent of providing the vehicle for youth to help other youth and parents understand more realistically the changing manpower needs.

II. Investigation of the field of cosmetology has proved to be an outstanding feature of the "careers in fields related to homemaking" courses at Sunnyvale High School. There is:

A. A need for the occupation; the industry is growing rapidly.

B. Enthusiasm on the part of the program teachers.

C. A natural attraction of the occupation for women.

III. Yolo County is applying for a research and development grant to explore the possibility of establishing regional centers for vocational education.

A. Each high school in Yolo County will continue to offer college preparatory, general, and pre-vocational courses, and will specialize in a "cluster" of vocational courses (courses that are grouped around a common occupational goal or which employ common equipment or staff, e.g., business-commercial-distributive education or graphic arts or agricultural science-mechanics-business, etc.).
B. All programs are to be made accessible to all students in the county and surrounding areas who can profit from them.

C. All vocational level courses (11th and 12th grades and adults) will be located at one site. Adult programs, retraining programs, and programs for the mentally retarded, etc., will be offered at this facility, which will also be the center for O.J.T., M.D.T.A., and other programs. The center will provide all necessary ancillary services of testing, counseling, job placement, research, and follow-up.

IV. A county-wide survey of vocational needs will be made in Humboldt County as part of Title III for the county center. It will begin where the junior college survey left off and should be the basis for changes in counseling, etc.

V. Below is a flow chart that attempts to indicate how a vocational program in Horticulture is being developed at American River Junior College.
DISTRICT VOCATIONAL SURVEY
(To establish need) May, 1965

Cooperating Agencies
1. Bureau of Industrial Education
2. State Department of Employment
3. Vocational Consultant (county level)
4. Vocational Coordinators (high school level)
5. California Polytechnic, San Luis Obispo

RESEARCH & DEVELOPMENT
(By school staff) September, 1965

Subcommittee
To develop rough draft to present to Advisory Committee

ADVISORY COMMITTEE
October, 1965

Subcommittee
To consider recommendations of Advisory Committee

ADVISORY COMMITTEE
December, 1965

Subcommittee
To develop final draft

CURRICULUM COMMITTEE
February, 1966
(For approval)

BOARD OF TRUSTEES
March, 1966
(For adoption)

PROGRAM IN OPERATION
September, 1966
LIST OF PROGRAMS, CURRENT AND PROPOSED

1. Cosmetology in "careers in fields related to homemaking" courses, Sunnyvale High School, Santa Clara County.

2. County-wide survey of vocational needs, Humboldt County.


5. In-service teacher training program, University of California.

6. Leadership training for fire science personnel, Division of Fire Training, State Department of Education.

7. Neighborhood Youth Corps Program, San Luis Obispo County.

8. Nursery school Assistant Program, Bakersfield College.


12. Opportunities Industrialization Center, West-East Palo Alto.


14. Trade Nite Program, Terra Nova High School, Pacifica.

15. Vocational Program in Horticulture, American River Junior College.


17. Yolo County Regional Centers for Vocational Education, Yolo County.


20. Youth Project (youth-directed corporation), Terra Nova High School, Pacifica.
VOCATIONAL EDUCATION CLINIC

C. Kent Bennion and Thomas S. Ryan, Chairmen

Question: HOW DO WE DEFINE VOCATIONAL EDUCATION?

Answer: Vocational education, an integral part of the comprehensive curricula, provides an opportunity for all students to acquire skills, knowledge, and attitudes leading to reasonable economic security.

Question: WHAT FACTORS CONTRIBUTE TO THE LESS THAN FELICITOUS RELATIONSHIP BETWEEN VOCATIONAL AND GENERAL EDUCATION?

Answer: Credential requirements, differences, and restrictions. The separation of physical facilities. The "self-imposed exile" image of vocational education personnel.

Question: HOW CAN THE RELATIONSHIP OF VOCATIONAL EDUCATION TO GENERAL EDUCATION BE IMPROVED?

Answer: General education is the cornerstone of vocational education. General education types of courses should be rewritten with the assistance of both vocational and general education personnel. Orange County, for example, offers technical science, math, and communications courses.

Perhaps normal or traditional academic subjects should be modified through tactful approach and suggestion so that they more closely relate to the world of work for all students.

More emphasis should be given to inter-discipline team teaching and flexible scheduling.

General administrators, superintendents, principals, directors, counselors, general supervisors, and deans should be included in planning and evaluating vocational education programs at all levels.

A regional evaluation team or teams composed of general and vocational education administrators should be made available to respond to requests by local districts to evaluate their vocational education programs.
Question: HOW CAN WE PROVIDE MORE VEHICLES FOR SHARING GOOD IDEAS?

