This article presents a rationale for the initiation of the career education movement in discussing the increasing emergence within the last few years of technological advances in America. Comprehensive and vocationally oriented, career education is designed to provide students with opportunities and experiences which will prepare them to become economically self-sufficient and worthwhile citizens. Because of its structure, career education is particularly tailored to meet the needs of the disadvantaged youth. His participation in its programs at the various grade levels will provide for him the experiences he needs to develop vocational skills, social interaction skills, personal independence, and self-dignity. Specifically, career education would build basic subjects in Grades 1 through 12 around career opportunities and labor market requirements. Included in its scope are provisions for: (1) career orientation at the elementary level, (2) job exploration at the junior high level, and (3) job preparation or post-secondary study at the senior high level. (Author/VT)
CAREER EDUCATION:
DISADVANTAGED STUDENTS
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Robert E. Taylor
Director
ERIC Clearinghouse on Vocational and Technical Education

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CAREER EDUCATION:

DISADVANTAGED STUDENTS

George E. Leonard
College of Education
Department of Guidance and Counseling
Wayne State University.

Wendell G. Rayburn
Academic Supportive Programs
University of Detroit

ERIC Clearinghouse on Vocational and Technical Education
The Center for Vocational and Technical Education
The Ohio State University
1960 Kenny Road Columbus, Ohio 43210

1973

CONTENTS

Career Education Concept ................. 1
Career Education Needs of the Disadvantaged .......... 5
Current Programs ................................ 8
Summary and Recommendations ............... 13
Bibliography ..................................... 17
CAREER EDUCATION CONCEPT

The world in which we live is dramatically changing. Not only is the world changing, but, as Toffler (1970) points out, the rate of change is also speeding up. This increase in the rate of change is illustrated by the facts that:

1. The earth's population will double in the next 35 years,
2. The gross national product of goods and services in the 21 advanced countries of the world is doubling every 15 years,
3. Approximately 36 million people move from one place to another every year in the United States, and
4. The cycle between a new idea and its application has shortened from as much as a millenium to a few years.

Shertzer and Stone (1971) suggest that there is a need for all individuals to understand the forces at work in our rapidly changing society. Technological advances, space exploration, manpower shortages, and automation are just some of the forces that are contributing to extensive changes in our world. These forces have caused decision-making and planning to become an ever-increasing challenge to the individual. "The margin of personal error or failure for leading an individually satisfying life seems to become smaller. These forces continue to put greater rather than diminished demands upon the individual" (1971:311-312).

There is little doubt that our present stereotype of vocational education programs are failing to prepare enough students to live and work in our changing society. Our present education system is graduating too many students deficient in job skills for entry into the world of work. Feldman (1970) reports that about 7,500,000 youth in 1970 graduated from high school and headed for work without having any vocational training. Likewise, he indicated that annually 750,000 college and high school dropouts have virtually no marketable skills. Rosenfeld and Gover (1972) show the unemployment rate of teenagers in October 1971 to be in excess of one million.

The Assistant Secretary of Education, Marland, recently criticized the secondary level general track curriculum for its failure to adequately provide growth with occupational skills:
Almost all of the shockingly high number of unemployed youth are products of the general curriculum and we can expect small improvement until the general curriculum is completely done away with in favor of a system of high school education with but two exits--continued education or employment--and nothing else (Marland, 1971a:2).

In the same speech, Marland (1971a) blamed our entire educational system for the plight of our youth, citing numerous instances where nine and ten year old youngsters have only a vague idea of what their fathers do for a living. Even our college bound youth often do not consider labor market needs in their chosen occupation until after they have earned a baccalaureate degree--by then, a surplus may have occurred in the job area for which they have prepared. This is a common criticism of education in this country.

The responsibility for preparing students to enter college has been and will continue to be a function of our secondary schools. While nearly four out of five students who graduate from high school continue on to college, only about one out of five students who complete curricula other than college preparatory enter college (Ginzberg, 1971). Although the U.S. Department of Labor has predicted that in the not too distant future 80 percent of all jobs will be within the range of the high school diploma, our educational system is exceedingly slow in providing relevant programs to meet these changing needs.

