

OPERATIONAL ANALYSIS OF TRAINING PROGRAMS

BY

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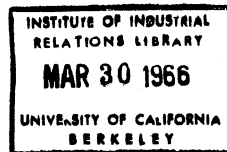
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Prepare yourself. This is going to be a dull speech -- not only because I am a dull speaker and I will be presenting some dull statistics -- but because apathy and neglect on the part of industrial relations people have made the subject of job training into a very dull, uninspiring topic.

My talk will consist of three parts: first, I want to present some basic statistics, next look at some of our major programs, and finally raise some basic questions which we will discuss today again and again.

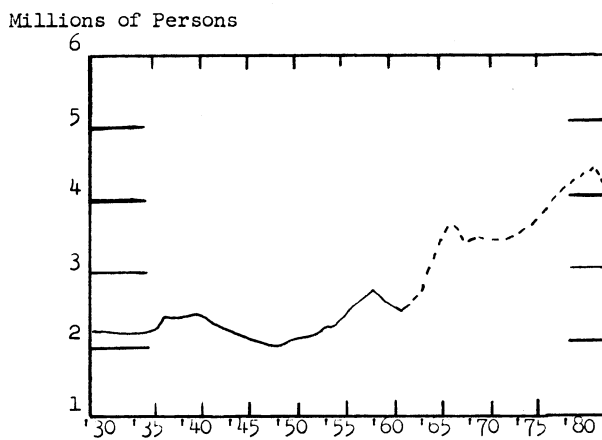
To start, let me present some facts which are familiar to all of you. Figure 1 illustrates the number of persons turning 18. It shows that for a thirty year period, from 1930 to 1960, we have had about 2 to 2 1/2 million young people enter the labor market each year. Beginning in 1960 we see a steady rise to almost 3 million; but 1965 will see a fantastic jump -- by almost a million a year. Thus, beginning this year the labor market will have to provide opportunity for 50 per cent more new entrants than it did only 5 years ago.

Figure 2 also presents familiar figures. The top, unshaded bar, indicates the percentage change in employment from 1940 to 1960. As is well known, the largest increases have been in the white collar occupations, professional, technical, managers, and clerical -- all of whom require high degrees of education. Manual occupations, which require less training, have grown much less rapidly and the number of farmers has actually declined.

The lower shaded bar in Figure 2 shows us that the fields which are expanding relatively less rapidly are also the ones which have the highest levels of unemployment.

Figure No 1

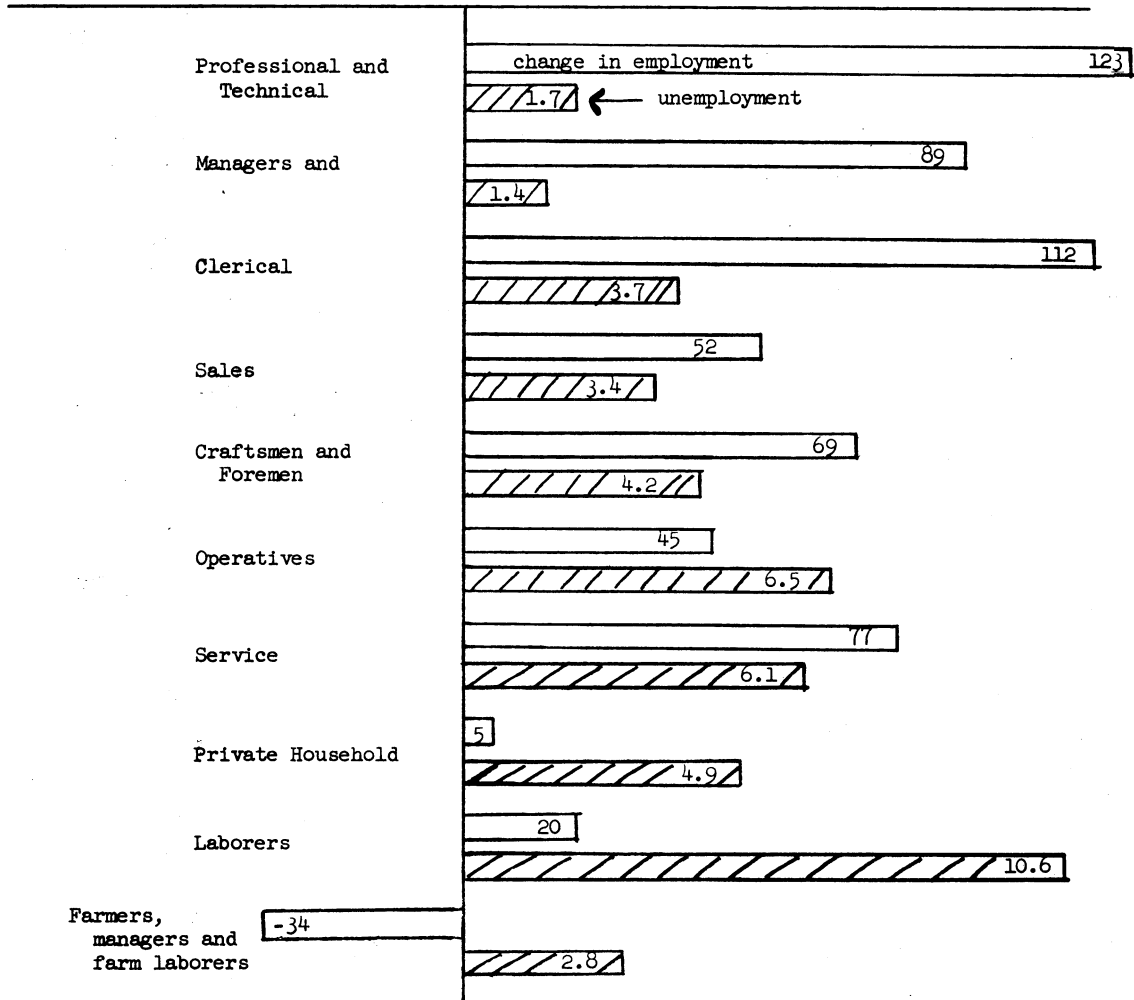
Shifting Tides in Numbers of Births
and Persons Reaching Age 18



Source: Adapted from Census Bureau data.