Answer: Though local meetings might be preferable in the sense that teachers could participate directly, conferences provide the broader view.

We can visit other offices to find out what is current.

We need a clearing house to read information (e.g., the vocational journals), sort it, put it down and distribute it. This would keep others up to date on what’s going on. Perhaps the county office could perform this service.

A list of audio-visual aids might be compiled and sent out so that other areas may interchange materials.

Teacher group visitation to classes of experienced and exceptional teachers, to be followed up with a department meeting critique, should be a continual practice.

Question: HOW CAN WE MAKE THE COMMUNITY AWARE OF THE NEED FOR VOCATIONAL EDUCATION?

Answer: Recognizing and having a coordinator is the first step; then the coordinator must sell the idea.

School publications, regularly distributed, publicize VE. These go home to parents, out to community.

Writing articles for the newspaper on the success of employees graduated from high school is an effective way to attract attention.

Go to elementary principals and PTA to sell junior high. Parents must be interested in the world of work.

If school is a public service, then radio and TV should be approached to give public service time.
Question: HOW CAN IN-SERVICE TRAINING BE EXPANDED?

Answer: A state-created project should be developed for in-service training of supervisors, coordinators, and directors. The plan would re-imburse the district for time away from the job and pay all related costs. University credit for these workshops or institutes is not recommended.

Question: HOW CAN THE INTERNSHIP PROGRAM BE EXPANDED?

Answer: Full payment of intern costs to the district by the state should be considered. J.C. vocational directors of all districts should be notified of program progress and interns available.

Question: HOW CAN WE MAKE THE STUDENT MORE AWARE OF THE WORK SITUATION?

Answer: Show him the work situation by providing field trips to different industries.

Outside speakers (not personnel people) should talk to students about the world of work.

Bring the job situation into the classroom, e.g., type real letters.

Make a product.

Put a time limit on projects, perhaps use a time clock. Schedule according to "time equals money equals economy."

Stress attitudes, getting along. Many students fail to hold jobs because of bad attitudes rather than lack of skills.

Bring in personnel people to demonstrate an interview in front of the class; involve students in the interview and a critical discussion of same. Discuss poise, grooming, polish.

The follow-up of the graduate, in which teacher, administrator and counselor should be used, must be at least 2 years in length.
Question: WHAT IS EFFECTIVE PLACEMENT?

Answer: Any placement wherein the student is actively engaged in improving industry, self, or society.

Question: HOW CAN WE PUT STUDENTS INTO THE FIELD OR BRING A PERSON IN FROM THE COMMUNITY WHO CAN TEACH SPECIFIC SKILLS TO A SMALL NUMBER OF STUDENTS WITHOUT REQUIRING A CREDENTIAL (NOW MANDATORY)?

Answer: We would like a meeting on this problem.

Question: "PLAN A TWO-DAY CONFERENCE FOR THE PURPOSE OF IMPROVING VOCATIONAL EDUCATION."

Answer: The following is a hypothetical agenda for a conference on the theme "Improving the Image of Vocational Education," to be co-sponsored with CASA and CASSA. It is submitted with the recommendation that the conference be held. The agenda should allow discussion of the following points:

1. Role theory of supervisors in vocational education
2. Validity of conceptual ideas
3. The Why and How of vocational education
4. Examination of terms
5. Explanation of deficiencies and similarities of high school and junior college vocational education programs
6. Description and distribution of talent (a fresh look)
7. How to take a random sampling, as applied to vocational education programs
8. How to select and use advisory committees effectively
9. How to assess what the student is doing both on and off campus (work-learning experiences) and its relationship to structured classroom learning
10. Broader interpretation of vocational education to occupations rather than the Big 4 as individuals (Vocational Core Approach)
11. Cultural implications
AGENDA

First Day

BEHAVIORAL SCIENCES APPLIED TO VOCATIONAL EDUCATION

1. Challenging speech or speeches by experts only; suggest Spindler (Stanford)
2. "Buzz" sessions with speaker participation
3. Group questions to speaker of the "Buzzes"

OR

ROLE THEORY AND APPLICATIONS

1. Speaker: Gordon Funk of Los Angeles or Eric Berne, author of Games People Play (30 minute address, followed by a leading sociologist)
2. Authority, related to supervisors;
   Speaker: Conrad Byner
3. Group discussion covering 1 and 2

Second Day A.M.

HOW AND WHY OF VOCATIONAL EDUCATION

1. Where does it fit?
2. Why do we have it?
3. How do we break the wall between us and the academic world?
   Speaker: Ernest Kramer or a person with a broad background in vocational education -- perhaps McDaniel (Stanford)
4. Defend Why

FOUR PROGRAMS
(Four 10-minute presentations by people who are really sold on the idea)

1. Comprehensive high school
2. Area Vocational High School (Residence)
3. Area Occupational Center (Facility)
4. The Junior College
Leadership for Vocational Education in California

Second Day P.M.