Marland (1971b) emphatically states that vocational education has not made it in America. He strongly urges a new system of career education to bridge the gulf between man and his work. The need for developing a workable system of career education is one of the leading priorities in the U.S. Office of Education (USOE). The emerging concept of career education is more than just a reworking of the traditional education programs; it is an approach that will provide an opportunity for all persons to become productive and contributing members of our society. The essence of the approach to career education is:

...to reform and refocus education so that what is taught in the classroom has a clear, demonstrable bearing on the student's future plans--whether these plans be to find a job immediately, to go on to
college or graduate school or some other form of advanced training, or to enter the world of work for a time and then return to education, and in any case to enable the student to go forward secure in the knowledge that he or she is prepared to deal with the world on its own terms (Pierce, 1973:4).

The concept of career education has been highly touted by USOE. This new approach is currently in the developmental stage prior to implementation. The role of career education will be to provide information on job opportunities and build basic subjects from grades one through 12 around career opportunities and requirements in the labor market (U.S. Department of Labor, 1972). General job information would be provided in the elementary schools; however, junior high school students would explore the 15 job clusters established by the USOE. The job clusters are: transportation, health occupations, agriculture, business and natural resources, business and office, communication and media, consumer and homemaker education, construction, environment, fine arts and humanities, hospitality and recreation, manufacturing, marine science, marketing and distribution, and personal services and public service. These clusters would be explored through field observations as well as classroom instruction. In the senior high school, students would select one of three options: job preparation for entry into the labor market immediately after leaving high school, preparation for post-secondary occupational education, or preparation for college.

Not only does career education include vocational education, but it also includes the sciences, the arts, and the humanities. Essential to the concept of career education is the idea that all educational experiences should be structured to prepare each individual for economic independence. This represents a challenge to instruction, curriculum, and counseling. The Deputy Commissioner for Occupational and Adult Education, USOE, firmly believes that competent teachers everywhere must reexamine and define their programs so that they deal with matters that youth will definitely need as functioning members of society and that these programs will be presented in a manner that can be seen as relevant and useful (Pierce, 1973).

Four model career education programs are being developed. Marland (1971a) has described these models as providing useful
alternatives to present practice. The models are: (1) a school-based model, (2) an employer-based model, (3) a home/community-based model, and (4) a rural/residential-based model.

The school-based model is oriented toward the school setting. The curriculum in this model focuses directly on the concept of career development from kindergarten through junior college. Each student would leave the school system with a marketable skill.

The employer-based career system model emerges from the world of business cooperating closely with the schools. Boys and girls in the 13 to 20 age group who have dropped out of the public educational system would benefit most from this system. These youth have typically not acquired the necessary understanding and competence to..."live fulfilled lives as free men and women in a free society" (Marland, 1971a:7).

The third model, home/community-based, is supportive of the first two models. The target population includes individuals excluded from job opportunities or job advancement due to limited formal schooling or lack of knowledge and personal skills. This system effectively combines adult education with vocational education in such a way as to broaden career opportunities to adults who have little or no hope for advancement.

The rural/residential based-model is designed to provide rural families with employment capabilities suitable to the area, to provide leverage on economic development of the area, and to improve family living in general.

The concept of career education is congruent with our democratic ideal of providing opportunities for each citizen to maximize his potential as a human being with dignity and worth and become a participating member of society. Indeed, for many, preparation for work as well as work itself is not only a means of subsistence, but it is important as a way for the individual to develop a more positive self-concept and a feeling of control over his destiny.
CAREER EDUCATION NEEDS OF THE DISADVANTAGED

As previously discussed, career education is not a concept that focuses upon just one segment of the population, but upon all individuals. However, it seems to be particularly tailored to meet the career needs of disadvantaged youth.