Figure No 2

MAJOR OCCUPATION GROUPS: PERCENTAGE CHANGE
IN EMPLOYMENT 1940-1960, AND
UNEMPLOYMENT RATE 1964



Source: Statistical Abstract of the U. S., 1947, p. 178, and 1963, p. 231;
Manpower Report of the President, 1965, p. 207.

Figure 3 confirms Figure 2. Unemployment rates are 50 per cent higher for dropouts than for high school graduates. Those without job-related training have somewhat lower unemployment rates than those with training. And finally, a depressing figure which none of us should forget: Negro unemployment rates are twice those of whites.

All this can be exaggerated a bit, and to put things in perspective, let me do a bit of debunking. It is often said that not only is the relative position of the Negro bad, but it is growing worse. As Figure 4 suggests, this is really an oversimplification. From 1948 to 1956 the position of the Negro did get worse -- from 1956 to the present it has gotten better. Negro unemployment is still over twice as large as the white rate -- but relatively as well as absolutely, as overall unemployment rates go down, the Negro position is getting better.

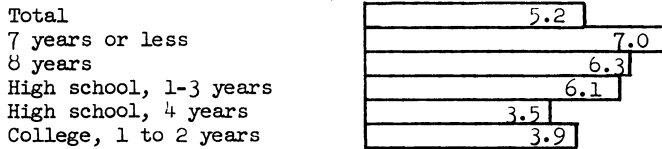
It is also suggested that automation is throwing millions of workers off their jobs. If so, we should see a marked increase in the relative unemployment rate of semi-skilled workers. Actually, we see that from 1956 there has been a decline in the unemployment rate of this critical group and that we are back to about the same situation as in 1948.

Now let's look a little closer at the impact of training on unemployment. In Figure 5 the bottom of each set of bars refers to those with job-related training; the top bar to those without. You will note that among the very uneducated (those with seven years of school or less), those with training had lower unemployment rates than those who did not. For those with 8 to 11 years of school, vocational education made no difference. However, high school graduates who have had job-related

Figure No 3

UNEMPLOYMENT RATES BY YEARS OF
SCHOOL COMPLETED, TRAINING, AND COLOR*

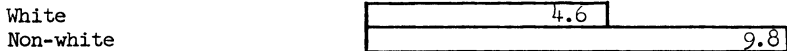
Years of School Completed, April 1963



Training, April 1963



Color, 1964



Source: Manpower Report of the President, 1964, p. 68, and 1965, p. 204.

* Data by education and training are for persons 22 to 64 years of age; data by color are for persons 14 years of age and over.

Figure No 4

UNEMPLOYMENT RATE: NONWHITE MALES AS A PERCENTAGE
OF WHITE, AND SEMI-SKILLED AS A PERCENTAGE OF TOTAL UNEMPLOYMENT
SELECTED DATES, 1948-1964

Nonwhite unemployment rate as a percentage
of white (males only)

1948	165
1956	236
1961	226
1964	217

Semi-skilled unemployment rate as a percentage
of total unemployment (both sexes)

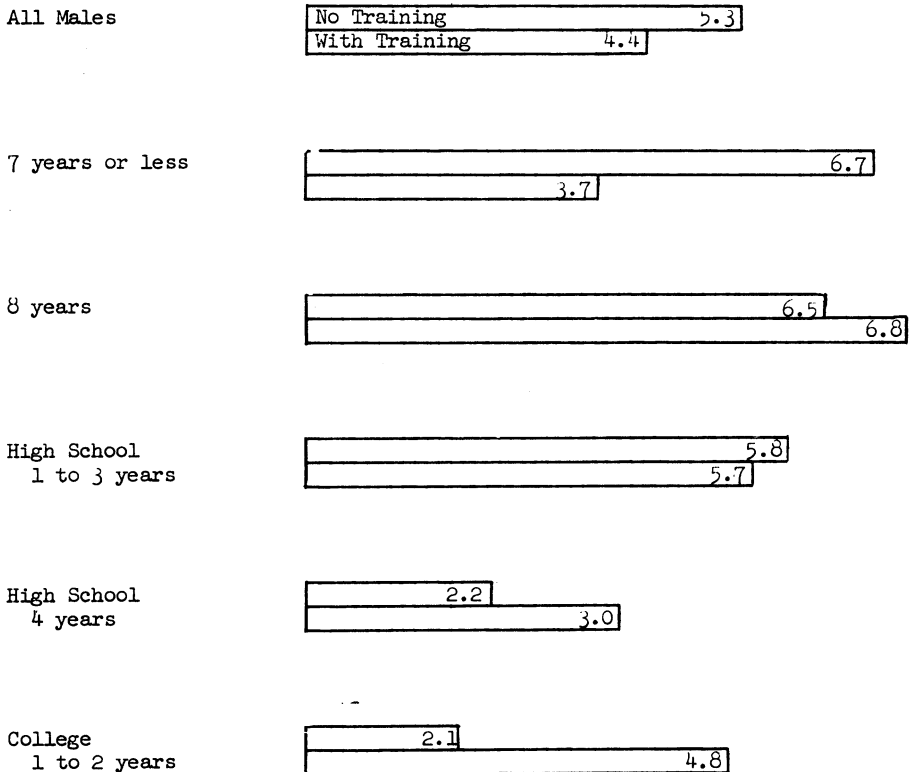
1948	121
1956	142
1961	143
1964	125

Source: Manpower Report of the President, 1965, pp. 204, 207.