FOLLOW-UP STUDY (HOW TO DO)

1. How to take a random sampling
2. How to get counselors
3. Modern sampling techniques
4. Harris (Practitioners)
Manpower Development and Training Act

AGENDA:

Panel: MDTA: THE STATE OF THE ART ........ Fred Sherwyn, Chairman

An Introduction to MDTA ........ Fred Sherwyn

MDTA and the Los Angeles City Schools .. Robert A. Sampieri

Questions to the Panel ........ James Allison
Majorie E. Gardner
Robert A. Sampieri
Fred Sherwyn

Symposium: MDTA: PROGRAMS, PROGRESS AND PROGNOSIS ........ Richard Wilcoxon, Chairman

The State Level ........ Richard Wilcoxon

The County Level ........ Bernard Gjerdrum
(report not submitted)

The Local Level ........ Robert P. Hansler

The Junior College Level ........ Richard Page
An Introduction to MDTA

Fred Sherwyn

I would like to go through an MDTA proposal for you from its inception.

Job Openings Located The local offices of the Department of Employment are responsible for locating job openings in the various areas they serve.

Unemployed Persons Available The local offices are also responsible for identifying and categorizing the unemployed so that they are ready for training.

Information Relayed This information goes to the state headquarters at Sacramento. The State Department of Employment signs the MDT-1 if the request is valid. This material then goes to the particular regional office of the State Department of Education.

Training Agency Selected The regional office, through its vocational staff, may select a public or a private school to conduct the training program, depending on the quality of instruction, facilities, cost, etc. The office may also decide on the school district if there are several in the training area.

Course and Budget Developed The training agency selected develops a course of instruction in conformance with the job performance requirements determined by the State Department of Employment. It also prepares the budget for the course, with each item identified. The proposal is then sent to the regional office.

Application Submitted Along with the Training Plan and the Estimated Budget (OE 40CJ) are submitted four other forms or sets of information: Application for Training (MDT-2), Notification of Training Need (MDT-1) from Employment, Application for Approval (VEMDT-1 for public school, or VEMDT-2 for non-public school), Supplementary Material (a detailed explanation of the requested budget). Then our office submits the proposal for review by the State Department of Education and the State Department of Employment.

Notification Sent After the proposal is reviewed at the state and federal levels, the training agency that submitted the training project proposal is notified by the State Department of Education that funds will be allocated for the support of the project.
Trainees Registered The local office of the Department of Employment refers qualified trainees to the training agency.

Progress Reported The training agency reports at intervals to the local office of the Department of Employment and the Department of Education on the progress of the students.

Training Allowances Processed The State Department of Employment processes training allowances for the trainees.

Claims Processed Claims from the operating training agency are also processed in the main office in Sacramento.

Trainees Placed The local office of the State Department of Employment is responsible for placing the trainees upon completion of the training program.
MDTA: THE STATE OF THE ART

MDTA and the Los Angeles City Schools

Robert A. Sampieri

Editor's note: A detailed list of the MDTA programs in the Los Angeles City Schools (1) funded and in progress, (2) submitted but not funded, and (3) being developed by the MDTA Central Office may be obtained from the Manpower Development and Training Office, Los Angeles City Schools. Prepared by Mr. Jackson E. Eckstein and Mr. Robert A. Sampieri, the list also contains itemizations of the programs in progress at the MDTA skills centers and of MDTA individual referrals. We do not include it here because of its length.

I. Overview of Los Angeles City Schools' participation in Manpower Development and Training programs under P.L. 87-415

A. Scope of Participation:

College projects include twenty active programs with a total of thirty-seven (37) classes, or sections.

Adult projects comprise eighteen (18) programs with a total of sixty-one (61) classes, or sections.

Individual Referral proposals total twenty-three (23) at the present with several under development.

B. Range of Vocational Programs:

Note: classes range from Basic Education, Animal Keeper, Glass Blower, Licensed Vocational Nursing, Television Repairman, Hospital Receiving Clerk, Automobile Upholsterer to Vending Machine Mechanic

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C. **Degree of Success:**

Manpower Development and Training Programs functioning within the Los Angeles City Schools System have resulted in an average employability of 72-73%.

The average is significantly higher in the programs for adults as opposed to those for youth.

D. **Types of Curricula:**

Manpower programs have been designed on a straight, institutional basis, institutional preceded by remedial/basic education, integrated vocational and basic education, and coupled program (O.J.T.), e.g., Floor Maintenance Mechanic, which contains four weeks of institutional training prior to the O.J.T. experience.

