Teenage unemployment is a critical manpower problem. Youth most severely affected are minority group members and those with limited education. Many barriers stand in the way of their obtaining steady jobs: lack of training and experience, job movement, child labor laws, minimum wage standards, and competition for jobs from veterans and middle-aged women. Special measures are needed, such as a different minimum wage, manpower programs, and most importantly, career-oriented education so that those in the potential work force are trained to meet immediate needs for technological manpower. With the growth of blue collar, white collar, service- and goods-producing jobs, career education needs to prepare all students either to take a job or to enter their next step of educational preparation when they leave high school. The development of a career education system requires the accomplishment of differing objectives at each level of the existing school system. Although vocational education has been the largest source of formal training for occupations not requiring a college education, implementation of vocational education legislation has met with some problems. Career education is more than specific job training and results in improving the transition from school to work, consequently greatly influencing the future employment picture of the country. (SC)
TRANSITION FROM SCHOOL TO WORK: THE ROLE OF CAREER EDUCATION*

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I am honored to have an opportunity to address this very distinguished group of labor leaders, businessmen, educators, government officials, and community leaders assembled here this week for the Fourteenth Annual Wilhelm Weinberg Seminar. In keeping with this afternoon's topic "Jobs, Careers, and Quality Education," I plan to discuss the problems involved for our nation's youth in their transition from school to work and the role of career education in helping to facilitate this transition.

THE GENERAL SCOPE OF THE PROBLEM

According to the 1972 Manpower Report of the President, teenage unemployment, particularly among black youth is one of our country's most critical manpower problems. Young workers, aged 16-19, for years have had an unemployment rate more than 4 times that for adults aged 25 and over (e.g. in 1971, 16.9% compared with 4.0%). Black teenagers have had a rate of joblessness more than double that for white youth. In the summer months, teenagers' job finding problems have been compounded as both students and new high school graduates flooded into the labor market. The inevitable result has been a great number of dissatisfied, discouraged young people — many of whom have given up looking for a job and are thus categorized as "discouraged workers" (a descriptor for those not included in the normal labor force statistics).

Youth unemployment is not one single problem but many. It affects, in different degrees and in different ways, in-school and out-of-school youth, younger and older teenagers, high school graduates and dropouts, boys and girls, blacks and whites. All young people face rates of joblessness far above that for adults. But minority group members and those handicapped by limited education are the ones most severely affected.
There is marked relationship between the number of years of school young people have completed and their rates of unemployment. In particular, high school dropouts have an unemployment rate nearly twice that of high school graduates.

The high unemployment rate among teenagers reflects to a large degree their frequent exposure to unemployment as they enter and re-enter the labor market after periods of devoted military service, schooling, vacations, or as they change jobs to find more satisfying work. Once young workers are established in jobs, their risk of unemployment is only moderately higher than that of adults. But many barriers stand in the way of their obtaining steady jobs. Some employers refuse to hire youth for more than casual work because of their lack of training and work experience and the very fact that their frequent movement between jobs and into and out of the labor market. The requirement of a high school diploma, even for many jobs not demanding this level of education, is a barrier to employment of in-school youth and dropouts. Legal minimum wage standards may bar youth from some jobs because of their inexperience, consequent need for training, and initially low productivity. Federal and State child labor laws such as the Fair Labor Standards Act, designed to protect young people from exploitation or from work which might impair their health or interfere with their education, have also restricted their employment. Competition for jobs, particularly from returning veterans and middle-aged women returning to the labor force, has hindered young people in their search for employment. And minimum wage laws have made employers reluctant to hire young workers because they would have to pay inexperienced teenagers the same minimum wages as more experience adults.
For some youth, frequent changes of low-level jobs in conjunction with periods of unemployment may not have negative long-term effects. Recent research by the U.S. Department of Labor indicates that a large number of young people are able to improve their economic position with time and additional experience as they change jobs. But for many, particularly among the disadvantaged, haphazard, discouraging early work experiences can establish a pattern which is very difficult to overcome in later life.

