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ABSTRACT

One of a series of special studies by Project Baseline, a national effort requested by Congress to gather information about vocational education and manpower training, the report traces the career education movement, beginning with a few isolated State and local activities in the mid-1960's and following it through the decade as it has become implemented in each State. The career education continuum is discussed, touching on career awareness, occupational exploration and preparation, career guidance and counseling, and placement and followup. Reviewing the state of the art nationally, several State programs, model developments, and curriculum developments are described. Four models are presented with a discussion of some of the problems encountered: (1) the school-based model, (2) the employer-based model, (3) the home/community-based model, and (4) the rural/residential model. A review of information needs and an analysis of Federal funding goals and criteria is offered and findings regarding the role of the National Institute of Education in supporting career education activity are tabulated and discussed. Concluding the report is an evaluation of the future prospects for career education as a catalyst for change. (MW)

CAREER EDUCATION IN THE UNITED STATES TODAY
WHAT IT IS, WHERE, AND THE RESULTS SO FAR

Project Baseline Supplemental Report

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ABSTRACT

Career education began gaining widespread acceptance as a promising means for educational reform in 1971, when it was designated as a top priority by then U.S. Commissioner of Education Sidney P. Marland, Jr. Career education blends academic, general, and occupational education so that education is made more relevant to the needs of all students. It provides for all persons the education and career information necessary to assure appropriate career choice, career entry, and career progression.

Career education is now being implemented to some degree in every State. More than 45 States have convened Statewide conferences to discuss this concept. It has stimulated the development of new partnerships among schools, business, labor, and community groups.

The U.S. Office of Education expended more than $50 million on developing and testing four research models. The schedule called for installation of the "first generation prototype Comprehensive Career Education Model" by September 1973. But, because of the transfer of this program to the National Institute of Education and the subsequent change of priorities, there is serious doubt that transportable career education models will be developed from this major investment. In contrast, the research and development, exemplary, and curriculum development programs (Parts C,D,I, Vocational Education Amendments of 1968) still administered by OE have made a significant contribution to the development and installation of career education in every State.

The Federal government has financed 71 percent of its career education effort from funds appropriated for vocational education. Although development of marketable skills through vocational education is extremely important, vocational education is only one of many components of career education. Total funding has been far from adequate, and much of the burden for implementing career education has fallen on the States and local school districts. To that end, Congress should appropriate funds specifically designated for career education - for occupational awareness and exploration, for job placement, for infusion of occupational components into academic study, and for other career education activities for which Federal education funds are not available.

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CHAPTER 1

DEVELOPMENT OF THE CAREER EDUCATION CONCEPT

HISTORICAL BACKGROUND

The concept of career education, which had been developing for more than half a century, gained widespread acceptance after Sidney P. Marland Jr. in 1971 declared it a top priority of his administration as U.S. Commissioner of Education.

In a paper presented to the Annual Conference of the National Association of Secondary School Principals on January 23, 1971, Marland announced that he was making available for implementation of the concept most of the discretionary funds over which he had direct control. It was his first national presentation of the idea of career education, which he called "a blending of academic and vocational education."[1] He urged leaders in education to consider the concept as a promising means of education reform, and subsequently, career education received some substantial endorsements.

There is still no standard definition of career education, but it has been a recurrent idea in American education for more than 50 years. Some elements of the concept appear in early efforts to introduce vocational guidance and occupational preparation into the mainstream of American education. Edwin L. Herr stated:

> One could start with many persons central to the history of the American Republic and find advocacy of some elements of career education. None would be more famous, or perhaps more pertinent than Benjamin Franklin. Franklin viewed education as having pragmatic and utilitarian purpose in facilitating the creation and mobility of a middle class in this country.
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> ...Frank Parsons, generally conceded to be the father of the guidance movement...attacked the public schools for their specialization in book learning and advocated that "book work should be balanced with industrial education; and working children should spend part time in culture classes and industrial science." In Choosing a Vocation, Parsons (1909)...formulated the following steps for "True Reasoning" or vocational guidance: First, a clear understanding of yourself, aptitude, abilities, interest, resources, limitations, and other qualities. Second, a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work.[2]

In the 1940s, there was a widespread concern for the "life adjustment" of students. Stemming largely from the philosophy of John Dewey, "Life Adjustment Education" was a response to the need for universal education in an industrial democracy, in contrast to the need for educating a small elite group, as in most earlier societies. Dewey believed that learning depended

upon doing and that industrial education activities for children provided an opportunity to explore, to manipulate, and to be creative with tools and materials. As early as 1900, Dewey advocated that children should develop both knowledge of the industrial world and understanding of the processes of economic life. Later, Dewey recommended the integration of industrial education activities with cultural education to help students understand other less practical subjects.

