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THIS PAPER SKETCHES RECENT TRENDS AND PROBLEMS THAT HAVE EMERGED IN PUBLIC TRAINING EFFORTS IN THE UNITED STATES DURING THE 1960S. IT CITES SHIFTS IN EMPHASIS FROM TRAINING WORKERS FOR EXISTING JOBS TO REFOCUSING ON YOUTH UNEMPLOYMENT AND TO PREPARING THE HARD-CORE UNEMPLOYED FOR WORK, AND FROM CONCERN WITH JOB TRAINING TO JOB CREATION. IT POINTS OUT SUCH TRENDS AS REHABILITATING DISADVANTAGED WORKERS IN INNER-CITY AREAS, EXPANSION OF ON-THE-JOB TRAINING PROGRAMS, ACTIVE ENCOURAGEMENT OF BUSINESS INVOLVEMENT IN PUBLIC TRAINING PROGRAMS, AND REORIENTATION TOWARD CLIENT-CENTERED SERVICES INVOLVING SUCH NEW CONCEPTS AS OUTREACH, JOB DEVELOPMENT, AND INTERAGENCY PROGRAMING. AMONG THE PROBLEMS OUTLINED ARE THE UNRESPONSIVENESS OF COMMUNITY INSTITUTIONS AND THE "CRASH" NATURE OF PROGRAMS DUE TO FUNDING PRACTICES. IT IS SUGGESTED THAT SOME SET FORMULA FOR COOPERATION AMONG AGENCIES BE MADE THROUGH A CENTRAL FEDERAL OR STATE AUTHORITY. A BIBLIOGRAPHY CONTAINS 15 ITEMS. (RT)

Technological Change and Job Change

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Technological Change and Job Change

Introduction

The term "technological change" has become part of our national vocabulary over the past decade, but there is still considerable controversy about the meaning of the term. "Technological change" is obviously a complex term, involving many more factors than "changes in machinery" or "automation." In using the term, we are dealing with an umbrella concept that covers a variety of changes which affect jobs and influence skills in our industrial system. We can identify six changes that could logically be called technological change: (1) rationalization of jobs, (2) mergers and consolidations of companies, (3) changes in the location of plants, (4) shifts in product demand, (5) changes in machinery and technology and (6) automation. Each one of these changes has an impact on existing jobs; eliminating some, changing the content of others and, in some cases, creating entirely new job opportunities. So rapidly have occupations emerged and job identifications changed in the United States that the 1965 edition of the U.S. Employment Service Dictionary of Occupational Titles, which is the codification of 22,000 observed jobs in our industrial structure, contains about 6,000 jobs which were not present in the preceding dictionary.

There is no doubt that such changes will continue and at an accelerated pace. Part of this impetus for change is mirrored in the rapidity with which technological change is being applied. During the decade of the 1950's alone, new plant and equipment expenditures exceeded the sum of \$300 billion. This substantial investment has resulted in a more efficient industrial system with a greater capacity to produce. Between 1947 and 1963, productivity in the nonagricultural sector of the economy increased by 2.4 percent a year, compared with a long-term rise of 2.1 percent; in agriculture, productivity advanced about 6 percent a year. A striking picture of the impact of new machinery and labor saving devices on employment can be seen in the automobile industry. In 1955 and in 1964, about the same output of automobiles occurred (7.8) million) but this production goal was accomplished in 1964 with one-sixth fewer workers than were required in 1955.

As we have defined it, technological change is not an abnormal condition of industrial society. These changes are intimately linked to economic growth and to impede them would seriously threaten our future welfare. The economist presupposes that these changes which have been identified will happen at a faster rate in the future. In the long run these changes make for a healthier, more

viable economy. It is the shortrun consequences of these changes—temporary dislocation from jobs, skill shortages in certain occupations, and the need for job changes—that make up the set of problems that a modern industrial society must face.

Public Training and Retraining in the 1960's

Why has there been an upsurge of interest in public training and retraining in the United States? Part of the explanation lies in the economic history of the United States since the Second World War. A series of factors, largely originating in the post-World-War-II years, combined to focus attention on those citizens who had lost their productive role in our economy. The World-War-II years were marked by an upsurge of employment as all available manpower was recruited to fill job needs. To help the readjustment to a peacetime economy, as well as to dispel the fears of another great depression, the Employment Act of 1946 came into being and established federal responsibility "to promote maximum production, employment and purchasing power." For the most part during the late 1940's the job picture was bright as production tried to meet demands stifled and denied by the war years. But it became clear during the late 1940's that, even in these good years, the economy had an unemployment rate between 5 and 6 percent, and we became very much aware of those "islands of unemployment" and idle manpower.

We also became aware that the Great Depression of the 1930's was not the last of the economic tragedies to stalk our country. Our postwar upward economic trend was interrupted four times by sharp downswings in the economy; first in 1949, then in 1954 and 1957, and again in 1960. Each one of the recessions left a residue of the unemployed, and we soon realized that many wage earners who had previously enjoyed a productive role in the economy did not recover their former jobs or obtain new jobs even with a new wave of affluence. By 1961, each of these waves of unemployment had contributed to an unemployment rate of 7 percent. Unlike the depression of the 1930's, the unemployment of the 1960's was concentrated in the lesser-skilled occupational categories and among minority groups.