For these young people, a variety of special measures may be needed. A different minimum wage which would permit employers to pay youth less than adults might get them off to a faster start in finding employment. Federal manpower programs can help to reduce the number of jobless, discouraged youth and to give dropouts another chance to equip themselves for a life of productive work. But in the long run, there is a need for more career-oriented education so that young people not bound for college will be prepared for an occupation upon leaving high school and for more adequate guidance and job placement services to aid in their transition from school to work.

That measures such as these will not, by themselves, solve the problems of unemployed youth is clear. In the absence of a high rate of economic growth and a higher general level of employment, efforts to improve young workers' qualifications and remove the special obstacles to their employment cannot be relied upon to open many more opportunities for them. But the reverse is also true because to bring youth unemployment down to more satisfactory levels, we need both stimulation of employment demand by general fiscal and monetary measures and policies specifically designed to reduce the structural barriers which impede young workers in locating jobs.
THE ROLE OF CAREER EDUCATION IN IMPROVING THE SCHOOL TO WORK TRANSITION

For too long now, as Rupert Evans pointed out in his 1968 article entitled, School for Schooling's Sake: The Current Role of the Secondary School in Occupational Preparation, "American education [has been] designed for one basic purpose -- to prepare the student for subsequent schooling. Actual practice in elementary schools, secondary schools, junior colleges, and baccalaureate programs shows far too little recognition of the role of the school in preparing students for citizenship and employment. Only at the graduate school level [have] employability skills [been] given careful attention by the majority of instructors, and anyone who dropped out of the education system prior to graduate school has been regarded as a failure."

Evans went on to indicate that there were two basic reasons why the schools have not successfully attached the problems of transition from school to work: (1) because society has never demanded it, and (2) because within education, theorists have almost uniformly called for unity of programs with emphasis on general education. But as youth unemployment rates continued to climb, society began to ask the schools for action especially when it has become evident that the largest increase in job opportunities in the nation's work force is now and will continue to be for persons below the baccalaureate level with specialized skills and knowledge.

Garth Mangum outlined the parameters of our nation's manpower needs in his article, Workpower for the Seventies: Requirements for Talent, Knowledge, and Skills when he wrote that: "Since World War II, The United States has graduated from an industrial stage of economic history,
with capital resources the critical element, to a post-industrial phase in which human resources have soared in importance. Consequently, the nation finds itself facing: (1) a hunger for manpower with specialized skills and talents; (2) a need for greater investment in occupational training at both entry and inservice levels; (3) severe difficulties finding jobs for the unskilled; and (4) direct competition between men and machines, with a worker's survival hinging on his ability to perform new functions or to underbid the cost of machine labor. There is no sign of work becoming obsolete, but the nature and definition of work are changing rapidly."

The nature of the problem facing us then in preparing highly competent workers for technological occupations is patently evident when we observe that, on one hand, there are thousands of important and attractive jobs in the highly skilled technical and supportive occupational categories which need to be filled in order to maintain the health and well being of our industrial and employment enterprises; and that, on the other hand, there are even more thousands of unemployed young people who cannot fill these jobs because they lack the necessary training.

At the very outset, we must recognize that there are two facets to this problem. One is the immediate task of preparing people in our potential work force, including those in our high schools and junior colleges and those who have left school and are underemployed or unemployed, to be able to meet our immediate needs for technological manpower. There exists already a large establishment which can train most of these individuals since programs beyond the high school in private or public junior and community colleges, proprietary schools, four-year colleges, technical institutes, and some area vocational-technical schools provide part-time
instruction for employed adults and full-time instruction for unemployed adults.

The second, and perhaps most important facet, however, is the long range task of providing a career education experience for young children which will permit them to understand the world of work, to make logical choices of careers in relation to their personal needs, and to provide a means by which they may continue to upgrade their occupational skills and knowledge to keep up with the rapid changes in the kind of work they will be doing as a result of the discovery of new knowledge and the increased application of science and technology.