Leonard (1973) indicates that the struggle of disadvantaged Americans to achieve equality is one of the crucial issues of our times. The importance of this movement is evidenced by the passage of civil rights legislation in recent years, and antipoverty programs and manpower policies aimed at removing employment barriers limiting opportunities for disadvantaged persons.

Notwithstanding many of the white students who may be considered disadvantaged, they represent only a very small percentage of the white population. However, the "22 million Negroes, 5 million Mexican-Americans, 1 million Puerto Ricans, 600,000 American Indians, and some smaller groups..." can be described as disadvantaged (Ginzberg, 1971:76).

The disadvantaged are often isolated from the mainstream of society, locked into urban and rural ghettos. These areas are incubators of many social problems. Grabowski (1971) identifies several developmental deficits which are manifested in the ghetto type environment of the disadvantaged.

1) A history of continued failure and negative reinforcement as a result of temporary or dead-end employment, extended unemployment, and a lack of vocational skills.

2) Frequently low in self-esteem, easily alienated and easily discouraged.

3) Multiple and complex barriers to employability may include inadequate or inferior education (lack of basic skills in reading and math), chronic health problems, police records, discriminatory hiring practices on the part of employers, a lack of transportation to jobs, and a lack of adequate child-care facilities.
4) Presence of an immediate financial crisis.

5) Resistance to and the inappropriateness of many paper and pencil type standardized assessment devices.

6) Wide differences exist in values, and frequent confusion may be noted in value systems. Work attitudes and motivation may be very different from those of the dominant society.

7) Low frustration tolerance for perseverance in lengthy developmental programs is evident.

8) Families are likely to be large. The proportion of households headed by women is substantial.

9) Resistance to change.


Children born into such an environment are often forced to identify with adults who are defeated, apathetic and non-productive members of society. Because of social, economic, and racial discrimination, they begin to feel worthless, inferior and rejected. A feeling of hopelessness and despair engulfs these children and depresses their self-concept to such a degree that many give up before completing the primary grades.

Because of their experiences and background, disadvantaged youth often have a distorted perception of what the present day world has to offer. Ginzberg makes the following comparison between blacks, the largest minority group, and the white majority:

The percentage of black families living in poverty is more than three times the percentage of poor white families. There are proportionately twice as many white families as there are non-white with more than the national median income. Negroes represent 12 percent of the labor force, but they hold only 5 percent of professional, technical and managerial jobs.
The unemployment rate for black adults has been twice that of their white counterparts, and among teenagers it is three times as high (1971:76).

It is with good reason that the nonwhite student perceives the world about him as alien, offering only limited opportunities. Also, nonwhites are generally being served by educational programs not related to current occupational demands. The effect of future career success on performance cannot be overemphasized (Leonard, 1973). Further, an individual's level of aspiration is closely related to his perception of the world and self; thus, the level of aspiration becomes of crucial importance in career development. A number of studies indicate that disadvantaged youth generally have lower levels of aspiration than their advantaged counterparts (Empey, 1956; Berreman and Holloway, 1959; Goldstein, 1967; Rayburn, 1972). "Thus, if an individual is unable to see himself as a white-collar, professional, technical or skilled worker, he will be unable to pursue the intermediate steps necessary to achieve these occupational levels..." (Leonard, 1973:5).

Statistics regarding nonwhite unemployment, particularly black unemployment, clearly show an immediate need to provide the disadvantaged with a new and relevant system that will meet their educational and occupational needs. The Manpower Report of the President (U.S. Department of Labor, 1972:84) reports: "Among the various youth labor market problems, the impact of unemployment on black youth stands out as one of utmost urgency for the Nation." The following facts from this report are restated in part, revealing the unemployment picture in 1971:

1) Negro teenagers have an unemployment rate of 32 percent.

2) Negro girls have an unemployment rate of 36 percent.

3) The position of Negro teenagers has seriously worsened over the years in comparison with Negro adults (five times that of adults aged 25 and over).