Figure No 5

UNEMPLOYMENT RATES BY YEARS OF SCHOOL COMPLETED
FOR MALE WORKERS WITH AND WITHOUT FORMAL TRAINING
April, 1963

(Males 22 to 64 years old, excluding those with 3 years of college or more)



Source: Manpower Report of the President, 1964, p. 68.

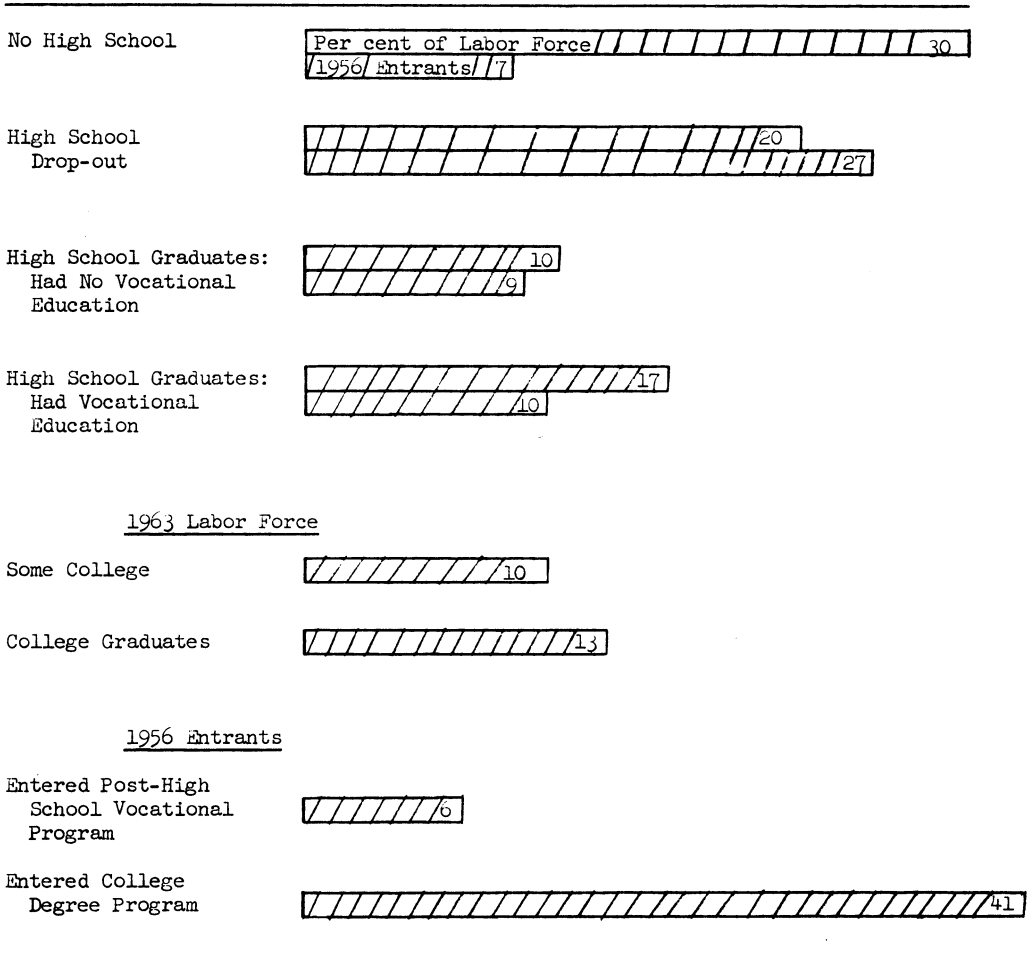
training actually had considerably higher unemployment rates than did those whose schooling was entirely academic. What this means I don't know. I don't think it means that vocational education per se makes it harder for a man to find a job, though it may mean this. More likely it relates to the fact that vocational training classes consist almost entirely of poorer students and members of minority groups -- and that such individuals have a hard time finding work in spite of their vocational training.

By now you are getting groggy with figures. Figure 6 gives an overall picture of the extent of education. The solid, upper bar deals with the present male labor force. You'll see that 30 per cent have had no high school education at all, 20 per cent are high school dropouts, and 27 per cent graduated from high school, but did not go to college -- of which 17 per cent had vocational education. Twenty-three per cent went to college and 13 per cent graduated.

The lower bars deal with what the census bureau quaintly calls the "educational status in the fall of 1964 of males who entered fifth grade in fall 1956" -- that is those who did or should have graduated in the high school class of 1964. How did this group differ from its predecessors? As you see, far fewer left school before the ninth grade -- 7 per cent as against 30 per cent. The dropout rate has gone up some and the number who have graduated from vocational school has gone down substantially. Perhaps most dramatic has been the increase in those going to college -- 41 per cent entering degree courses, 6 per cent entering vocational. We don't know how many will end up with degrees -- but one thing is sure: our present bumper crop of entrants to the labor force will be not only larger, but

Figure No 6

UNEMPLOYMENT RATES BY YEARS OF SCHOOL COMPLETED
(PERCENTAGE DISTRIBUTION), April 1963, AND EDUCATIONAL STATUS
IN FALL 1964 OF MALES WHO ENTERED FIFTH GRADE IN FALL 1956



Source: Office of Manpower, Automation and Training, Formal Occupational Training of Adult Workers, 1964, pp. 34, 47-48; Manpower Report of the President, 1965, p. 100. Data for civilian labor force are for males 22 to 64 years old.

also better educated than any group before.