Another problem became paramount in the mid-1960's. A sharp drop in unemployment to a rate of `.6 resulted in manpower shortages in a number of occupations. During most of its history, the United States has been gifted with an abundant labor force. Immigration and the migration to the city of trainable rural migrants resulted



in a steady stream of potential workers into the shops and factories of the nation. In many ways, we have come to take this labor supply for granted. In the mid-1960's, the nation faced a manpower crisis. The supply of trained and trainable workers had been almost wholly committed to economic roles in the economy and significant labor shortages had developed in certain industries and occupations. We were faced with the prospect of continued labor shortage, unless we could develop and tap the potential of the millions of residents of ghettos and inner city areas. For the most part, these people had been underutilized in the past, and many of them had never been fully integrated into the work roles of the economy. This group of workers were heavily overrepresented by the underskilled, the undereducated and minority-group members. We had reached a point in our economic history where strong efforts had to be made to develop these people into productive workers. This was a challenge of a high order and even if there was no economic justification for the attempt, our nation was committed to a total war on poverty with a prime goal being the de-

velopment of job opportunities for the poor.

Thus, in the 1960's, the United States was confronted both with the need to provide for the adjustment of workers to technological change and the need to develop the vocational capacities of workers who had never fared well in the labor market. We began to grope for elements of a "manpower program" to deal with these problems. There was no thought that an immediate comprehensive program would be developed, but rather, that individual planks could be built that would lay the necessary groundwork for the eventual construction of a platform. The first beginnings of this began to appear in the early 1960's, and these pieces of legislation should be recognized as pioneering efforts. Although other elements appeared in this legislation, a prominent place was given to training and retraining. We became cognizant of the skill revolution in the making and preparation for work as well as return to work meant more education, better education and more specialized education. Secretary of Labor Willard Wirtz has said that the kinds of training necessary for 50 percent of the jobs in 1985 has not yet begun, and this is a sobering thought. While the legislation of the 1960's was designed to facilitate shortrun adjustments in the labor market, more and more thought is being given to using these beginnings, together with new legislation, as a solution to longrun labor-market adjustments.

This panorama of legislation was initiated by the Area Redevelopment Act of 1961; the first national program in the 1960's to provide government-subsidized training specifically directed toward unemployed workers. The Manpower Development and Training Act of the following year expanded the federal commitment to retraining and widened its scope beyond ARA's focus on depressed areas. Later that year, the Trade Expansion Act also accorded an important role to retraining in the readaptation of workers displaced as a result of trade liberalization, although this legislation has been infrequently used

quently used.

The administration of this legislation began to reveal in definable form certain characteristics about the unemployed and the underemployed: where they lived, who they were, how they lived and what their needs were, particularly beyond the acquisition of employable skills. The need for updating and reshaping traditional vocational education legislation became apparent and was incorporated into sections of the Vocational Educational Act of 1963. This Act provided new resources to educate and train disadvantaged urban residents for the labor market, a significant shift away from a previous emphasis on home-economics and agricultural-training programs. This Act also required consultation between the vocational educator and the employment service in developing programs and curricula responsive to the changing vocational needs of the industrial society.

tional needs of the industrial society.

The next significant piece of legislation in the 1960's was the Economic Opportunity Act of 1964, which was aimed specifically at the problems of the poor. The Act had specific training provisions: the Job Corps for hardto-train disadvantaged youth; the Neighborhood Youth Corps with emphasis on work experience for disadvantaged youngsters; and the work-experience program for welfare recipients. Successive MDTA amendments liberalized allowances, lowered entry requirements and focused on disadvantaged workers (e.g., the older worker and the long-term unemployed). The MDTA also provided for on-the-job training subsidies to private firms to train workers for entry jobs or for upgrading. Twenty-five states revised their unemployment compensation laws to permit the use of these funds for allowances in training/retraining situations. New and important legislation enlarged the services of the United States Employment Service with new facilities for testing, counseling and provision for geographical transfers to make employment possible.

These various statutes represented an era of experimentation. For the most part, each statute was a discrete attempt to deal with a particular group of workers who were disadvantaged and could not find an economic role in the labor market of the 1960's; youth entering the labor market; welfare recipients; technologically-displaced, chronically-unemployed and older workers. What emerged in the 1960's was not a coordinated or integrated program but a series of discrete programs administered by a number of federal departments and agencies, each having their own standards and benefits but subject to a tangled maze of administrative regulatory and procedural mechanisms with voluntary "inter-agency cooperation" viewed as the key to the problem of overlapping legislation. A careful examination of all federal training legislation at present reveals 32 specific laws, titles and sections dealing with job training or instruction related to job training. The total expenditures authorized by this network of legislation in the 1966 fiscal year was in excess of 2 billion dollars. Although all of the federal agencies are involved in these activities in various ways, the following Departments share the major responsibilities: Health, Education and Welfare; Labor; Interior; Commerce; Agriculture; and Housing and Urban Development. The Office of Economic Opportunity, although not a federal department, is also greatly involved.

The purpose of this paper is to sketch, in broad outline, the trend of ideas and recent experiences in using training and retraining programs to adapt workers to jobs in our technologically-advanced society. We will conclude this review with some attempt to indicate the problems that have characterized these efforts and discuss some of

the imminent future trends.

Manpower Program Trends in the 1960's

The development of large-scale, public programs of training and retraining during the 1960's was influenced by a number of factors: the structure of unemployment, the manpower demands of the economy and assumptions about resources needed by the trainees to make them productive workers in the society. These three factors do not remain static, and changes in these programs, as well as the creation of new programs, most be considered against the background of change in these factors.

1. The original mandate under ARA and MDTA was to train workers for jobs that existed. This was determined by job-vacancy studies conducted by the state or local offices of the United States Employment Service. These programs were initially developed in an economy with unemployment rates of 5-7 percent. The initial assumption was that the program would provide resources for the training of technologically-displaced workers. The consequence of this mandate was to permit the employment standards of these jobs to determine the composition of the trainee groups. As might be expected the early trainees were better educated, had a fair number of basic skills and had shorter periods of long-term unemployment. The more disadvantaged of the unemployedminority group members and the undereducated—were represented in these programs in small numbers.