The high proportion of unemployed Negro youth has reached a very critical stage. Fantini and Young (1970:5) join
Marland in criticizing the present educational system for failing to do an adequate job in preparing students: "Whereas the operation of schools indicates an interest in institutional efficiency, today we talk about maximizing human potential." Two major approaches to correcting the present deficiencies of our educational system are presented: 1) change and improve the present system, or 2) design new or relevant systems of education. They ascribe to the latter, but warn:

We must approach this design problem accepting fewer "givens." The question is: "How would you design a new system of education for the future assuming you had none today?" Required of course, is a careful study of the subsystems, that is, the parts of a total system that are successful today (1970:5).

As previously stated, the Assistant Secretary of Education (Marland, 1971a) is convinced that a career education system will be the first comprehensive attempt that will serve virtually all Americans.

CURRENT PROGRAMS

There is little doubt that the disadvantaged are greatly handicapped by inequality of opportunity and poor educational preparation for the world of work. "Education in the ghetto is not a means of self-improvement and an avenue of escape from the ghetto but is in fact the opposite--a system that perpetuates it" (Fantini and Young, 1970). The concept of career education appears to be the one approach that best meets the needs of the disadvantaged. But, as Michigan's State Superintendent of Public Instruction so aptly put it:

...career education will be meaningless unless we can demonstrate to the black ADC mother in Detroit or to the Indian father in Eau Clair, or to the Chicano family in Hartford, or to the white family in Grand Rapids, that their sons and daughters have been provided that blend of academic programs with the specifics of the occupational skill center will indeed be employed... (Porter, 1972:5-6).
The concept of career education is not only important to disadvantaged persons of all ages in terms of preparation for economic independence, but promises to fulfill a very important democratic ideal--the recognition of the dignity and worth of the individual. It would involve a broadening of our existing vocational education system as demonstrated by the Vocational Education Act of 1963 and the Amendments of 1968 (U.S. Office of Education, 1965, 1969).

There are many vocational programs and demonstration projects of excellent quality. Nevertheless, the literature is sparse in reporting on vocational programs aimed primarily at disadvantaged youth, which might admirably serve as vocational components in career education. The Developmental Career Guidance Project developed in Detroit (Leonard, 1973) is exemplary. It has been operational for nearly a decade and has been subject to numerous independent evaluations.

The Developmental Career Guidance Project (DCGP) is a comprehensive project that has as its core the concept of developmental career guidance--an ongoing process. Emphasis is placed upon the developmental aspect of career knowledge, aspiration, choice and planning; the ever changing nature of society; and guidance and counseling. The DCGP began in 1964, co-sponsored by Wayne State University and Detroit Public Schools and funded by the Office of Economic Opportunity.

The orientation of the DCGP "is conceived as being dynamic, contiguous with growth stages, relevant to the real world as it exists and evolves, and integrative of multiple old and new experiences" (Leonard, 1973:31). This concept includes all of the people and learning experiences which contribute to child development. All of these experiences must be relevant to growing and developing the youth in all aspects of his world.

There are three major objectives of the DCGP. One of the objectives is to increase the awareness of each child in every project school about all phases of work. The project is designed not only to "add work knowledge and experience, in proportions commensurate with the child's ability to absorb as he rises through successive grades," but to create a constant awareness of the world of work. Another program objective is to assist each youngster in developing a realistic and functional awareness of himself as a worthwhile human being who will eventually enter the job market. The
DCGP focuses on individual potential, attitudes, values, skills, aspirations, interests, aptitudes, perceptions, relationships and self-images. A third objective concerns molding those individuals who affect the personality of the child into a smooth-working team. "Common understanding, interests, and points of view are sought. Thus, interaction between groups among group members is vital, and effective communication is a constant concern" (Leonard, 1973:33).

Activities designed for the programs of the project schools include group and individual counseling, group conferences, elementary school employment services, articulation activities, and dissemination of career information. Although this list is by no means exhaustive, a brief description of those named will be given.

Group counseling involves students at all grade levels. Students are selected on the basis of need, availability of time, interest, common problems, and teacher referrals. Group sessions are generally unstructured with discussion topics selected by group members.