Obviously much which is learned in school is not directly relevant to the job. Let's look at Figure 7 which shows how people learned their jobs. You will notice that only 30 per cent have had formal training -- and that high schools and special schools, such as private typing schools, have been the most important sources of such training. Most employees, however, have learned their jobs in various informal ways.

Table 8 takes a few jobs at random -- including many for which a high degree of formal training is required. Note that 94 per cent of the stenos have had formal training, mostly in high school. Among construction workers only 39 per cent have been formally trained, largely in apprenticeship -- though the percentage varies from a low of 31 per cent for the carpenters to 73 per cent for electricians. And so forth.

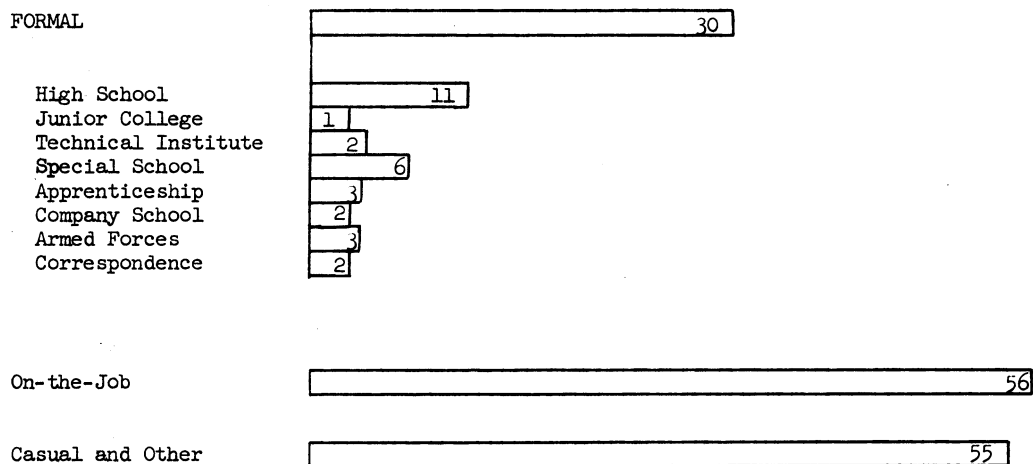
Figure 9 gives an overall picture of our training effort today from the best available statistics. Vocational education in our high schools and junior colleges is our largest single program -- but 60 per cent of this on a national basis is in agriculture and home economics. Formal company training comes next in size. And the various poverty programs, when they get under way, will far outnumber apprenticeship and the MDTA and ARA programs.

Specific Programs

With this background, let's look a little closer at these programs themselves.

Figure No 7

WAYS IN WHICH JOB EDUCATION OBTAINED BY PERSONS
IN THE CIVILIAN LABOR FORCE 22 TO 64 YEARS OLD
April 1963 (PERCENTAGE DISTRIBUTION)



Source: Manpower Report of the President, 1964, pp. 256-257. Data do not include persons who completed college.

Figure No 8

MEANS OF OBTAINING JOB EDUCATION
SELECTED CATEGORIES (PERCENTAGE DISTRIBUTION)

	FORMAL						<u>On-The-Job</u>
	Total	High School	Jr. College & Technical Institute	Special School	Armed Services	Other	
Stenographers	94	83	3	6	1	1	66
Construction Craftsmen	39	7	2	4	4	22	55
Carpenters	31	7	-	3	2	19	49
Electricians	73	16	11	8	12	26	71
Machinists	56	12	5	8	6	25	71
Auto Mechanics	41	17	2	17	9	6	48
Radio and TV Repairmen	86	3	24	9	22	28	49
Meat Cutters	36	1	1	5	5	24	58

Source: Manpower Report of the President, 1964.

Figure No 9

ENROLLMENT IN WORK TRAINING PROGRAMS
U. S., 1950 AND 1964, AND CALIFORNIA, 1964

	U. S.		California
	1950	Current and Projected	1964
Vocational Education ¹	3,364,000	4,217,000	511,000
Agriculture	764,000	828,000	15,000
Distributive	365,000	310,000	119,000
Home Economics	1,430,000	1,839,000	162,000
Trade and Industry	805,000	1,186,000	207,000
Practical Nursing	---	54,000	8,000
Apprenticeship ²	203,000	220,000	32,000
Formal Company Training ³	N/A	2,700,000	N/A
MDTA	---	68,000 ⁴	8,000
ARA	---	10,000	--- ⁵
Poverty Act (E.O.A.) Programs ⁶	---	422,000	
Job Corps	---	25,000	
Neighborhood Youth Corps	---	175,000	
Work-Study	---	97,000	
Adult Literacy	---	37,000	
Work-Experience	---	88,000	
Aid to Unemployed Fathers of Dependent Children	---	21,000	

Notes:

¹Current U. S. data are for 1963. Add to U. S., 1963, 5 million High School students' courses in typing and other office subjects; to California, 1964, add 500,000 enrolled in similar courses, plus 500,000 in industrial arts courses.

²Based on the assumption that there is one unregistered apprentice for every two registered apprentices. See Phyllis Groom, "An Assessment of Apprenticeship: III Statistics on Apprenticeship and their Limitations," Monthly Labor Review, April, 1964, p. 392.

³Data are for 1962.

⁴68,000 represents enrollees in institutional programs only. Add approximately 10,000 on-the-job trainees.

⁵Less than 50.

⁶Figures are projections for various dates during 1965.

Sources: Manpower Report of the President, 1965; California Department of Education, Vocational Education in California, 1963-64; Office of Education, Digest of Annual Reports of State Boards of Education, 1950; Bureau of Apprenticeship, Training of Workers in American Industry.