Before discussing the concept of career education, let me first review with you some facts about our present educational processes as they relate to preparing the highly skilled, technical, and supportive occupational personnel required in today's and tomorrow's world of work.

Despite our concerted efforts in recent years to make education more relevant for the children and young people in our schools and colleges, our area vocational-technical schools and technical institutes, the record is still not very encouraging either in terms of human resources or financial investment. For example, statistics compiled by the National Center for Education Statistics in the 1970-71 school year indicated that:

-- 850,000 students dropped out of elementary or secondary school.

Assume that, on the average, they left at the end of the 10th grade. At $8,000 per child for schooling that began in kindergarten or first grade, these dropouts represented an outlay of $7 billion.

-- 750,000 students graduates from the high school general curriculum that has traditionally been the dumping ground for students who do not elect vocational education or plan to go to college. At
$12,000 per student, the total cost to the Nation ran about $9 billion.

-- 850,000 students entered college but left without a degree or completion of an occupational program. Assume that, on the average, they left at the end of the first year. These young people added $12 billion to costs.

If you have been adding with me, you know that we are talking about 2.5 million young people and expenditures of some $28 billion. That is one-third of the entire $85 billion costs of education last year. And these young people and expenditures reflect the dropout rates for a single year. If you include the millions of dropouts and billions of dollars spent in years past, the losses become astronomical. What we can never measure though are the personal losses of these young people - their frustrations, their shattered hopes and dreams. Nor can we calculate the contributions they might have made to our National vitality and progress.

Who are these youngsters? What happens to them? A recent Department of Labor study entitled U.S. Manpower in the 1970's not only looks ahead but recaps the labor picture in the 1960's. In terms of our social and economic progress, some lines on the charts and graphs for the 60's moved in the wrong direction or, or at best, failed to move at all. For example:

-- Teenager unemployment was more than 12% in every year of the decade.

-- The rate for teenagers of black and other minority races was double that, running between 24% and 30%.

-- Most significantly, the gap between youth and adult unemployment rates widened. At the beginning of the decade, unemployment among the 16-19 age group was 3 times greater than for adults.
25 or over. By 1969, over 5 times more teenagers were out of work than adults.

Projections show that 100 million Americans will be working or seeking work by 1980. That's 15 million more people, mostly young, who will have to be accommodated in the labor force by 1980 than we had in 1970. If 2.5 million youngsters are now leaving our schools and colleges each year without adequate preparation, how many of those 15 million are apt to be unprepared for the demands of the 1980 labor market? Compared with 1968, that market will need 50% more professional and technical workers -- but 2% fewer laborers and an incredible 33% fewer farm workers.

Despite a projected rapid growth rate in the professional occupations, a Labor Department study of the jobs which will be available in the coming decade indicates only about one in five (20%) will require a baccalaureate degree preparation. The Department of Labor's Occupational Outlook Handbook projects a 13 percent increase in blue collar jobs between now and 1980 and a 36 percent increase in white collar positions. Service-producing industries (trade, government, health care, education, transportation, repair and maintenance, finance, insurance, and real estate) are expected to grow from 44.2 million people in 1968 to 59.5 million by 1980, a 35 percent increase. The workforce in goods-producing industries (agriculture, mining, construction, and manufacturing) is expected to increase from 27.5 million to 30 million, a 10 percent increase.

These are the hard facts. Now what can career education do about them?

At present, about 30 percent of our students receive vocational preparation which will enable them to get a job when they leave high school and over 50 percent of our youth receive an education which
neither prepares them to enter further education beyond high school with reasonable assurance of success nor to become employed. Career education, as we conceive it, would guarantee that all students, when they leave high school, will be prepared either to take a job or to enter the next step of educational preparation for their chosen work.

For the past year and a half, career education has been a major objective of the U.S. Office of Education. In fact, no U.S. Office of Education initiative has attracted more attention or received more support! The development of a career education system requires the accomplishment of differing objectives at each level of the existing school system. For example, from nursery school to about the sixth grade, the objectives are to develop in each pupil self-awareness and positive attitudes about the personal and social significance of work. Students in these grades should receive a meaningful overview of the world of work by being exposed to the 15 major job clusters we have developed which encompass more than the 20,000 different job categories listed in the Dictionary of Occupational Titles.