2. By late 1963 and early 1964, there was some refocusing of the MDTA program on youth unemployment. In 1963, one of every seven white teenagers remained unemployed, and for nonwhites, the rate was twice as high. To a large extent, the problems of these youth centered around entry jobs; the need to gain a stable job to enter into a work career. In November, 1963 a series of amendments to MDTA liberalized eligibility criteria, weekly training allowances, length of training period and course content; all of which made it easier for disadvantaged youth to receive training. The preoccupation with the problems of unemployed youth focused attention on the fact that the acquisition of technical skill was only one of a number of concerns in fitting new workers to job opportunities. It became obvious that the educational system had failed to prepare many youth in the skills necessary for work. Furthermore, large numbers of youth, approximately 40 percent of the 16-20 age group in 1963, were drop-outs from the school system and lacked the elementary language skills increasingly demanded for employment. Attention was given to literacy training, work discipline orientation and the social and interpersonal skills necessary to keep a job. Although legislation to provide a special program of resources for youth employment training was defeated in Congress in 1963, the Job Corps and Neighborhood Youth Corps provisions of the Economic Opportunity Act of 1964 were designed to develop the employment potentials of disadvantaged youth.

3. By late 1965 and early 1966, a new reorientation was given to training and retraining. Attention was focused on work preparation for those disadvantaged workers who lived in ghettos and were either unemployed or underemployed for most of their work lives. These were the workers who could not find job opportunities even in the tight labor markets that characterized the mid 1960's.

In 1966, it was proposed by the Department of Labor to devote 65 percent of the training positions in the MDTA program to work-preparation projects for these hard-core unemployed. These projects were not only concerned with skill acquisition, but attempted to deal with the total set of problems of these individuals in preparing them for employment (e.g., health, transportation and credit management).

4. Another significant shift also occurred. The initial period of the 1960's was concerned with job training and placement. In the MDTA program the initial emphasis was placed on training for occupations in which there was a reasonable prospect for employment. Job-vacancy techniques were quite crude in this period, and many of the workers who were trained for particular jobs found that these job openings did not exist. The pattern at this time was to determine the job openings and prepare a worker for these job openings. Thus, the emphasis was on bringing the worker up to the hiring standards set by the employer. With the increasing emphasis on rehabilitation of the long-term unemployed, two new basic activities were added to the program: job creation and job development. It was recognized that it would be difficult to develop the capacities of some of the hard-core unemployed to meet the present hiring standards set by many companies. One solution to this problem would be to create or restructure jobs to meet the immediate capacities of these disadvantaged workers. In job creation, an activity confined almost entirely to public employment, there have been vigorous attempts to create subprofessional employment opportunities. This has taken the form in some cases of restructuring professional jobs so that certain activities can be taken over by an undereducated or unskilled person. Thus, in elementary-school teaching, the teacher's duties of monitoring children in the playground or guiding them in group activities can be given to a person with relatively little skill. It is claimed by Frank Riessman that such activities can be hierarchically arranged to provide a form of mobility for the disadvantaged; an opportunity that is rarely available in the kinds of jobs usually open to these people.

A second solution to the problem of providing job opportunities for the disadvantaged worker is job development. This concept denotes a number of different activities. First, the agency personnel may make an intensive effort to find job openings that have been hidden either through a lack of advertising or failure to provide the information to appropriate sources of recruitment. The Office of Economic Opportunity has employed a number of the poor themselves to carry on intensive job finding activities for the employment services. These workers are under on-the-job training provisions of MDTA and the program has met with a fair degree of success. Another form of job development is to work intensively with employers who have labor shortages to redesign these jobs into a series of simplified employment tasks for disadvantaged workers. The agency may also seek to have the employer modify his employment standards on a temporary basis to give employment to these workers. Finally, the agency may seek to gain an agreement with the employer to place a worker who cannot meet the standards at the present time with the understanding that the agency personnel will continue to service the individual with re-



training, counseling, medical rehabilitation and other aids needed to stabilize and improve his job situation. In this last instance, the employer hires a substandard employee on condition that certain agency services will be used to upgrade and rehabilitate him. It should be noted that, contrary to previous practices, the emphasis is placed on a temporary modification of hiring standards rather than on pre-employment rehabilitation to meet existing job standards.

- 5. The current preoccupation in the United States with training for the hard-core unemployed has led to the development of a number of coupled interdepartmental programs designed to give training and training-related services to residents of ghettoes and inner-city areas. In 1966, the Office of Economic Opportunity, together with the Department of Labor, developed the Concentrated Employment Program designed to bring every conceivable resource available to provide job-oriented rehabilitation for the residents of economically-distressed areas. The program is operative in 19 inner-city slum areas and has health, recreational, transportation, child care and basic education components. It is still too early to assess the impact of this program, but the funding agencies have been given the mandate to use the services of any agency, public or private, to meet its goal of increased employment. In late 1966 and early 1967, the Comprehensive Area Manpower Program Systems agreement was signed by representatives from the five largest federal agencies dealing with training and retraining. CAMPS is an agreement for inter-agency cooperation in manpower development rather than a specific program. The signers pledge to make available the resources of their agencies for a cooperative, concerted and concentrated attack on the employment problems of ghettoes and inner-city areas. One form of an operational, cooperative program is the Human Resource Development Program, presently administered in nine major cities under the Bureau of Employment Security. The object of this program is to coordinate the resources of public and private agencies for a concentrated program of employment and employment-related services. The program is designed to develop the following components in sequential order:
- (a). Outreach to the disadvantaged through new or innovative techniques utilizing a combination of inter-agency capabilities.
- (b). Supportive services which give recognition to impediments to employment beyond the acquisition of manipulative skills, i.e., health, emotional disturbances, age, lack of basic education, transportation difficulties, etc.
- (c). A strongly-reinforced counseling and guidance program which is interwoven throughout the entire sequence of components.
- (d). Training, including basic education, prevocational, occupational, and on-the-job.
- (e). A vigorous job development program which would include:
 - 1. an inventory of openings
- 2. restructuring of jobs to meet the capabilities of the disadvantaged
- 3. inducements to employers to expand through rearrangement of work processes where available trained workers are provided.