Individual counseling often stems from group sessions. Individual counseling programs in the secondary schools are not designed to replace the existing group counseling programs. However, guidance consultants become involved in short-term individual counseling contacts "related to personal problems and needs, to vocational planning, job placement, career choice, and in self-perception areas which had a connection with general vocational guidance" (Leonard, 1973:70).

The group conference serves as an important function in situations where there is general interest in an area or subject by a large group of students. Representatives from business and industry in the area of interest are invited to the schools to be interviewed and questioned by the students in a press conference style.

The elementary school employment service concept was initiated to help broaden the perceptions of all pupils in the Developmental Career Guidance Project schools. This simulated employment service approach encourages students to apply for and obtain various "jobs" which are available in their school building, such as safety squad members, audio-visual aides, and office helpers. The importance of the job interview and application completion are stressed.
Articulation activities include working closely with business and industry in developing local vocational resources. Through support of the commercial and industrial community, numerous speakers come to the schools, field trips are organized, and many kinds of occupational information are made available in the form of audio-visual materials, books, kits and pamphlets. Each DCGP school is sponsored by a local company or corporation.

The dissemination of career information is an important function of the DCGP. It is carried out through assemblies, class visits, role playing, consultation, career games, bulletin board notices, and both printed and audio-visual materials.

Evaluation procedures have been built into the DCGP. Several evaluative reports made by persons independent of the project are available. One such report concludes:

The findings of this evaluation validate the DCG Project as a curriculum change delivery system possessing the potential to rally the educational forces of the community and provide for the career thrust of each individual student as they prepare themselves for entry into adulthood and the World of Work. The evaluator found evidence that the project accomplished all of its primary objectives. Therefore, he recommends...that the State Department of Education study it for use as a model for Career Education in Michigan; and...that the United States Office of Education examine the merits of its guidance and counseling approach over the rather narrow vocational education approach used by most of the other Career Education projects (Leonard, 1972:231).

It is also significant that the high school in the project reduced its dropout rate by 10.03 percent. The following is a summary of attitudinal changes resulting from a controlled study of the project during the period of 1965 to 1970:

1) The aspiration level of the students in the experimental schools increased over the period while those in the control schools remained at the same level.
2) Students in the experimental schools expressed greater "surety" of choice over the period while students in the control schools remained at a "not sure" level.

3) Students in the experimental schools showed changes in values regarding careers in that they now value a "career where I can get ahead" over money. No change with control students.

4) Perceptions of counselors changed positively over the period, with no commensurate change by those in the control groups (Leonard, 1973: 144).

The Developmental Career Guidance Project demonstrates that vocational education programs with a developmental career guidance approach integrated into the total school educational program can meet the educational and vocational needs of the disadvantaged students.

Another comprehensive vocational education program that might serve as a career education component is "Operation Bridge" in Greeley, Colorado. The target population of this program is disadvantaged youth, particularly Chicanos. Features of the program include intensive vocational counseling based on the total family unit, occupational orientation for students in grades K-12, intensive tutorial assistance for all pre-vocational and vocational students in the program, a work experience program, and job placement and follow-up (De Petro, 1972). Results of the first year's operation indicate that the program is successfully meeting its objectives.

The Rural Education Disadvantaged Youth Project (Project REDY) is a model vocationally-oriented educational program in Illinois. The project focuses upon youth and career choice, family financial management, improvement of family and career choice, and improvement of family income. A major conclusion suggests that an effective family-centered, vocationally-oriented education program can be conducted by a local school teacher. The project was also successful in significantly changing the attitudes and situations of severely disadvantaged rural families (Thomas, et al., 1970).
As Hansen (1970:23) points out, "A few systems have developed research or pilot projects which attempt to provide career guidance in a systematic, continuous way at various points in a student's career." The above programs do seem to do this.