In the seventh and eighth grades, students devote more attention to the occupational clusters of their choice, leading to an in-depth exploration in the ninth grade. Subject matter here is also more meaningful and relevant because it is unified and focused around a career theme.

In grades nine and ten, the student gets in-depth exploration and training in an occupational area, and is provided a foundation for further progress. This leaves open the option to move between clusters.

In grades eleven and twelve, the student receives intensive preparation in a selected cluster, or in a specific occupation, in preparation for job-entry or further education. His studies are related more closely to
the world of work. Guidance and counseling are more concentrated. The school is obligated to assist the student in obtaining a job, entry into a post-secondary occupational education program, or entry into a four-year college program.

Career education beyond the high school includes preparation required by an individual to enter employment, improvement of his knowledge or skills as they relate to his job, or preparation for new ones throughout his working career. It also includes the cultural and recreational knowledge necessary to cope with living in our post-industrial society.

Much progress is being made in the States developing and initiating long range career education programs. As part of this development, we are currently testing four models through research, experimentation, and feasibility studies. The first of these is the school-based model essentially as described above. The second is an employer-based model which involves young people who, for one reason or another, have left school without being equipped for work. For this group, learning by doing is stressed. The third is the home-community based model which is intended primarily for adults. Its main purpose is to reach those who did not acquire the necessary skills to hold a satisfactory job while they were young. It relies heavily on cable television, career clinics, and home instruction. And the fourth is the rural-residential model in which entire families live and train together for new and upgraded employment.

THE CONTRIBUTIONS OF VOCATIONAL EDUCATION

Today's Federal-State program of vocational education is the largest source of formal training for occupations not requiring a college education. Established in 1917 to help raise the skills of the work force, this program has been repeatedly modified and extended. During the 1960's, Federal
expenditures for vocational education increased more than 6 fold - from $45 million in FY 1960 to $300 million in FY 1971. During the past year and a half, the Federal government has also begun major efforts to widen the scope of vocational education and mesh it with general education to give young people more realistic job preparation. These efforts form the bases of career education.

Congress also recognized the need for improving vocational education by passing the Vocational Education Act of 1963 and the amendments of 1968 which have already resulted in a major strengthening of vocational education programs and a great increase in enrollments. Among other things, the 1968 amendments authorized sharply increased support for cooperative education which has been among the most successful of the high school vocational education programs in training students and in subsequently placing them in jobs.

Another important development has been the steady expansion of post-high school non baccalaureate career education programs in community and junior colleges, technical colleges, area vocational colleges and schools and in 4-year colleges and universities. These public institutions enrolled 1,141,000 post secondary preparatory students in 1971 (10 percent more than in 1970) and in addition 2,860,000 adults studying part time (a growth of 7 to 8 percent). Most of these adults studied in post secondary institutions.

Private post secondary schools also provided very significant career education services beyond high school. Dr. Harvey Belitsky reported over 1.5 million enrolled in 1966 and there are many indications that the number has significantly increased in the years since his study was published.

The difference that the kind of job-related training embodied in the vocational training concept can make was illustrated in a report written
in 1971 by Herbert S. Parnes et al. entitled: *Years of Decision, A Longitudinal Study of the Educational Labor Market Experience of Young Women.* Parnes found that unemployment was much higher for out-of-school white boys aged 16-19, who had pursued general education programs than among those who had selected a vocational or college preparatory curriculum. Among out-of-school black women, aged 18-24, he found the lowest unemployment rate (10.5%) for those who had completed commercial training and the highest (19.7%) for those who had been in general education programs.