6. Although MDTA provided funds both for institutional and on-the-job training, the major effort has been in institutional training. In fiscal year 1963, there were 33,000 MDTA trainees enrolled in institutional training. Three years later in fiscal year 1966, the number had increased to 164,700 trainees. By June 30, 1967, a total of 495,000 had been enrolled in MDTA institutional courses, and approximately 59 percent of these had completed their course of instruction. The enrolled numbers in OJT programs have been considerably smaller: 3000 in fiscal year 1963; 14,000 in fiscal year 1964; 57,000 in fiscal year 1965; and almost 100,000 in fiscal year 1966. The development of OJT programs, although proceeding at an accelerating rate, has lagged behind expectations. Several factors have contributed to this lag. First, the development of OJT programs required a whole new system of procedures and regulations for governmentemployer relations. While institutional training developed through the use of existing public educational services, the OJT programs had no such base to build on. Second, many of the employers with acceptable training facilities already had their own training programs and resisted involvement with government agencies that had training standards of their own. In many cases, there was a fear of government control of such training. Finally, some firms were unhappy with the trainees sent to them by the employment service and found that OJT regulations denied them a decision-making role in the selection process. Added to this was criticism of the regulations and auditing procedures which required the company to make an inordinate investment of time and resources in the processing of trainees.

Compared to institutional training, OJT programs have been far more concerned with the upgrading of underemployed workers. Approximately one-third of the OJT trainees of 1964 had been underemployed prior to entering training, while only one-tenth of the institutional trainees were in the underemployed category. Furthermore, on-the-job training projects have been concentrated largely in skilled and semi-skilled manufacturing occupations. In 1964, two out of every three OJT trainees were being prepared for skilled or semi-skilled jobs, compared with less than half of those in institutional projects.

7. There has been a concerted effort to gain the participation and mobilize the training resources of private industry as an integral part of a public training program. Ninety percent of the jobs in American industry are generated by the private sector of the economy. In the early history of training in this decade, policy planning was concerned with relatively small numbers of technologically-displaced workers while the current emphasis on manpower training to the disadvantaged has moved this number into the millions. The magnitude of the problem is clearly beyond the training resources of the federal and state governments. Slowly and surely, there has been a greater emphasis in policy planning on on-the-job training and the use of private industry as a prime training facility. Of course, there are other strong motivations for the use of on-the-job training programs. First, it costs less than one-third the cost of institutional training since the employer is using his own equipment and techniques. Second, in a large number of cases, on-the-job training is tantamount to employment and involves no post-training placement effort. Finally, on-the-job training situations give the trainee a realistic picture of a work situation rather than the artificial picture generated by a classroom situation.

Efforts to involve the business community in public retraining efforts have been at four levels. The first is the placement of on-the-job training programs in private companies with some subsidy in wages and training costs. A second effort has been in coupled institutional-OJT programs where the trainee works on a job, receives a regular wage and is given at the same time supportive services by the government agency (e.g., training, counseling) to stabilize his job adjustment. Third, more and more attention is being given to the use of key business leaders as advisors to agency officials in public programs, particularly business personnel from company training and personnel operations. Finally, there is an emerging tendency for public agencies to contract with private business establishments on a cost basis to use the expertise and training technology of the company to develop a program of training for disadvantaged groups. This latter arrangement has elements of on-the-job training but is quite different in orientation. The business establishment accepts the assignment as a training institution and not as an employer using a government subsidy for training workers in his company. Thus, the Chrysler Corporation has already begun discussion with public agencies to train 1500 unemployable workers. The Chrysler program will include: job counseling, institutional and on-the-job training, literacy training, business methods orientation, and work discipline training. The Chrysler Corporation will receive full payment for the use of resources and overhead expenses.

This latter type of arrangement deserves further comment. A number of the largest companies in the United States, as a means of diversification of company operations, have indertaken training programs for the disadvantaged on a profit basis. The Philco Corporation, International Telephone and Telegraph, International Business Machines and Xerox are but a few of the growing number of companies that have established vocational-educational divisions. The programs of eighteen Job Corps Centers are under the direct administration of large companies. These companies have sought to develop work motivation, work discipline and work skills in the residents of these Centers; youth who are characterized by a low education and skill level, chronic emotional problems and low motivation. There is no evidence as yet as to the effectiveness of these arrangements and particularly the impact of these programs in the rehabilitation of disadvantaged youth. There is every reason to believe that this form of government-business cooperative effort will continue and be enlarged.

At the middle of this decade, then, American public-training efforts have been marked by three basic trends. The first is the new investment of resources in rehabilitating disadvantaged workers in the ghetto and in the inner-city area. This has generated a need for new concepts and perspectives that are beginning to emerge. Second, there has been interest in the expansion of on-the-job training programs, particularly for the hard-core unemployed. Finally, there is a growing tendency to actively encourage the participation and involvement of business, particularly personnel experts and technicians in industrial

training, in the development of public-training programs. The American programs in the 1960's have been largely experimental but they have been instrumental in defining human needs and goals that must be central to any coordinated manpower program.