**SUMMARY AND RECOMMENDATIONS**

Our traditional approach to education has not kept pace with our changing society. Advanced technology and other forces have become a serious challenge to the individual as he makes plans and decisions. Statistics reveal that too many high school graduates are entering the job market with deficient job skills. There is little doubt that our vocational education programs are failing to reach sufficient numbers of students.

Several outspoken critics have advocated a new career education system that will serve all Americans. When implemented, career education would prepare each student to become economically independent. Career education with its many components would begin in kindergarten and continue through post-secondary education and adulthood. Students leaving high school would be equipped with at least entry level job skills. The concept of career education would also provide opportunities for each student to maximize his potential as a human being with dignity and worth and to become a participating member of society.

The disadvantaged have suffered more severely than any other segment of the population in American society. Because of devastating environmental conditions, discrimination, minimal academic preparation and other such factors, coupled with low aspirations and self-concepts, the needs of the disadvantaged are severe and largely unmet. The concept of career education seems to be the one approach that would best serve the needs of the disadvantaged, as well as other students.

Demonstration projects with a developmental guidance approach, such as Detroit's Developmental Career Guidance Program (DCGP), have proved to be successful in meeting the vocational education needs of the disadvantaged. These programs can
serve as excellent models for vocational components in career education programs.

In view of the above, the writers offer the following recommendations:

1) The concept of career education should be advanced as an approach that would best meet the educational needs of all students, including the disadvantaged.

2) In order to be effective, this career education concept must include the following basic principles:
   
   (a) Permeate the total educational process.
   
   (b) Maximize the range of options open to all students.
   
   (c) Be systematically reviewed as any meaningful activity in which an individual engages.
   
   (d) Be individualized, flexible and developmental in nature, stressing the importance of self-development.
   
   (e) Recognize that the family is a major influence on the career development of students.
   
   (f) Require school and community collaboration (Miller, et al., 1972:73-10).

3) In order to be effective, career education programs must begin in elementary school where pupils will be introduced to the concepts of decision-making, goal-setting, and career choice. Each subject matter area and unit of work should be related to individual experiences which would promote the setting of individual goals.

4) Career guidance should also begin in the elementary school and acquaint the individual with business and industry and help him to progressively clarify his career choices. The continual
reexamining of individual plans must enable the student to understand the relevance of school and his performance in it to his own career development.

5) Successful career education requires a unified, current, and complete inventory of the labor force and employment projections. This would include a description of abilities, skills, and training needed to succeed in all occupations.

6) Career education must improve the articulation between secondary schools and post-secondary institutions. Thus, provisions must be made for continued experiences to enable the individual to receive education and training appropriate to his needs.

7) Strong leadership must be provided from the highest level in Washington, D.C. through state departments of education down to local education districts to initiate the concept.

8) Teacher education institutions must be issued a mandate to prepare teachers to meet the challenge of career education.

9) Funding needed to implement the concept of career education must be provided from federal and state sources in order to enable local districts to initiate programs.

In conclusion, the concept of career education could offer bright promise for enabling disadvantaged youth to prepare for better lives if properly executed. The welding of academic and vocational aspects of the educational process in order to expand opportunities for a significant segment of our population is both a critical necessity and a real possibility through effective career education.
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ERIC Clearinghouse on Vocational and Technical Education
1960 Kenny Road
Columbus, Ohio 43210
ABSTRACT - This article presents a rationale for the initiation of the career education movement in discussing the increasing emergence within the last few years of technological advances in America. Comprehensive and vocationally oriented, career education is designed to provide students with opportunities and experiences which will prepare them to become economically self-sufficient and worthwhile citizens. Because of its structure, career education is particularly tailored to meet the needs of the disadvantaged youth. His participation in its programs at the various grade levels will provide for him the experiences he needs to develop vocational skills, social interaction skills, personal independence, and self dignity. Specifically, career education would build basic subjects in Grades 1 through 12 around career opportunities and labor market requirements. Included in its scope are provisions for: (1) career orientation at the elementary level, (2) job exploration at the junior high level, and (3) job preparation or post-secondary study at the senior high level. (Author/SN)