Vocational Education

Let's look at vocational education first. In terms of its size vocational education is the largest single component of our national training program -- but until recently it was a step-child. With the increasing academic orientation of our high schools and junior colleges, vocational education and vocational educators fell to the very bottom of the totem pole in terms of morale and status. Eighty-five per cent of the high school students in federally-aided vocational programs and 60 per cent of all federally-aided students were in agricultural and home economics programs. Industrial programs, in many cities, existed chiefly to provide custody for the student misfits which the higher status branches of the school system refused to handle. And so a vicious cycle emerged: employers learned that the best students and best teachers avoided vocational education, and so being a graduate of vocational programs became a hinderance rather than a help in getting a job. Vocational schools have been quite successful in placing graduates with commercial training, such as in typing, but in many areas the placement rate for those who majored in skills such as plumbing or electricity was very low.

The last few years have brought significant changes -- though vocational education is hardly out of the woods yet. Federal money has become much more available for fields other than agriculture and home economics. New programs have been started in technical education and practical nursing, and there has been an expansion of area-wide programs on the junior college level. The 1963 Vocational Education Act expanded

federal appropriations from \$54 million in 1964 to \$235 million in 1966 -- and all this money must be at least matched on the local level. States have been allowed greater flexibility to experiment in new areas. In general, more emphasis has been placed on programs on the junior college level and on those with higher intellectual content.

Much remains still to be done to clear away the debris left by the long years of neglect. Vocational education is inherently more expensive than academic education. New teachers, new teaching techniques, new equipment, new buildings -- all are needed. More important -- we must give careful thought to the role which we want vocational education to play. There is still too much unimaginative, status-quo-oriented, defeatist thinking among vocational education circles. To paraphrase a well-worn saying: vocational education is too important to leave to vocational educators.

Company Training

On-the-job, company-sponsored training is one of the oldest, largest, and -- from the taxpayer's point of view -- cheapest forms of training available. Since it is directly tied into work needs, it may also be one of the best.

Statistics in this area are mostly guesses, but two studies agree that on the average working day there are about 2.7 million employees involved in formal company training programs -- some of whom may be in more than one program. Over 2 million individuals at a time are in safety and

orientation programs -- though much of this may be trivial. Over a million are in formal programs to develop white collar skills -- almost 400,000 in supervisory and management training, for example, and 230,000 in sales training. Over 200,000 are being trained for the skilled trades, 56,000 in the tool and die field alone. These are quite impressive figures although I am sure we all realize that the quality of these programs vary greatly. Some are very, very good, some are a complete waste of time, and a few may exist only as gleams in training directors' eyes -- even though they report to the government otherwise.

About half the employees in the country work for firms which report formal programs -- but naturally the extent of training varies greatly among industries. The most extensive programs seem to exist in larger companies, particularly in the transportation and mining fields.

One final interesting statistic here: there are 125,000 individuals being subsidized to take courses in institutions outside their company. That's quite a lot.

Apprenticeship

Apprenticeship is perhaps the oldest form of formal training -- but formal apprenticeship today plays a relatively minor role in the total training picture. Compared with 4 million in vocational schools and 3 million in company programs, there are only about 200,000 apprentices, both registered and unregistered and about half of these are in the building trades.

Various estimates suggest that from 25 to 50 apprentices per thousand journeymen must be graduated each year to replace those who die, retire, or leave the trade, as well as to allow room for gradual growth. As Figure 10 indicates, by these standards only the electricians seem to come close to replacing themselves.* The vast majority of the men in the other trades are what are sometimes known as Joe McGees who learn their trade on the job.

A quite high percentage of former apprentices become foremen. Indeed the apprenticeship program seems to serve the function of providing a hard core or cadre of highly trained men who perform the difficult tasks while the bulk of the routine work is done by Joe McGees.

Figure 10 tells us something else too. If you run up the chart from painter to electrician you will note that the trades with the higher percentages of apprentices also are the trades which are expanding in size, earn higher incomes, have steadier employment and are better educated.

A number of people have bemoaned the decline of the apprenticeship system -- and point to some golden period when all journeymen had served an apprenticeship. My own research indicates that this golden period is a myth. Figure 10 suggests the apprenticeship system is more effective today than it was in 1920 -- and it is probably at least as effective today as it has been at any time in the last 100 years. True there were a larger

* There are many reasons for the relatively small number of apprentices. Many employers refuse to take on apprentices because they think it doesn't pay, or because they have inadequate training facilities. Unions are usually too conservative in estimating future vacancies. And apprenticeship proceeds by fits and jumps, being cut back severely whenever there is a recession.

Figure No 10

APPRENTICESHIP

Trade	Active Apprentices		Completed Program 1960	Percent Change in Number of Persons in Occupation 1950 - 1960	Median Earnings 1959	Worked 50-52 Weeks (Percent) 1959	Median School Years Completed 1960
	1920	1960					
	(per 1,000 journeymen)						
Electrician	45	142	30	8.9	\$5959	70	11.8
Sheet Metal Worker	NA	76	14	11.6	5485	68	10.8
Pipe Trades	36	66	11	11.6	5593	61	10.7
Iron Worker	NA	50	8	19.6	5543	46	10.0
Bricklayer	11	35	6	17.8	4793	30	9.7
Plasterer	10	25	3	-17.6	4646	33	9.0
Carpenter	5	18	2	- 6.7	4164	41	9.3
Painter	7	12	2	- 4.0	3727	42	9.1

Source: George Strauss, "Apprenticeship: An Evaluation of the Need," in Arthur M. Ross (ed.), Employment Policy and the Labor Market (1965), pp. 302-309.

total number of apprentices immediately after World War II, but the quality of instruction today is probably considerably better than it was then.