New Perspectives in Public Manpower Training and Retraining

The advent of the American manpower programs in the 1960's marked a revolution in ideas about training, placement and employment in the United States. Previously, the unemployed worker who approached the employment service for a job was given conventional placement service. In other words, the skills and capacities that he brought to the employment service were regarded as given, and no attempt was made to improve them. The job order from the employer was also viewed as absolute, and every effort was made to find a candidate who could fill the job description when he registered for employment. The Area Redevelopment Act of 1961 was the first piece of legislation that suggested an investment of resources to improve the skills and capacities of unemployed workers to qualify them for certain jobs. The significance of this legislation is that it marked a radical shift from employer-centered service to intensive clientcentered services.

This reorientation toward client-centered services resulted in a new series of concepts and ideas that would have been regarded as radical in manpower services only a decade ago. There is every indication that these new perspectives will become the guidelines for the standard manpower services of the future. Five of these ideas have become central, and it would be well to discuss them and indicate their contribution to the solution of manpower problems in the United States today: (1) outreach, (2) job readiness, (3) job development, (4) inter-agency programing and (5) human-resource development.

(1) Outreach. It is obvious that in dealing with the hard-core unemployed or unemployed ghetto residents, the first task is to establish contact between agency and client. There are several barriers to this contact. Psychological factors may deter the prospective client from contacting the agency. Frequently, the agency is located some distance away from the residence of the client and transportation is a problem. It becomes necessary for "the mountain to go to Mohammed." The United States Employment Service established 150 Youth Opportunity Centers, located within the neighborhoods of disadvantaged youth. This is a practice which is becoming standardized among private and public agencies. In several cases, indigenous leaders from the neighborhood have been employed to conduct house-to-house interviews soliciting information on the employment patterns within the household as well as needed manpower services. The major functions of the outreach station are to establish contact with prospective clients, provide on-the-spot job counseling and make referrals to other agencies. The main value of this activity is to identify the agency as a local neighborhood resource and diminish any hostility toward the agency as a foreign agent. In neighborhoods where the residents have attenuated ties to the larger society, the outreach activity may be the only means of bringing manpower services to the client.



(2) Job readiness. It is becoming increasingly clear that the manpower services given to the disadvantaged client must go beyond the acquisition of new or improved skills, although the latter is certainly an important component in preparing the individual for a job. The disadvantaged worker must be treated as a special case, requiring certain employment-related services if he is to secure a job and hold it. Such services may include basic literacy training, instruction on how to handle finances, guidance on health and emotional problems and guidelines for meeting the everyday requirements of a job (e.g., punctuality at work).

But job-readiness activities do not end with the securing of employment. Those who study turnover statistics are aware of the high-quit rates in the first days of new jobs. This is especially true of the disadvantaged. It becomes important, then, to develop on-the-job supportive services to insure that the new hiree stays on the job. Frequently, this may assume the form of counseling or an opportunity for the person who is doing poorly at work to air his problems.

The agency must begin with a diagnosis of the individual's problems that may be related to employment, and using this diagnosis, provide for services to prepare the individual for a job and then keep him on it. Secretary of Labor Willard Wirtz noted in a visit to Detroit in early 1967 that "the 30,000 hard-core unemployed do not all have the same problem, nor need the same services. We are dealing with 30,000 individual problems, not to be solved by the same formula." A job readiness diagnosis must be individual-problem-centered in order to mobilize the most effective package of services for the individual.

(3) Job development. It has already been noted that traditional placement procedures emphasized the fixed or rigid nature of the job order from the employer. The strategy has been to find an applicant to meet these standards or, in recent years, to provide training to improve the skills of the applicant to qualify for the job. Relatively little has been done in the past to negotiate with the employer to modify his standards temporarily to meet the capacities of prospective job applicants. A pioneering effort is presently underway in Chicago to get employers to hire some hard-core unemployed by relaxing employment standards and to cooperate in building both supportive services and education components into the job situation. The Jobs Now Project was launched in September, 1966. It is attractive to disadvantaged youths because it offers immediate jobs for wages, together with on-the-job training for occupations offering promise for advancement. The program is jointly sponsored by a group of local industry leaders, public and private agencies and a number of labor unions. Three thousand hardcore unemployed youths are slated to participate in the project. Three central job-development ingredients are included in the project: (1) agency personnel known as "coaches" are available to provide support for the trainees in the plant and at home, (2) each trainee is under the direct supervision of an older worker who is responsible for helping him to acquire skills and competence and (3) an agency job developer maintains close contact with the employer to keep him informed as to progress.

The experimental and pioneering aspect of this project funded by the Department of Labor offer some exciting

prospects. On the input side of its two-week cycle of operations, of the hard-core unemployed recruited, screened, and referred to two weeks of training, 96.5 percent were Negroes; 82 percent males and 18 percent females; 85 percent had 8 grades or less of schooling; 79 percent had police records (predominantly minor offenses, but some serious ones); and 43 percent were on public assistance.

Of the 235 who completed training, 200 referred to employment were actually employed, while the remaining 35 were returned for another two weeks of training. Of those who were employed, 70 percent have stayed employed, but those who fail on the job are also returned for training and given a second chance to make good. The wages for those who are employed range from \$1.50 to \$3.05 an hour.

Although it is too early to form conclusions, progress up to now suggests that it is possible to get employers to hire the hard-core unemployed, and to cooperate in building both supportive services and education components right into the job situation.

Three concepts have emerged from this program: first, that employability programs of the future must have built into them guarantees of employment by employers to insure the motivation needed to make the training a success; second, total-community involvement and commitment of both the private and public agencies and organizations are necessary to insure support of such programs, their coordination, and the resources needed to produce the employable individual and jobs; and third, support is needed for both employee and employer in facilitating job adjustment.