There are some problems, however, in the implementation of the Vocational Education Act of 1963 and the amendments of 1968 as was illustrated by an October 18, 1972 report to Congress by the Comptroller General of the United States entitled: *Training America's Labor Force: Potential, Progress, and Problems of Vocational Education.* This report indicated that:

1. 37% of the Nation's high school students presumed to need vocational education -- primarily those not going on to 4 year colleges -- were not receiving it,
2. there was insufficient financial support for vocational education at all levels of government,
3. there was, in general, a widespread unfavorable image of, and resulting aversion to, vocational education,
4. funds intended by the Act to support special programs or services for disadvantaged persons unable to succeed in the regular vocational education program were often not used for this purpose, and
5. current management information systems of HEW and the States did not provide sufficient data to adequately evaluate the results of programs as required by the Act.

HEW concurred with GAO's recommendations, and actions and have been taken or promised to conduct the required research, to properly control the use of funds for the disadvantaged, and to improve the management information systems. In fact, just last week there was a Vocational Education Workshop
held in Washington to assist state representatives to develop programs for the disadvantaged by using Federal funds as "seed money" in one or two selected communities instead of spreading it too thinly throughout the state.

Another important factor considered in the GAO report is the impact that vocational education programs have on an area's manpower training programs. Young people who are not exposed to a good vocational education program in secondary school, either because it is not available or because it is rejected due to an image problem, would seem to be likely candidates for manpower training programs. More than 300,000 young people, aged 21 or younger, entered Federally funded manpower training programs during FY 1971.

Such programs may or may not be as effective as vocational education courses in teaching job skills in a regular school environment - I know of no studies comparing the two - but these programs are certainly a more expensive way to train people for jobs because stipends are paid to enrollees and a range of supportive services is generally provided. Finding other ways to equip young people with marketable skills, as through vocational education, thus would seem to offer prospects for reducing future needs for manpower programs.

However, the obvious advantages of supplying young people with specific skills for which there is a current demand in the labor market should not lead to policies which overlook the need for lifetime flexibility. The findings of a recent nationwide study indicate we would be misguided if we make vocational training too specific. This study by Gerald G. Somers et al. entitled, The Effectiveness of Vocational and Technical Programs, concluded that "...training should be generalized,
especially at the high school level, and preparation for a broad range of skills should take the place of narrow occupational training."

Career education, as now being developed by the U.S. Office of Education recognizes this need for academic education which will facilitate both initial vocational training and the frequent updating and retraining likely to be required during the worklife of today's young people. We also are confident that career education will substantially reduce the image problem cited in the GAO report because it is for everyone, not just "someone else's child" as has too often been the case with vocational education.

In the long run, improving the transition from school to work for the Nation's youth calls for restructuring our current process and the institutions involved in it. This will require radical changes in thinking about the role the schools should play in preparing young people for the world of work and the help they have a right to expect in facing the many complex decisions required of them in selecting and preparing for a lifetime career.

The Federal government can act as a catalyst in this restructuring - throwing new light on old problems and stimulating change in the out-of-date attitudes of State and local governments, school boards, and other institutions. The most important service you, the participants in this seminar, can render is to become involved as advisors, consultants, and supporters of occupational programs in the State and local organizations which administer them. The authors of the Vocational Education Act of 1963 and the Educational Amendments of 1972 clearly saw the necessity for knowledgeable leaders in all fields to advise, counsel, and support occupational educators if we are to provide high quality training for their future employees.

In fact, the Congress has made such advisory services a mandatory part of
the administration of the legislation at all levels. I hope that some of you are already serving on such advisory groups and that others will soon follow suit.

The task of reducing youth unemployment will be aided in the years ahead by the much slower growth rate expected in the teenage work force as a whole (though not for blacks) during the 1970's than in the previous decade. This slowing in the rate of increase in the number of new young workers should relieve some of the pressures in the youth labor market. But it will not solve the special problems of underprivileged youth nor overcome the complex of job market factors responsible for the always wide differential in unemployment rates between youth and adults. Furthermore, the current large numbers of young people with discouraging labor market experiences are likely to be disadvantaged middle-aged and older workers some years hence. Thus, the future employment and unemployment picture in this country will be greatly influenced by the rate of progress we make in improving the transition from school to work.