Actually we have all sorts of apprenticeships in our society. The intern in the hospital is serving an apprenticeship and so is the junior executive trainee in industry. Apprenticeship of this sort may well expand. Apprenticeship in the rather rigid form in which it exists in the building trades plays a very important role in certain trades; but I see little prospect of it being expanded -- at least in its current form.

Retraining Programs

The fourth form of training which we will examine -- and the first of the newer programs -- was intended originally to provide retraining for those who were displaced from their jobs due to economic or technological change. The first of these programs, the Area Redevelopment Act, passed in 1961, was designed for the benefit of hard core depressed areas, such as Appalachia, although it was eventually extended to cover areas in all 50 states. In 1962 a much broader program was approved, the Manpower Development and Training Act. Finally, the recent Foreign Trade Act provided a similar program for the benefit of employees who lost their jobs because of tariff reductions. The foreign trade program has yet to be implemented and ARA is being substantially modified, so I will confine my comments to MDTA.

MDTA today provides for courses of up to 72 weeks in length for unemployed and underemployed workers and pays these workers allowances of up to \$10 above average unemployment compensation benefits. There are three

kinds of training programs: institutional, for the most part vocational courses taken in the public high schools and junior colleges; on-the-job training; and experimental and demonstration training. As Figure 11 indicates, 92 per cent of the trainees are in the institutional programs.

MDTA was designed originally for unemployed heads of households who had been in the labor force for two or more years -- and it was heavily criticized for training only those who were easiest to train and to place -- for skimming the cream off the top of unemployment pools -- and for doing very little for the more difficult cases, such as teenagers, members of minority groups, and those with little education.

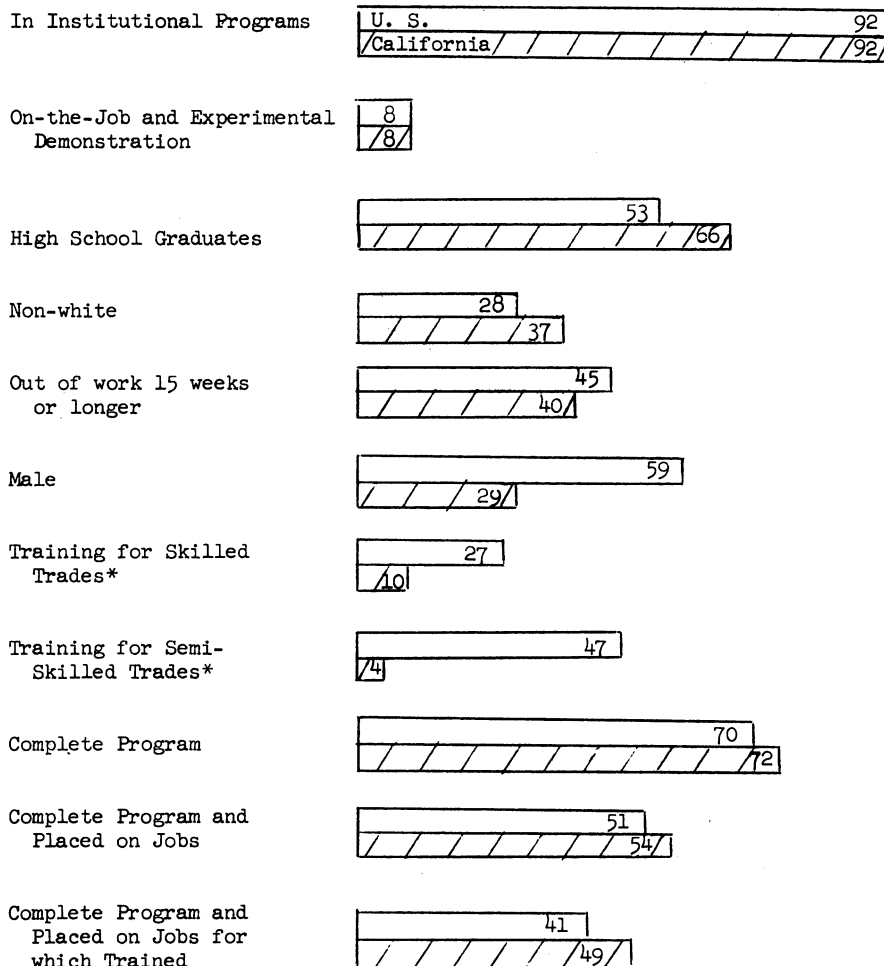
In response to these criticisms the law was amended in 1963 to permit greater emphasis on teenagers and on basic education, chiefly in reading and writing skills, for those whose educational level was too low to permit them to profit from training for specific skills. In effect, the distinction between re-training and training for first-permanent jobs was dropped. As of the moment MDTA trains its proportionate share of non-whites and the long-term unemployed, but still devotes less than proportionate attention to teenagers, older workers, and the undereducated.

On-the-job training has been notably unsuccessful, although the picture is improving. I will have more to say about this, and so will other speakers. On-the-job training for the most part, so far, has been confined to upgrading those already employed or, in the case of construction workers, those who belong to the appropriate union but are temporarily out of work.

Figure No 11

SELECTED CHARACTERISTICS OF MDTA TRAINEES

PERCENTAGE DISTRIBUTION, 1964



*As a percentage of single-occupation training.

Sources: California Department of Employment; Report of Secretary of Labor on Manpower Research and Training, 1965. U. S. data (except for percentage in institutional programs) for institutional programs only.

How does California compare with the rest of the nation. As Figure 11 indicates, both programs are heavily institutional; both give substantial emphasis to high school graduates, non-whites, and the long-term unemployed. Non-whites receive specially heavy attention in California. The completion and placement rates of the two programs are very much alike. These rates are disappointingly low, though it must be noted that many of the dropouts find jobs and report that their partial training was useful. But even if only half those who enter the program found jobs through it -- and so make a contribution to the economy rather than being a drain on it -- the program seems worthwhile.