- (4) Inter-agency programs. The recognition in the last few years that manpower development must include both skill improvement and an attack on employment-related problems has resulted in the development of multi-agency programs. The disadvantaged youths may require a combination of basic literacy training, work experience, job counseling, job-placement services, and medical rehabilitation. Programs to realize the manpower potential of such youths must coordinate the resources of these agencies to provide job-preparation services. The initial MDTA program in 1962 required by law an inter-agency program between the vocational education service of the U.S. Office of Education and the employment service of the U.S. Department of Labor. Although the concept of inter-agency programs is appealing, it is only within the last six months that serious efforts have been made to develop such cooperative activities. In Cincinnati, the local housing authority cooperated with the U.S. Employment Service by making funds available for housing repairs in slum neighborhoods. These funds were used to develop a work experience program for disadvantaged youth who received pre-apprentice training in a number of trades through this program. In Detroit, the Mayor's Youth Employment Project coupled Public Health Service resources with an eniployment service program to improve the employability of disadvantaged youths who were registered in a MDTA training program. The pattern of inter-agency programs will obviously vary, depending on the needs of the client group and the availability of agency resources in the local community.
 - (5) Human resource development. A logical extension



of outreach, job-development and job-readiness activities is a concern with the *total* set of conditions and problems that have resulted in the nonemployability of the disadvantaged. This involves an analysis of the institutional structure in the neighborhood and a specification and isolation of the factors that deny access to the institutional memberships and rewards that are basic to job preparation. Attention must be given to the adequacy of schools; the capacity of mass transit systems to link the worker with distant work situations; the extent of supportive services forthcoming from neighborhood agencies; and the access to desirable housing, education, and recreation as motivating forces for labor force participation. In this sense, human resource development is a long-run activity, trying to eliminate or remedy the conditions that result in unemployables. Although the outlines of this kind of program are only now emerging, it portends to be one of the most significant developments in manpower development in the next decade.

These new perspectives on public manpower training have already had and will continue to have a profound impact on the goals, structure, and administration of training. These perspectives indicate that American manpower specialists are beginning to realize that solutions to hard-core unemployment must consider both the personal problems of the individual as well as the barriers to employment imposed by forces in his environment.

Problems in the Development and Administration of Public Training and Retraining Programs for Workers

For workers handicapped by lack of skill or experience, age, or limited education, the best protection against displacement and job obsolescence may be training or retraining. It is becoming increasingly apparent that some measure of continuous education and training is necessary if workers are to become established in productive roles in the labor market and insulate themselves from the strains of job changes that occur as a result of technological changes.

Very little is known about the content and effectiveness of company-sponsored programs to upgrade or enlarge the skills of their blue-collar workers. Whether such training results in insulation against job obsolescence is problematical. A recent study indicated that 85 percent of the nation's largest corporations provided some form of in-service training. About 70 percent of the companies studied provided technical and professional programs while 16 percent offered general education programs. More than 44 percent offered instruction to blue-collar workers.

Critical shortages among skilled craftsmen in recent years have led to concern about the efficiency of apprenticeship programs in providing training opportunities for expanding the number of skilled craftsmen. One study reported that, in recent years, only about a third of the number required for expansion and replacement in the skilled trades were registered in formal apprenticeship programs. It has been suggested that the reason for this may be that apprenticable programs have failed to keep up with advancements in technologically-expanding industries and that what is needed is a skill complex that cuts across traditional craft lines.

These programs are designed to prevent unemployment but do not focus on training the technologically unemployed or the hard-core unemployed. These latter workers are largely dependent on federally-sponsored programs to fulfill their training needs. The administration of these programs offer a number of problems which set definite limits on the extent to which these programs are effective.

Mobilization of Local Community Resources

It was obvious from the beginning of the federallysponsored training programs that one element in the possible success of these public programs was the extent to which the local community was capable or willing to mobilize and commit local training resources for the programs (e.g., instructional staff, classroom space). This dependence on local community resources to implement the programs imposed sharp limitations on the number of trainees that could be served and the number of curricula that could be offered. A number of factors affected the allocation of resources to these programs by local authorities. First, in some of the distressed communities, where training was needed most, there was an unavailability of resources to commit or leadership to coordinate these resources. The largest cities with premium resources and talent were at a decided advantage over the smaller communities. Second, training programs for the poor and unemployed had to contend for resources against more traditional, eductional activities in the community (e.g., vocational education or basic education courses). Third, the proliferation of discrete programs, funded on a yearto-year basis, did not develop community confidence that such training was an integral part of the educational system of the community. This latter factor made it difficult in many cases to generate long-run interest in these programs and to mobilize support for them. For the most part, community leaders viewed the programs as emergency, short-run activities without any sense of permanence. Finally, it was difficult to develop inter-agency programs on the community level because cooperation among agencies was voluntary rather than statutory with no designated mechanism to take the responsibility for co-

In a larger context, there was no way of mobilizing the resources of discrete communities into a comprehensive, regional facility with diverse curricula and a high level of instruction to service clients in these communities. The repeated difficulties in centralizing training resources to service a wide geographical area was one of the chief failings of program development in the 1960's. There were almost as many programs as communities and these programs suffered qualitatively by being limited to the resources of the immediate community rather than the resources of a broader geographical and political base.

Training for What?

Two repeated questions have been asked about these programs. Were the trainees being trained for jobs in the local labor market, the regional labor market or the national labor market? What was the goal of the training—a job or a career? It was obvious in MDTA and ARA practices that primary emphasis was on training for jobs in the local labor market. In a society where geo-



graphical mobility is practically a way of life, this emphasis on training for the local labor market may not truly be serving the long-run needs of the trainee. Jobs that still exist in small towns or rural communities may not have their counterparts in the large urban center and failure to train for these latter jobs may fail to prepare the trainee for the work realities tomorrow.