II. **Budget Implications to the Los Angeles Board of Education**

A. **Current Fiscal Budget**

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<th>Unified Projects</th>
<th>Junior College Projects</th>
<th>Total as of May 13, 1963</th>
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B. **Amendment to the Current Budget** for the purpose of establishing three Skills Centers

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<th>Unified Projects</th>
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C. **Combined Current Fiscal Budget**

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<td>770,000.00</td>
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III. **Administrative Responsibilities** of the Manpower Training Central Office are basically two-fold:

A. The development of the curriculum (training plan)

B. The development and ultimate control of a complete budget
Leadership for Vocational Education in California

The basic fiscal concept of manpower training programs is educationally sound. Frequently, within the profession, the typical objective of a school administrator is to fit an educational program within a limited budget. This has resulted in many "watered-down" programs that are fiscally paralyzed. However, the reverse is true under P.L. 87-415. That is, the educational program is first developed to meet a particular training objective. A budget is then developed to support this training program. The result is usually a vigorous, unimpaired training program that is able to meet the individual and employer needs.

IV. Advantages to be gained by participation in Manpower Development and Training Projects:

1. The opportunity to develop an enriched total community education service

2. Stimulation to the ongoing programs in the form of:
   (a) Educational innovations
   (b) Use of different types of exotic equipment not normally found in a school
   (c) Pedagogical experimentation

3. Provides the opportunity to a school district to offer an experimental program it normally could not afford

V. Manpower Development and Training Central Office Administration Structure (See chart below)
MDTA: THE STATE OF THE ART

Questions to the Panel

Question: How do you feel about 10% - 90% funding?
Answer: No hardship -- matching will be in kind. It's just a token to show that the school is interested in 10%. In reality, it is 100%.

Question: How are individual referral applications processed?
Answer: Most of the work is done at Sacramento. Master contracts don't have to go to a review team. This saves time; they only need a day or two for processing.

Question: Do you expect Medicare to increase demands for trained clerical workers?
Answer: Yes. The Department of Employment states great need.

Question: Like the training of medical secretaries?
Answer: Yes.

Question: How can small districts that don't have reserves get money?
Answer: They can ask for project development money or file a partial claim.

Question: What is the length of training for stenographers?
Answer: Twenty-five to thirty-five weeks, with the average being about thirty weeks.

Question: How much money was spent last year?
Answer: Last fiscal year, $36,000,000 in California.

Question: Can the school district initiate the request?
Answer: Yes, if the school district works through the Department of Employment.
MDTA: PROGRAMS, PROGRESS and PROGNOSIS

The State Level

Richard Wilcoxon

Brief History of MDTA

The Manpower Act was passed by Congress on March 15, 1962, and the first project was approved in California on August of that year. The Act has been amended twice--once in December of 1963 and again in April of 1965. The amendments have lengthened the time of training from 52 to 104 weeks, made provisions for basic education, and reduced the state matching requirements from 33-1/3 percent to 10 percent in kind after June 30, 1966 (A brief explanation of the attached list was then made).

Trends in MDTA

Contrary to popular expectations, the largest growth of jobs in the last two years has been among the Negro, the unskilled, and the teenager. Jobs have increased where automation was supposed to cause trouble in manufacturing, in transportation, and among the unskilled.

The explanation of the above two statements is that in the past two years we have experienced a growth rate of 5 percent instead of the 2 to 3 percent. This increase has been largely a result of an expansionary federal fiscal policy (tax cut, deficit spending), which in turn has caused a larger demand for goods and services and the subsequent need for people to fill more jobs.
Leadership for Vocational Education in California

It appears that the effect of this expanding economy on the MDTA program is that we will do more training which will be aimed at the hard core unemployed (the culturally deprived, the low achievers, the poverty-ridden--those that this new prosperity has not touched). This will mean that we will have more projects in which the trainees will need basic education, intensive counseling, and some method(s) of motivation.

Included in this report is a list of the MDTA programs approved as of September, 1965.
Leadership for Vocational Education in California

CALIFORNIA STATE DEPARTMENT OF EDUCATION
Vocational Education
MDTA Projects Approved

September 27, 1965

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<th>FISCAL YEAR</th>
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<th>Industrial Education</th>
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Total through 6/30/65
Leadership for Vocational Education in California

MDTA Projects Approved (continued)

<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>Total through 6/30/65</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962-63</td>
<td>1963-64</td>
</tr>
<tr>
<td>5,581</td>
<td>7,685</td>
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<tr>
<td>$2,708,354</td>
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<td>$485</td>
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<td>$3,066,391</td>
<td>$5,879,315</td>
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Leadership for Vocational Education in California