There are some substantial differences between California and the rest of the country. The California program is largely female and places relatively little emphasis on the skilled trades. Almost two-thirds of the trainees were in clerical, sales, and service programs. I don't know why the California picture should be so different. I heard it suggested that one reason is heavy opposition by some unions to training in the skilled and semi-skilled occupations. But perhaps other speakers will touch on this today.

Economic Opportunity

Finally let us look at the Economic Opportunity. There are three major programs under this Act plus a number of minor ones. The major programs are the Job Corps, the Neighborhood Youth Corps, and the Community Action Programs.

The Job Corps is to be administered directly by the Office of Economic Opportunity and is to consist of two kinds of programs. The conservation programs are modeled after the CCC. Men in these programs will spend half of their time working on conservation projects and the remainder in school. The urban programs will be located closer to big cities and will be, in effect, vocational boarding schools. Camp Parks, which is being run by Litton Industries, is an example of the urban program.

Since many of the trainees will be very deficient in their education, the first order of business will be to make them literate -- to provide training in reading and writing. Then they will be taught social skills, such as how to work under supervision, and later a broad bank of work skills, mostly on the pre-apprenticeship level. It should be emphasized that the Job Corps are to provide residential type programs primarily for younger dropouts.

The Neighborhood Youth Corps is administered by the Department of Labor and it provides part-time employment with public or non-profit agencies. Youth Corpsmen are to be placed on newly-created jobs which do not provide competition with private enterprise or take work from those already working. Here too there are two programs. One is for those still in school and provides additional income both in the summer and during the school year. The other is for dropouts, but in contrast with the Job Corps it is designed to develop work habits rather than work skills themselves.

Finally, there are the Community Action Programs. These are to be developed on a local level and cover a broad and miscellaneous spectrum only part of which is related to training.

Miscellaneous Programs

I should also mention a number of miscellaneous programs, most of them quite small. The Poverty Act establishes a Work-Study program, which provides part-time work for college students, an Adult Basic Education Program for literacy instruction, and a Work Experience Program for unemployed fathers. The latter program is much like the Neighborhood Youth Corps, but at an adult level.

The MDTA runs a group of experimental and demonstration projects which are in effect precursors for the Community Action programs under the Poverty Act. In addition, the State of California has experimented with its own conservation work camps, a state version of the Job Corps' conservation program, and it has another program for adults on relief which is much like the federal work experience program. Finally, as a state counterpart for the MDTA there have been a few retraining programs for adults on unemployment compensation.

Policy Questions

Easy vs. Hard-to-Train

With this bird's eye view of the training scene, let me pose some general questions as to policy which others will expand upon.

Perhaps the first question is where do we start? Should we start with those easy to train? Should we skim the cream and take the better educated who will be easy to place? Or should we start with the hard core unemployed, the dropouts, the socially and physically handicapped who will be very expensive to train -- if they can be trained at all?

The emphasis on the early MDTA programs was on the easy-to-train. More recently with the MDTA amendments and with the poverty program greater emphasis has been given to the more difficult cases who need broader, more basic forms of training which are not related to immediate jobs. Through rehabilitation work with the physically handicapped we have learned that something can be done even for the worst cases, but requires a great deal of time, patience, and money.

With the easy-to-train it may be possible to train a relatively large number of people at low cost. But, assuming an upswing in employment, many of these might have found work with companies who would train them on the job. Perhaps we can get more for our money if we concentrate on the hard cases who would otherwise be completely unemployable -- even though the cost per man will be greater.

Ideally, we should be able to train both groups at once -- the easy and the hard. Our problem is lack of training funds and lack of jobs to put trained people on. Training increases the number of jobs available only to a very slight extent. What happens is that the better trained take work away from the less trained, and by training one group, in effect, we reduce the opportunity for those who don't get training. Our dilemma here is something like the dilemma which doctors will face after an atomic attack. There won't be enough doctors to treat everyone -- should those available treat those who are worst injured or should they save their limited energies for those lightly injured who will require less care and have a greater chance to survive?

Broad vs. Narrow Skills

A related problem is this: should we aim for high level skills or low level skills? Should training be basic or applied -- broad or narrow? The current philosophy behind the apprenticeship program is to train men in all aspects of the trade, even though upon completion of the program they may work only as specialists. Apprenticeship officials are opposed to short courses which lead to splintered skills. But here I think time and advancing technology are working against them. The day of the master of aspects of the trade is gone. We see this clearly in the professions. Nursing and engineering are becoming increasingly specialized. Some go on to advanced degrees, but many of the functions once performed by nurses and engineers are now performed by nurses aides and engineering technicians. Even in construction the vast majority of men are only partially trained Joe McGees. Jobs are available for men with splintered skills, and it is becoming increasingly unrealistic to take the position that if men don't get complete training they should get none at all.

Of course, we see a wide variety of new skills being required in many trades. It is argued that we need higher levels of training rather than less -- longer apprenticeship periods rather than short MDTA programs. It is suggested that with broader training men will be better able to adjust to technological change. We use the same approach in training college professors. To earn their Ph.D., we make our graduate students do advanced research even though they will spend most of their time teaching the basic course.

It must be remembered, however, the new skills required by the trades are largely intellectual skills -- mathematics or electronics, for example -- rather than manual skills, and can be learned better in school than on the job. Specific skills become quickly outmoded. Broad intellectual skills are less likely to be so.

Institutional vs. On-the-Job

This brings us to our next major question and the subject for a panel this afternoon: to what extent should training be on-the-job as opposed to institutional? Traditionally, most training was on the job -- even for doctors and lawyers -- but as intellectual, theoretical skills have become more important, and as we have begun to expect people to stay in school longer -- our society has placed a greater emphasis on institutional training. This is the long-term trend, and I doubt if we can buck it.