MDTA and ARA practices have also stressed preparation for a particular job rather than training in a particular cluster of skills. The trainee's future is, then, tied to the permanence or stability of that particular occupational specialty in the current network of occupational roles in the United States. There is the possibility that he may be prepared for a job that will become obsolete. For example, the large numbers of key-punch operators being trained today must face the reality that this job is being superceded by tape-punching operations that require an entirely different set of skills.

This emphasis on preparation for a particular job in the immediate labor market is an indication of the short-run character of these training programs. They were designed on a "crash" basis to deal with an immediate problem of the worker. There may be, however, some validity to the claim that for a displaced or a chronically-unemployed worker, there must be priorities in training and the principal priority must be his placement into a productive role in the labor market. His future can, then, be built on this base.

Management and Union Attitudes Toward Public Training

The management and union communities have had ambivalent attitudes toward public training. Business and union representatives have been members of local manpower advisory boards and have applauded training as a principle of public policy. Business critics of public training emphasize three points. First, not enough has been done to give trainees some realistic expectations of the opportunity structure in the companies, the work discipline demanded or the basic literacy and verbal skills needed for job advancement. Most trainees are well equipped for a job but not for a career with the company. Second, the equipment and training methods used in public training facilities lag seriously behind those in company training programs so that supposedly skilled workers still need training. Finally, many of the trainees, especially disadvantaged groups, require backup services (counseling, literacy training) to stabilize their job situations.

Union leaders frequently espouse the training ideal but have been critical of real training situations. Considerable opposition toward OJT programs is to be noted. There is some feeling that such programs threaten the skill and wage privileges of union members by increasing the supply of skilled workers. Public training in skilled occupations is particularly resisted since there is a general feeling that sufficient numbers of skilled workers are already available. A number of unions have cooperated with MDTA officials to develop upgrading programs for union members using MDTA funds (e.g., the International Brotherhood of Electrical Workers), but such efforts are the exception rather than the rule.

Institutional Rigidity and Training Programs

Another problem in public training efforts has been the unresponsiveness of community institutions to the training problems encountered in these programs. Thus, the placement of subprofessional workers into public agencies after training was difficult because there was no specification for such work in civil-service job descriptions, or because the trainees could not pass the traditional civilservice tests. The testing and placement programs of the United States Employment Service and the curricula of the vocational education schools had traditionally serviced middle-class clients and found it difficult to apply established techniques and programs to the new, lower-class client groups. For example, the vocational-education schools found it difficult to train disadvantaged youth for vocational skills, since most of these youngsters did not have the necessary base of language and mathematical skills. In many cases, literacy training was required, and there was little acquaintance with this kind of training among vocational educators.

As a consequence of this inability to apply the programs of established vocational schools to the training problems of the poor, a "shadow vocational-education empire" began to develop, composed of private groups that tried to develop an educational system more responsive to the needs of the poor. Most of these groups had a high degree of idealism about training; were primarily organized to serve minority group members; and received funds from donations, membership dues, foundation grants and government subsidies.

A notable example of this kind of organization is the Opportunities Industrialization Center (OIC), developed in Philadelphia by a Negro Baptist minister, the Reverend Leon Sullivan. The organization receives local donations as well as foundation support and funds from the MDTA program. The OIC stresses "self help" as a central ideal with the motto, "We Help Ourselves." Trainees are not paid allowances. The leaders of the program are primarily ministers, but help has been forthcoming from industry in the form of employer participation and donations of equipment and instructional aid. The program has two chief parts, a "feeder" system and a skill-training center. The feeder system (a) screens all applicants, (b) provides those deemed to need it with basic education and instruction in minority-group history, work orientation and good grooming, and (c) makes referrals to needed services of other agencies, directly to employment, to MDTA or other training opportunities or to the OIC skill center. Most enrollments in the feeder pre-skill training are for two to four months. The skilltraining courses may include electronics assembly, auto repair, machine shop and secretarial training. Courses average six months.

The OIC approach has been extended on a trial basis to eight other cities, primarily smaller ones in which there were as yet quite limited manpower programs. The planned enrollment is 400 to 1200 a year, varying by city some The OIC approach has sought to fill a vacuum in training for the disadvantaged which more traditional agencies have been slow to fill. Whether this program is exportable and whether it does not reach certain disadvantaged groups because of a lack of training allowances are im-



portant questions; but it cannot be denied that the programs may prove to be a strong stimulant for change in agencies hampered by institutional rigidity.

Short-run Emphasis of Manpower Programs

One of the serious drawbacks to public training efforts is that funding practices emphasize the short-run, "crash" nature of these programs. Programs are reviewed and budgeted by Congress annually. Inevitably, changing priorities may result in the curtailment or elimination of some programs. Unfavorable publicity about a program may place it in jeopardy. For example, the public disclosures of riots by Job Corps trainees in local communities, coupled with public controversy about the per-capita cost of training—about \$9,000 per year—resulted in some Congressional cutbacks in the funding of the program. Furthermore, programs must compete against one another for funds, and consequently, expansion of one program is usually at the cost of another.

Under these conditions, it is difficult to normalize public training and mobilize resources for an ongoing effort. Even when teachers are available, there is some reticence to commit themselves to a program that may be shortlived. In a like fashion, it is difficult to obtain the cooperation of local community leaders on a long-term basis or to have long-term commitments on training resources. Obviously, one of the most urgent needs is to normalize public training through a funding procedure that is not short-run.