In 1959 James B. Conant added his voice to those supporting the unification of vocational education, guidance, and general education. He called for vocational education in comprehensive high schools for all boys and girls, and advocated the elimination of labels such as general curriculum, college preparatory, or vocational.

In 1961, President Kennedy, concerned about many of the serious domestic problems facing the nation, ordered the appointment of a panel of consultants on vocational education. Most of the panel's recommendations became part of the Vocational Education Act of 1963. The 1963 Act was evaluated by a second national panel and significant amendments were enacted by Congress in 1968. The 1963 Act and the 1968 Amendments made it possible for the United States to broaden programs in vocational education to include persons of all ages in communities throughout the nation. As shown in Chapter IV by an analysis of funds for career education, some of the States took advantage of the liberal provisions of the new legislation as early as 1965 to begin education programs around career development themes.

Grant Venn, as Associate U.S. Commissioner of Education, 1965-68, made a major contribution to the conceptualization of career education. He advocated elimination of the dichotomy between general and vocational education, and development of a new attitude between education and the world of work.[3]

Between 1963 and 1967, the efforts of the Ford Foundation to help improve vocational and technical education in the United States made a significant impact on the evolution of career education. These efforts reflected the beliefs of Marvin J. Feldman and Edward J. Meade that vocational education was the responsibility of all educators and that it could be the catalyst for change to make education more effective. The foundation made grants to elementary and secondary schools, technical institutes, community colleges, and teacher training institutions. A report issued in 1967 documents the early entry of this prestigous organization into career education:

> Such a system would introduce awareness of the relationships which exist between schooling and work -- how man supports himself through work, how various occupations use knowledge -- beginning in the elementary grades. It would use tools, materials, and activities until now principally associated with vocational education to provide concrete, nonverbal complements to the generally abstract-verbal performance standards of conventional education, and as a vehicle to show various kinds of knowledge and concepts in action settings. It would also promote respect for varying individual talents and capabilities.

> In the middle school years, more intensive consideration of the relationships among school work, individual abilities, and the opportunities and demands of various career fields would provide awareness of how options in later life may be expanded or limited by performance and choice. From this period on, each student might have a personal inventory of interests, abilities, and achievement designed to keep before him a full picture of the paths open to him, and subject to continual revision in the light of his further progress and development.
>
> In junior and senior high school, the coordinated curriculum approach embodied in several of these projects would be employed to lend reality and a sense of purpose to education for all students, including the college-bound; and to equip those not planning on college with marketable skills without foreclosing the prospect of continuing education after high school. A major purpose would be to eliminate the so-called "general" curriculum which neither prepares students for useful work upon graduation, nor equips them adequately for further education. Another would be to refocus purely vocational content toward more generally useful skills and concepts in line with the emerging shape of the job market.
>
> At the post-secondary level, career preparation would continue but curricula would be designed also to enable students to advance to four-year college and university courses.[4]

Later in Washington, Feldman, as a special assistant to then U.S. Commissioner of Education James Allen, prepared a policy statement for a legislative draft which recommended the establishment of a "new Office of Community College and Career Education Programs." The proposed legislation called for a "revitalized system of public education with the community college as a central component." Many of its provisions were incorporated later in the Education Amendments of 1972.

The career education concept, then, had been evolving for a long time before Marland made his historic contribution by bringing the idea forcefully to the attention of top policy-makers. The subsequent endorsements included this statement by President Nixon in his State of the Union message to Congress in January 1972:

> There is no more disconcerting waste than the waste of human potential. And there is no better investment than an investment in human fulfillment. Career education can help make education and training more meaningful for the student, more rewarding for the teacher, more available to the adult, more relevant for the disadvantaged and more productive for our country.

One of the first professional groups to formally endorse the concept was the National Association of State Directors of Vocational Education which pointed out that vocational education is an essential part of career education. The National Advisory Council on Vocational Education passed a resolution commending the Administration for its efforts in career education. In the official White House proclamation for Vocational Education Week, February 13-19, 1972, the President said that:

> Owing much to the efforts of vocational educators, we are now on the threshold of a new concept of education which can make school both more interesting to the student and more relevant to him and his society. This concept, career education, is based on the principle that a complete and meaningful education should include the opportunity to learn about the world of work. The vocational educator can take satisfaction from the fact that the new concept of career education derives its heart and energy from the efforts so carefully begun by the vocational and technical teachers of America.