Institutional training has its costs. Classroom training tends to be impractical and laboratory exercises and manipulative training are required. On-the-job training is cheaper for the taxpayer; in some cases (not all) it is more up-to-date;* and in many cases it is more likely to lead to a permanent job. In addition, many trainees learn more rapidly on the job than they do in class, especially since they know such training has practical value. The problem is that many kids, particularly those from underprivileged backgrounds, hate the classroom situation. They have

* In the fields of science, medicine, and technology practioners we usually look to the universities and colleges to provide the most up-to-date techniques. Vocational schools, however, are too often followers rather than leaders.

little intellectual curiosity; they have done poorly in elementary school, and so expect to do badly in high school; they see little tie-in between school and anything practical; and so they are poorly motivated and fight and resist the classroom situation. For such kids -- and there are an awful lot of them -- on-the-job training is necessary, or at least some sort of cooperative arrangement in which the student spends part of his time working and part of his time at school.* Arrangements like this are much more common in Europe than they are in this country.

Another argument against on-the-job training is that it is too dependent on the existence of current job vacancies -- and since trainees usually have low seniority, slight fluctuations in employment may easily disrupt the continuity of their education. The evidence suggests that on-the-job training is provided chiefly by large firms, chiefly during periods of rising employment, and only to the best prospects. There are relatively few opportunities for on-the-job training for those who obtain work in small firms, during periods of recession, when such training may be most needed, or for "hard core" people with little educational background.

High School vs. Junior College Training

This brings us to another problem. At what level should classroom vocational training occur? In the high schools or in junior college? Because of the increasingly complex nature of modern technology, the amount of mathematical, scientific and other knowledge required for employment in

* For such kids even schooling is often best presented in a disguised chocolate coated form.

many skilled occupations has increased considerably. Many educators believe that training for such occupations can be done best at the junior college level, building on the broad background of general education in the high school. Fine as this sounds, this philosophy leaves out the underprivileged and under-motivated kids who never finish high school in the first place.

Train only for Available Jobs?

Let's look at another difficult problem. For what sorts of jobs should training be provided? Some unions have argued that training should be provided only in those occupations in which there are current vacancies in the local labor market. Understandably, they are reluctant to add to the number of unemployed in fields which are already overcrowded.

On the other hand, it can be argued that this is a fairly defeatist position which would result in very little training done. If it makes good sense in terms of manpower flexibility to overtrain apprentices, to equip them with skills for which they have no immediate use, perhaps it also makes sense to train too many people, to equip people with stand-by occupations in which they cannot obtain immediate employment. It is suggested that we should look upon training as a long-run proposition, and we should be concerned more with jobs which will exist in the future* than with immediate local conditions. It is even suggested that local conditions

* This implies we can do a better job of job-demand forecasting than we have been able to do thus far.

are irrelevant, since over one-third of our workers today work in communities other than where they went to school. Finally, it is argued that the MDTA policy of training just for jobs that are now available has resulted in overemphasis on low-paying, poverty jobs such as hospital attendant and hotel chambermaid -- and that the apparent vacancies in these areas may be due to low wages rather than to lack of properly trained people.

Who Shall Control?

Next we come to a very sensitive question rarely discussed frankly, and this is: who shall control the training? Unions, management, the school system, the department of employment, new agencies, or who? Obviously, this is an important question, for the agency which determines who gets trained also, to a large degree, determines who gets jobs. And the question is obviously especially important in those trades where labor has traditionally asserted the right to control entry. The new programs cannot help but to either strengthen or weaken labor's position -- they are not likely to have a strictly neutral effect.

Naturally, we should expect similar power struggles within the government. Should the new programs be handled by fresh new agencies with fresh new ideas, or by old established agencies with years of experience and know-how? Should the control be at the federal, state, or local level? How about the relative balance between manpower agencies, such as the department of employment, and the educational system? Should Community Action Programs at the local level be controlled by the Mayor's Office -- or

by representatives somehow selected from the poor themselves (an issue which has led to much controversy in many cities)? To some extent these problems have been avoided by bringing everybody into the act, by establishing a number of joint programs, joint committees, etc. But the effect has been to make administration terribly slow and to drown everyone with fantastic paperwork requirements.

Who Pays for Training?

Finally, let me raise the question of who should pay for training: the individual, the firm, the union, or the government? Our practice today varies from the girl who pays for her own tuition at a commercial typing school -- through the vocational school where the government pays the tuition, but the student meets his own expenses; or the company school where the company pays both training costs and wages for the trainee; to the MDTA situation where the government pays both tuition and living allowances.

The trend certainly seems to be that of taking the economic burden of training off the shoulders of individuals and companies -- and placing it on the government. There are dangers here: we may be persuading youngsters that anyone who goes to school without being paid for it is a sucker. Also we may be taking from companies the training function which traditionally they have handled themselves.

On the other hand, there are some who are so poorly motivated that only the dollar sign will bring them back to school.* And unless they

* Psychologists would say they have a very short time perspective.

receive training allowances, heads of families feel compelled to take any job which comes along, even though they might eventually earn much more where they are able to complete their training.

Conclusion

Only one thing seems clear in this area. Training is going to be more important as our technology advances. Our national training policy today -- if we can call it that -- is a matter of bits and patches and we are going to have to give it a lot harder thought than we have in the past.

Despite the intricate series of checks and balances built into the MDTA and poverty programs -- despite the cloying steam of gobbledegook and good intentions spilling forth from government mimeograph machines, one gets the impression that much of what is being done is haphazardly designed and that much of the money being poured into these fields will go to waste. The war on poverty will not be won by a blitzkrieg or by a public relations attack.