Problems of Inter-agency Linkages

We have already indicated that the manpower revolution of the 1960's consists of a series of discrete programs. In order to maximize service to the client and increase the efficiency of operation, it is necessary to develop linkages between a number of agencies. Until now, this has been based on the premise of voluntary cooperation by the community agencies involved. Although the CAMPS agreement postulates the need for cooperation on the local community level, the actual implementation has involved a trial-and-error process. In the absence of any set formula for cooperation, the linkages between agencies have become a matter of integrating discrete agencies, each with an individual mandate for service. Overl pping functions exist, and it is questionable whether such integration can occur without some central federal or state authority to make these linkages compulsory. In an era where training must be closely linked to pretraining services (e.g., recruitment and testing) and posttraining services (e.g., placement and counseling), the multiplicity of agency efforts without some form of coordination only serves to weaken the total package of manpower services designed to aid the disadvantaged worker.

Summing Up

In this paper, we have been concerned with some of the trends and problems that have emerged in public training efforts in the United States during the 1960's. The manpower revolution in the United States has been concerned both with the retraining of technologically displaced workers and the training of the disadvantaged.

More and more resources are being invested in the latter activity and a new set of perspectives on training has become necessary. No single unified training program has developed to fulfill this goal. Instead, a number of discrete programs focused on different groups coexists. The central problem that has emerged is one of coordinating funding of these programs at the federal level and coordinating services at the community level to maximize training aid to the disadvantaged. This coordination involves not only the coupling of public programs but the mobilization of private resources as well. We have learned an important lesson from these pioneering programs, a lesson that is becoming a guiding principle in public training efforts: training involves more than skill acquisition; it involves a concern with the total needs of the individual within his environment. Training must be coordinated with other rehabilitative programs of the individual as well as efforts to improve those aspects of his environment that affect opportunities for employment.

The previous discussion has suggested three basic trends that will receive increased attention in the years ahead. Let me briefly review them.

1. Public training and retraining programs have a "crash" aspect or emergency label attached to them. There is a need to normalize such programs and build them into the fabric of social welfare at the community level. The current funding practices from the Congress add a note of instability to these programs and services suffer as a result. To be effective, as well as to develop a sense of permanence, an alternative source of funding more stable than the present—must be found. Thought has already been given to a program of tax credits for industries or companies that initiate training efforts for the disadvantaged. Twenty-five states have also liberalized unemployment insurance provisions to cover training subsidies. A program of training subsidies to selected industries is currently being explored. There appears to be little doubt that these funding possibilities will receive increasing attention in the immediate future.

2. More thought will be given to problems of coordination of diverse training programs. There is a need for a "super manpower agency" where priorities can be determined and a single, unified set of funding procedures can be developed. The structure and locus of such an agency is yet to be determined but it must, as a minimum, have statutory powers to develop inter-agency programs and require agency cooperation at the community level to implement these programs.

3. More concern will undoubtedly be given to the problems of adapting traditional manpower agency services to the rehabilitative needs of the poor. What effective measures can be taken to change the curricula, practices and methods of these agencies? Institutional revision is not automatically legislated without a program of training for the trainers.

While we have only recently become aware of the problems among the disadvantaged in the journey to work, the next decade promises to be one of great challenges and discoveries in this area. It is an exciting intellectual proposition, and the fulfillment of the Employment Act of 1946, that the federal government has seen fit through a series of programs to invest resources for the vocational development of the poor. The fulfillment of this goal



promises to be a substantial step toward a society in which all men have the equal *right* and *opportunity* to enjoy the rewards of participation in our industrial system.

BIBLIOGRAPHY

- State of California Commission on Manpower, Automation and Technology, "Collective Bargaining Adjustments to Technological Change," Report No. 65-5, November, 1965.
- Dobrowa, Hal, "Emphasis is on Four Areas to Alleviate the Manpower Shortage: Processes, Mechanization, Recruiting, Training," *Production*, August, 1966, pp. 92-99.
- Killingsworth, Charles C., "Automation in Manufacturing," Labor and Industrial Relations Center, Michigan State University Publication, Vol. 53, No. 14, East Lansing, Michigan, May, 1959.
- Commonwealth of Massachusetts, Governor's Conference on Automation, June 2 and 3, 1960.
- Minnesota Department of Employment Security, "Three Phases of the Automation Program in a Community: A summary report on the findings of the Demonstration Project on Automation and Technological Change," Demonstration Project No. II, Automation Program Report No. 1, Si. Paul, Minnesota, October, 1963.
- National Commission on Technology, Automation, and Economic Progress, *Technology and the American Economy*, Vol. 1, February, 1966.
- Scoggins, Will, Labor in Learning: Public School Treatment of the World of Work, Institute of Industrial Relations, University of California, Los Angeles, Calif., 1966.

- Stern, James, "Adjustment to Plant Closure," *Monthly Labor Review*, Vol. 90, No. 1, January, 1967, pp. 42-46.
- Stern, James L., "Adjustment to Plant Closing: Retraining, Relocation, and Re-employment Experience of Workers Displaced in the Shutdown of the Armour Plant in Kansas City, Kansas," (A Report to the Automation Fund Committee).
- Subcommittee on Unemployment and the Impact of Automation of the Committee on Education and Labor, U.S. Government Printing Office, Washington, D.C., June, 1961.
- U.S. Department of Labor, Bureau of Employment Security, Impact of Automation and Technological Change on Employment and Unemployment, Washington, D.C., September, 1961.
- U.S. Department of Labor, Bureau of Labor Statistics, Technological Trends in Major American Industries, Eulletin No. 1474, February, 1966.
- U.S. Department of Labor, Manpower Administration, Bureau of Employment Security, Experience of Other Countries in Dealing with Technological Unemployment, Washington, D.C., August, 1963.
- U.S. Department of Labor, Manpower Administration, Office of Manpower, Automation and Training, Manpower Implications of Automation, Washington, D.C., September, 1965.
- "Technological Change, Productivity, and Employment," Occupational Outlook Quarterly, Vol. 8, No. 3, September, 1964, pp. 1-7.