Commissioner Marland and his staff in the Office of Education worked in close cooperation with the chief State school officers, university-based research centers, representative school districts, and professional education associations to develop a first approximation of what career education could -- not necessarily should -- be. The chief State school officers supported the basic concept without reservation. They pledged a major effort to gain legislative and public endorsement in their States and to use the resources available to them to encourage local school districts to adopt elements of career education. State legislatures, notably Florida, Arizona and New Jersey, made the ultimate commitment -- putting money where their endorsement was.

Further action and support came about after regional invitational workshops in ten locations throughout the United States. The regional conferences, conducted by the Bureau of Adult, Vocational, and Technical Education under contract with the Maryland State Department of Education, stimulated 45 State conferences on career education, the majority of which were convened by the governors.

Reasons for the Surge of Interest in Career Education

In a paper prepared for presentation as a keynote address at the regional invitational workshops, the author sought to make clear the circumstances documenting the need for career education as follows:

> First, there is increasing segregation between students and the world of work because they feel they are unneeded by our technological society. They argue that since fewer and fewer "bodies" are needed to produce more and more consumption goods, they (the students) are shipped off to the educational institutions for temporary internment.
>
> Second, about one-third of all students pass through high school via what is known as the "general education curriculum,"

a type of education which leaves its graduates neither trained for a salable skill nor qualified to pursue higher education.

Third, there is an undesirable and counter-productive separation of the vocational education, general education, and academic curricula in our high schools, with the result that those in the vocational curriculum are often seen as low status technicians, while those in the academic curriculum emerge with little contact, preparation toward, or qualification for the world of work.

Fourth, because of the widely held view that a degree is the only kind of respectable occupational preparation in our society, many high school students choose academic preparation. However, a significant number of these do not go on to college and far more begin college than complete it. In addition, the numbers who do not complete college are increasingly out of proportion to the occupational opportunities in our society. In a free society no system can guarantee an exact matching between individual needs and educational options, nor should a system purport to eliminate those who "drop-out." Nevertheless, the magnitude of these types of discontinuities represents a major problem.

Fifth, the vocational offerings in our high schools and those students who elect them are sometimes relegated to second class status. As important and relevant as this type of preparation is in modern industrial society, it often has lower class status than academic preparation and therefore does not constitute a real option for many students.

Sixth, our present system is an inflexible one which often results in premature tracking, and fails to offer individuals the option of changing direction during their years of preparation or of obtaining new training and shifting occupations later in life.

Seventh, many students have little or no formal contact with, or preparation for, the world of work during their elementary and secondary years.[5]

A PROBLEM OF DEFINITION

One of the problems of compiling information on career education at the national level has been the lack of a generally accepted national definition. Edwin L. Rumpf, director of field coordination in adult, vocational, technical and manpower education in the Office of Education, compiled a listing of State definitions of career education. To illustrate the diversity of current interpretations, selected definitions are quoted below:

Alabama

Career education is a comprehensive educational approach to the preparation of the citizenry for living as fulfilled human beings in a predominantly technical, specialized society.

Arizona

Career education combines the academic world with the world of work. It must be available at all levels of education from kindergarten through the university. A complete program of career education includes awareness of the world of work, a broad exploration of occupations, in-depth exploration of selected clusters and career preparation for all students. This calls for all basic education subjects to incorporate career education as an activity. Education and career education are synonymous terms.

California

Career education is a concept (not a program), a comprehensive educational thrust with impact upon instruction at all grade levels and in all subject matter disciplines. The purpose of career education is to provide each student with a coordinated educational experience consisting of career awareness, career exploration, career guidance and career preparation to the end that all students are prepared for employment immediately upon graduation from high school or to go on to further formal education.

Colorado

Career education is a continuous learning process that will assist all individuals in decision-making through integrated school and community activities. It will be implemented through career awareness, exploration, and preparation. These decisions will be pertinent to the life roles of the family, citizenship, leisure time, as well as work.

Connecticut

Career education is a broad sequence of learning experiences provided through formal education and use of community resources. It is a state of mind favoring a mode of inquiry for examining, preparing for and coping with the working world. The focus is on planning; on the life process of career choices; on preparation appropriate to an individual's needs, values, interests and aptitudes; and on the more general needs and values of a diverse society. Individual career development encompasses a series of decisions and progressive experiences throughout a lifetime.

Georgia
Career education is an organized, comprehensive, educational, instructional program designed to facilitate the self and career development of students.

Illinois
Career education is the term denoting the total effort by educational agencies and communities in presenting organized career-oriented activities and experiences to all persons from nursery school through adulthood, and orients the entire educational plan into one unified, career-based system.

Kentucky
A systematic program of educational experiences focusing on the development of knowledge, general and specific abilities, and the awareness of the values of a work-oriented society which assists all individuals at all levels and all ages to interact with the economic sector.