CALIFORNIA STATE DEPARTMENT OF EDUCATION
Vocational Education

Approved MDEA Projects by Occupation

September 27, 1965

<table>
<thead>
<tr>
<th>Occupation</th>
<th>1962-63</th>
<th>1963-64</th>
<th>1964-65</th>
<th>Total</th>
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<tbody>
<tr>
<td>Agricultural Education</td>
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<tr>
<td>Agricultural Mechanic</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>Farm Hand, Poultry</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Farm Mechanic</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Foreman (Agriculture)</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Groundkeeper</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Groundsman-Gardener</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Keeper (Amusement &amp; Recreation)</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
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<tr>
<td>Nurseryman II</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Pre-Vocational &amp; Farm Hand, General</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tractor Operator I</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Vine and Tree Pruner</td>
<td>1</td>
<td>8</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>15</td>
<td>24</td>
<td>44</td>
</tr>
</tbody>
</table>

| Homemaking Education                           |         |         |         |       |
| Home Health Aide                               |         |         | 4       | 4     |
| Housekeeper                                    | 1       |         |         | 1     |
| **Total**                                      | 1       | 4       | 5       |       |

| Business Education                             |         |         |         |       |
| Calculating Machine Operator                   | 1       |         | 1       | 1     |
| Clerk, General Office                          |         | 4       |         | 13    |
| Clerk, General Office (Finance)                |         | 1       |         | 1     |
| Clerk-Typist                                   | 19      | 14      | 27      | 60    |

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Leadership for Vocational Education in California

<table>
<thead>
<tr>
<th>Occupation</th>
<th>FISCAL YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1962-63</td>
</tr>
</tbody>
</table>

**Business Education (continued)**

- Clerk-Typist (Refresher) | 1 | 2 | 3 |
- Clerk-Typist (Spanish Speaking) | 1 | 1 |
- Clerk-Typist and General |
  - Industry Clerk |
  - Bookkeeping Machine Operator | 1 | 1 |
- Duplicating Machine Operator | 1 | 1 |
- Key Punch Operator |
- Grocery Checker |
- Office Reproduction Worker |
- Reproduction Typist |
- Receptionist |
  - (Hospital Receiving Clerk) |
- Salesperson |
- Stenographer |
- Stenographer (Refresher) |
- Secretary |
- Secretary (Clerical) |
- Secretary (Legal) |
- Secretary (Insurance) |
- Secretary (Medical) |
- Technical Stenographer |
- Transcribing Machine Operator |
- Teller (Banking) |
- Total | 52 | 57 | 100 | 209 |

**Industrial Education**

- Auto Body Repairman | 1 | 1 |
- Auto Mechanic | 2 | 2 |
- Automobile Service Station |
  - Attendant |
    - 10 | 10 |
- Auto Retailer |

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Leadership for Vocational Education in California

<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>1962-63</th>
<th>1963-64</th>
<th>1964-65</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Education (continued)</td>
<td></td>
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</tr>
<tr>
<td>Carpenter (Upgrading)</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Carpenter Apprentice</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemist Assistant</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
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<tr>
<td>Compositor (Upgrading)</td>
<td>1</td>
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<td>1</td>
<td></td>
</tr>
<tr>
<td>Coin Machine Serviceman</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Custodian</td>
<td>1</td>
<td>2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Construction Equipment</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Mechanic</td>
<td>2</td>
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<td></td>
<td>2</td>
</tr>
<tr>
<td>Draftsman</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Dry Cleaner Operator</td>
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<td></td>
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</tr>
<tr>
<td>Electronic Assembler</td>
<td>3</td>
<td>1</td>
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<td>4</td>
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<tr>
<td>Electronic Technician</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>11</td>
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<tr>
<td>Electrical Appliance Serviceman</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Mechanic</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Food Service Worker</td>
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<td></td>
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</tr>
<tr>
<td>Fry Cook</td>
<td>1</td>
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<td></td>
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</tr>
<tr>
<td>Framesman (Tel &amp; Tel)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Geriatric Nurse Aide</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Housecleaner (Medical)</td>
<td>1</td>
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<tr>
<td>Inhalation Therapist</td>
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</tr>
<tr>
<td>Instrument Assembler</td>
<td>2</td>
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<tr>
<td>Janitor I</td>
<td></td>
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<tr>
<td>Licensed Vocational Nurse</td>
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<td>17</td>
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<td>Machine Operator (General)</td>
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<tr>
<td>Machine Shop Trainee</td>
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<td>Nurse, Staff (Refresher)</td>
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<td>Nurse, General Duty (Refresher)</td>
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<tr>
<td>Orderly, Medical Service</td>
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Leadership for Vocational Education in California

<table>
<thead>
<tr>
<th>工业教育 (继续)</th>
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<tbody>
<tr>
<td>FISCAL YEAR</td>
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<table>
<thead>
<tr>
<th>岗位</th>
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<th>1963-64</th>
<th>1964-65</th>
<th>总计</th>
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<td>Office Machine Serviceman</td>
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<tr>
<td>Painter, Construction</td>
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<td>2</td>
<td></td>
</tr>
<tr>
<td>(Upgrading)</td>
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<td></td>
</tr>
<tr>
<td>Precision Lens Grinder</td>
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<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Psychiatric Technician</td>
<td>1</td>
<td>1</td>
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<td></td>
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<tr>
<td>Pre-Apprentice Metal Trades</td>
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<td></td>
<td></td>
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<tr>
<td>Porter I</td>
<td>1</td>
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<tr>
<td>Sheet Metal Worker</td>
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<td></td>
<td>1</td>
</tr>
<tr>
<td>(Upgrading)</td>
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<tr>
<td>Sewing Machine Operator</td>
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<tr>
<td>Salesperson, Building &amp; Construction</td>
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<tr>
<td>Salesperson, Auto Parts</td>
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<td>2</td>
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<tr>
<td>Surgical Technician</td>
<td></td>
<td>4</td>
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<tr>
<td>Stationary Engineer</td>
<td>2</td>
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<tr>
<td>Technical Illustrator</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Water &amp; Sewage Plant Operator (Missouri)</td>
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<tr>
<td>Welder, Combination</td>
<td>1</td>
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<td>2</td>
<td>4</td>
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<tr>
<td>Welder, Heliarc Skill</td>
<td></td>
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<td></td>
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<tr>
<td>Waitress</td>
<td>3</td>
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<td></td>
<td>3</td>
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<tr>
<td>Ward Maid and Hospital Janitor</td>
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<td></td>
<td></td>
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<tr>
<td>Welder, Electronic Resistance Spot</td>
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<tr>
<td>OJT Projects</td>
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<td>10</td>
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<tr>
<td><strong>Totals</strong></td>
<td>33</td>
<td>54</td>
<td>118</td>
<td>225</td>
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</tbody>
</table>
The MDTA manual was prepared by the ad hoc committee in 1962. The value of this manual in the preparation and operation of MDTA programs cannot be overemphasized. I urge all people involved in vocational education to become familiar with the manual.

Local concerns include:

I. Teaching Personnel
   A. Selection
   B. Procurement
   C. Retention

II. Facilities
   A. In most classroom situations it is best that the MDTA be housed in separate facilities.
   B. In specialized programs requiring heavy equipment, it is necessary to use most of the existing facilities. It is difficult to obtain equipment and supplies in the short time between the funding of a project and the actual starting of the class.

III. Job Placement
   A. There are problems in referral of students by the Department of Employment.
   B. The supply of jobs seems to be quite variable with the seasons of the year, among other factors.

IV. Continuity
   A. Plans should be made where possible to provide continuity in utilization of buildings and equipment.
Leadership for Vocational Education in California

B. A special effort should be made to achieve continuity in the teaching staff of MDTA programs.

V. Communications: Notification of approved programs is usually from Washington by Congressmen through the local newspapers. This system leaves much to be desired.

VI. Matching Funds: We are concerned about the 90-10 matching funds effective July 1, 1966. If possible, the 10 percent matching funds should be done on a statewide basis because it is unlikely that many local districts will participate on the 90-10 basis.

We wish to express our compliments to the State Department's work in checking applications and reimbursement procedures with such promptness.
I. VOCATIONAL EDUCATION - WHAT IT ENCOMPASSES

A. Regular high school, junior college, college and private school, other public agencies
   1. Vocational and pre-vocational education
   2. Adult education
   3. Work-experience education

B. Recent legislation assisting in improving and expanding vocational education
   1. Vocational Education Act (includes work-study)
   2. Manpower Development and Training Act - to provide unemployed or underemployed with necessary skills to become employable
   3. Economic Opportunity Act - many provisions for vocational training through Job Corps, Neighborhood Youth Corps, basic education, college work-study, etc.
   4. Elementary and Secondary Education Act - English language centers, and other compensatory programs
   5. On Job Training, Up-grading, Apprenticeship

II. WHAT A COUNTY VOCATIONAL EDUCATION CONSULTANT SHOULD KNOW

A. The kinds of vocational education programs in operation in the schools of the county

B. The occupational and training needs of the county and labor market served by your graduates

C. All aspects of each type of assistance which can be obtained to improve the quantity and quality of the vocational training programs
D. How to write "successful" projects