Minnesota
Career education is an integral part of education. It provides purposefully planned and meaningfully taught experiences, for all persons, which contribute to self-development as it relates to various career patterns. Career education takes place at the pre-school and elementary, junior high and senior high, post-secondary, and adult levels of education. Emphasis is placed on career awareness, orientation and exploration of the world of work, decision-making relative to additional education, preparation for career proficiency and/or specialized occupations, and understanding the interrelationships between a career and one's life style.

Missouri
Comprehensive career education includes a sequentially developed educational program offering career orientation and awareness, career exploration, and job preparation for all individuals.

New Hampshire
Career education is a concept of relevant and accountable education centered on the individual which provides the opportunities for educational experiences, curriculum, instructions, and counseling leading to preparation for economic independence. The development of this concept is a lifelong process which involves a series of experiences, decisions and interactions that provide the means through which one's self-understanding can be implemented, both vocationally and avocationally.

Rhode Island
Career education is seen to be a method of educating people towards an understanding of the essential inter-

> relation of individuals in society. It intends to foster the skills of information acquisition, self-appraisal, synthesis, decision-making, and planning, by using careers as the central focus of organization for all learning activities. This approach to education will promote individualization, promote the acquisition of life-oriented skills, emphasize the use of personal, internal motivation to learn in place of external, teacher-applied motivation, and hopefully result in individuals better equipped to develop and carry out their own chosen pattern of living.

In recent months, the new Office of Career Education in USOE has attempted to firm up a definition and has circulated a draft for comment which states in part:

> Career education can be defined generically as the totality of educational experiences through which one learns about work. ...In a generic sense, its definition must obviously be derived from the ways in which the two words, "career" and "education," are defined. Here, "career" is defined as the totality of work one does in his or her lifetime. "Education" is defined as the totality of experiences through which one learns. Work, obviously includes far more than "schooling."[6]

Whatever national definition evolves, it is now widely accepted that career education is based on the idea that all educational experiences, curriculum, instruction, and counseling should be geared to preparing each individual for a life of economic independence and personal fulfillment, including an appreciation for the dignity of work. Its main purpose is to prepare all students for successful and rewarding lives by improving their basis for occupational choice, facilitating their acquisition of occupational skills, enhancing their educational achievement, making education more meaningful and relevant to their aspirations, and increasing their real choices among the many different occupations and avenues of training open to them. While it is anticipated that career education would increase the opportunities available to the disadvantaged, the concept is not limited to any particular group or segment of society. It is directed at changing the whole educational system to benefit the entire population.

Career education embraces all occupations and professions and can include individuals of all ages, whether in or out of school. It recognizes the critical decision points for which students must be prepared - to decide whether to pursue a job, further education, or some combination of work and formal study. It is a way of acquainting students with the world of work in elementary and junior high school, and preparing them in high school and post-secondary institutions to enter into and advance in career fields of their own choosing. For adults, it is a way to re-enter formal as well as informal programs of education at any time to upgrade their skills in their established careers or to enter new career fields.

Altogether, it is apparent that career education is an absolute necessity for a healthy, expanding, post-industrial society.

SUMMARY

Career education is an idea that had surfaced in American education in many ways early in the 1900s. It did not gain widespread national acceptance, however, until 1971, when Sidney P. Marland, Jr., then U.S. Commissioner of Education, declared it as one of the top priorities of his administration. He urged leaders in education to consider it as a promising means of reform.

Career education has emerged as a way to make education more relevant to the needs of all students. It eliminates the undesirable separation of vocational education and general education and provides information necessary for career choice, career entry, and career progression.

There is no generally accepted national definition of career education, and that has been a problem in compiling information on the concept. But it is clear that career education is a bold new design for education, blending academic, general, and occupational education so that all individuals can be prepared for economic self-sufficiency, rewarding and satisfying lives, and further education appropriate to their career development and avocational interests.

FOOTNOTE REFERENCES

[1]Marland, S.P. Jr. Career Education Now. Paper presented to the National Association of Secondary School Principals, Houston, Texas, January, 1971.

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[5]Worthington, R.M. The Need for Career Education. Paper presented at the Invitational Workshop on Career Education, Washington, D.C., March 1972.

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CHAPTER 2

THE CAREER EDUCATION CONTINUUM

CAREER AWARENESS

Career awareness, the initial component of the career education continuum, is focused primarily on grades K-6, though it can begin earlier or later. Career awareness helps people realize they will spend most of their lives doing some kind of work. Once they start to recognize the many options available to them, they will begin to assess their interests and capabilities. The purpose of occupational awareness programs is initial exploration toward gaining a broad overview of the world of work and the career alternatives requiring closer attention.