III. WHAT THE COUNTY VOCATIONAL EDUCATION CONSULTANT SHOULD DO WITH HIS KNOWLEDGE

A. Assist districts in putting projects together
   1. Be available
   2. Be willing
   3. Act as guide
   4. If necessary, help write and submit projects

B. With the assistance of an advisory committee, develop long range goals and a priority list

C. Work with press and farm, business and professional groups to give high visibility to needs in vocational education; serve as coordinator, catalyst
   1. Don't get locked into a single vocational category, e.g., business education, industrial arts, etc.
   2. Call attention to, praise, and publicize good programs
   3. Facilitate cooperation between schools, and between schools and outside groups; call meetings

(Editor's note: Mr. Page also reviewed the process of submitting MDTA projects, but since a similar review is included in this summary (see Mr. Shervyn's report) we do not include it here. The following are Mr. Page's suggestions additional to the MDTA project steps.)

IV. MDTA: These are some additional niceties which I feel should be included:

A. Frequent staff meetings to evaluate both training program and progress of individual trainees

B. Opportunity for individual trainees to advance through program at own rate - this requires good staff, program flexibility, and adequate equipment
Leadership for Vocational Education in California

C. Provision for individual counseling of trainee for:

1. Evaluation of progress in training program

2. Occupational guidance

3. Personal counseling to assist trainee in obtaining maximum growth during the training period

D. Issuance of certificates to trainees at the completion of training; a special ceremony -- perhaps outside speakers should be engaged for the occasion.
APPENDIX
CONFERENCE AGENDA
Coastal and Central Regions, Fresno, California
January 25-26, 1966

Tuesday, January 25, 1966

9:00 a.m. to 9:50 a.m. REGISTRATION AND COFFEE

10:00 a.m. KEYNOTE ADDRESS: "MANPOWER: OUTLOOK AND OUTCOME"
William Redmond (California State Department of Employment)

11:00 a.m. "EMPLOYMENT AND UNEMPLOYMENT: CONCEPTS AND MEASUREMENT"
Melvin L. Barlow

12:00 Lunch (no host)

1:15 p.m. SMALL GROUP DISCUSSIONS: "MANPOWER MEANINGS FOR VOCATIONAL EDUCATION"
Robert L. Obrey, Chairman

3:15 p.m. Coffee Break

3:30 p.m. "LABOR AND MARKET ANALYSIS FOR VOCATIONAL EDUCATION"
Donald H. Mayall (California State Department of Employment)

5:30 p.m. Dinner (no host)

7:00 p.m. WORKSHOP: VOCATIONAL EDUCATION CLINIC
C. Kent Bennion, Chairman
Coastal and Central Regions, Fresno, California

January 25-26, 1966

Wednesday, January 26, 1966

9:00 a.m.  SEMINAR: "DESIGN FOR EXCELLENCE"
            James Herman, Chairman

10:30 a.m.  Coffee Break

10:45 a.m.  SEMINAR: "DESIGN FOR EXCELLENCE"
            James Herman, Chairman

12:00  Lunch (no host)

1:15 p.m.  SYMPOSIUM: "MDTA: PROGRAMS, PROGRESS, AND
            PROGNOSIS"
            Richard Wilcoxon, Chairman
            Richard Wilcoxon  The State
            Bernard Gjerdrum  The County
            Robert P. Hansler  Local
            Richard Page  Junior College
CONFERENCE AGENDA

Southern Region Conference, Anaheim, California

February 16-17, 1966

Wednesday, February 16, 1966

9:00 a.m.  REGISTRATION AND COFFEE

10:00 a.m.  KEYNOTE ADDRESS: "MANPOWER: OUTLOOK AND OUTCOME"
            Gaylord F. Pitts (California Department of Employment)

11:00 a.m.  "EMPLOYMENT AND UNEMPLOYMENT: CONCEPTS AND MEASUREMENT"
            Melvin L. Barlow

12:00      Lunch (no host)

1:30 p.m.  "MANPOWER MEANINGS FOR ME"
            John R. Toothaker, Chairman
            Small Group Leaders
            William Steinberg  High School
            Irvin Colt          Junior College
            Keith James        Adult

3:15 p.m.  Coffee Break

3:30 p.m.  PROGRAM INNOVATIONS
            William A. Stanton, Chairman
            Virginia Clapp       High School
            Thomas Johnson       Vocational Center
            Glen R. Guldberg     Junior College

6:00 p.m.  Dinner (no host)

7:30 p.m.  CONVERSATION GROUPS
            Lee W. Ralston  County
            C. Allen Paul   Junior College
            Gordon-Funk    High School
Southern Region Conference, Anaheim, California
February 16-17, 1966

Thursday, February 17, 1966

8:30 a.m.  CONTEMPORARY PROGRAMS: AGRICULTURAL EDUCATION
Kenneth B. Cutler
James W. Maynard

9:45 a.m.  Coffee Break

10:00 a.m.  VOCATIONAL EDUCATION CLINIC
Thomas S. Y. m, Chairman
Small Group Leaders
Donald Sieber
David E. Fleckles
Stanley Everett
Glen M. Larsen
Norman R. Stanger

12:00  Lunch (no host)

1:30 p.m.  CONTEMPORARY PROGRAMS: BUSINESS EDUCATION
John McDannel
Tillie Neft

2:45 p.m.  MDTA: "THE STATE OF THE ART"
Fred Sherwyn, Chairman
Panel Members
James Allison
Marjorie E. Gardner
Robert A. Sampieri
CONFERENCE PARTICIPANTS

COASTAL

Joseph Berruezo
J. Wilson Bilyeu
Lee D. Bodkin
Everett Edington
Lawrence Edler
Edgar H. Fickenscher
Bernard Gjerdrum
Leroy Hill
John Hin on
James Hoerner
Floyd M. Hunter
Bernice T. Jacubinas
Francis Larson
Emile LaSalle
Paul V. W. Lofgren
Robert W. Lorenzen
Harry Loucks
Jane Mills
Charles Malkey
Jesse Norris
Robert L. Obrey
Robert H. Pedersen
John Pennington
Albert J. Riendeau
George H. Schwalm
Edgar L. Smith
Richard Storm
Arlin G. Taylor
Robert Walker
Richard Williams
John Wixon

CENTRAL

Joseph Acosta
Samuel L. Barrett
C. Kent Bennion
Edward W. Bent
Roland N. Boidt
Gaylord Boyer
John P. Conley
Harvey N. Gruber
Robert P. Hansler
James A. Herman
Gilbert A. Hutchings
Karl F. Jacobson
Gene Jensen
Velma A. Johnston
Russell P. Journigan
Curtis E. Lackey
Lloyd Livingston
Celeste Mercer
Henry J. Opperman
Richard Page
Richard C. Payne
G. Frederick Peters
Louis Quint
William N. Reynolds
Michael J. Rielley
John Saulsbury
Louis A. Schwark
Russell Tibbetts
Maurine Vander Griend
Rulen C. Van Wagenen
Richard Wilcoxen

SOUTHERN

Roy Apple
Charles C. Brady
Virginia Clapp
Irvin Colt
Kenneth B. Cutler
Stanley Everett
David E. Fleckles
James Fox
Gordon Funk
Marjorie E. Gardner
J. Lyman Goldsmith
Cecil D. Green
Glen R. Guldberg
Keith James
Don L. Jones
Martha C. Karm
Millard S. Lachman
Glen M. Larsen
W. James Maynard
John McDannel
Cloise E. Myers
Tillie Neft
Fred E. Orr
John S. Owens
C. Allen Paul
Lee W. Ralston
Thomas S. Ryan
John Sharon
Fred Sherwyn
Donald Sieber
James G. Soules
Norman R. Stanger
William A. Stanton
John Stead
William Steinberg
Dorothy W. Stone
Robert Tobi
John R. Toothaker
Don Welty

STAFF

Melvin L. Barlow, Director
Bruce Reinhart, Supervisor
Mary M. Fuller, Research Assistant

Judy M. Seder, Editor
Hilda Frazer, Secretary
Lillian Asihene, Secretary
The successful transition of young people from school to job will become easier to accomplish as the artificial wall between the schools and the outer world breaks down. Fortunately, that wall has been crumbling for some time, and is certain to disintegrate further. The vast development of industrial, military, and other educational programs outside the formal system is striking evidence of that fact. In some communities the young person may get almost precisely the same course in a school setting or in an industrial setting.

It isn't only the wall between the school and the outer world that is breaking down. Also disintegrating is the notion that education is something that goes forward with no interruptions until it is capped by some sort of graduation ceremony, whereupon it ends forever. We are coming to recognize that education should be lifelong, that it may be interrupted at many points, and that it may take place in many settings.

We should expect it to become an accepted practice for men and women to enroll in one or another kind of educational program intermittently throughout their lives. The boy who leaves school early may resume his education after a year of work or a period of military service. The mature individual may enroll in an educational program to acquaint himself with new technological developments—or sheerly for his own enjoyment. Women may return to education after their family responsibilities are over. Retired people may resume their education.

When the populace as a whole comes to recognize that education should be an enduring thing in their lives and can take place in a variety of settings, then the artificial emphasis on certain types of education will recede. Emphasis will be on individual fulfillment and personal growth, however they may best be furthered. And they will be sought for all.