In accomplishing this, the learner's attitudes and self-image are important. How children perceive themselves as part of their environment is the result of a series of events and experiences that represent a developmental process. Growth in vocational awareness does not take place independent of growth in other areas of knowledge and understanding. In each of the areas of growth, which include intellectual, emotional, physical, social, personal, and vocational development, as well as personal identity, the significant factor is the degree or extent of understanding experienced by the child. To achieve growth in the career development process, the child must be involved actively in discovering the world of work and his or her own prospects in becoming a productive member of society.

In 1971, the U.S. Office of Education listed the objectives of career education for grades K-6 as follows: to develop in pupils attitudes about the personal and social significance of work; to develop each pupil's self-awareness; to develop and expand the occupational awareness and the aspirations of pupils; and to improve over-all pupil performance by unifying and focusing basic subjects around a career development theme.

In recent years, the States have begun to implement career awareness programs in their school systems. The first State to do this was New Jersey, which developed a Technology for Children program. New Jersey trained a cadre of 21 teachers for the program in the summer of 1966 and began operation in September 1966. The 21 teachers were selected carefully to avoid any identification of the program as one for "disadvantaged," "rural," "inner city," "suburban," or any other special categorization.

Because at the time Federal regulations did not permit using Federal vocational funds for career awareness at the elementary level, State funds were used to train the teachers and purchase the necessary supplies and equipment. A Ford Foundation grant financed an office of consultants who worked with the elementary schools, helping to develop curriculum materials and providing day-to-day assistance for new starts. The state took over the funding for the program after the experimental period. The program has grown from the original 21 teachers in 1966 to more than 3,000 in 1974.

An experimental television career awareness program for children three to six years old was developed by Sutherland Learning Associates, under contract

with the Office of Education, from a concept proposed by Alan Sloan. The program, titled "The Kingdom of Could Be You, "contained 16 animated films, which were shown twice on the CBS-TV "Captain Kangaroo" children's television series, during the spring and fall of 1973.[1]

In these films, children from the inner city and suburbs are transported by a wizard to his mythical kingdom, where they find out they can be anything they want if they are willing to try. Encouraged by the wizard, children engage in many of the activities of adults in the world of work as they help the wizard solve various problems within his kingdom. The children discover self-potential and the potential of others while they are involved in experiences within each of the 15 major occupational clusters.

Specific objectives of the film series, according to Elizabeth J. Simpson, Chief of the Curriculum Development Branch in the Office of Education, are to develop the child's awareness of career opportunities; to enlarge vocational self-concepts by helping each child identify with a variety of occupational roles; and to begin to develop a responsibility ethic within the child, responsibility to self and to others.[2]

Some of the benefits to be derived from occupational awareness programs include: a foundation for good attitudes regarding the worth and function of man's work in our society; an understanding of the world of work; an ability to evaluate individual experiences as they relate to eventual career choices; an opportunity to develop self-understanding; an opportunity to develop an attitude of respect and appreciation toward workers in all fields; understanding of developing personal interests, attitudes, and skills as they relate to future career decisions and an understanding of the broad range of occupations open through education.[3]

OCCUPATIONAL EXPLORATION

Career education, as a means of helping people decide what career to pursue, is especially important at the middle school or junior high school level. All young people, boys and girls alike, from about the 6th grade through the 9th or 10th grade, should have an opportunity, as part of their regular educational program, to explore occupations in depth. Career and occupational exploration programs should provide all students with a variety of experiences to help them evaluate their own abilities, interests, and needs. Exploratory activities should provide opportunities for sampling of all common occupational clusters. At the upper level of this program, many students will want to examine in depth the occupational clusters which have stimulated their interest.

In the past, the traditional school shop and laboratory courses have been considered the principal opportunity for occupational exploration. Unfortunately, these programs, such as industrial arts, home economics, and business education, have concentrated mostly on elementary skill development rather than systematic exploratory activities which would provide useful career information.

One promising approach to occupational exploration at this level has been developed in recent years -- group occupational exploration and counseling.

In this approach, teams of teachers from all subject matter areas work with a guidance counselor to provide field trips, visiting lectures from business and industry, and hands-on experiences, using a variety of audio-visual techniques.

For a career exploration program at the middle school or junior high school level to be successful, it must be part of the regular learning activity of all students. It should not become a substitute for regular course work, nor should it be a separate course. As part of social sciences, for example, teachers should help students explore careers in government, politics, and other fields related to this discipline. Mathematics teachers can help them learn about mathematics-related careers. Students in science courses should be given opportunities to learn about both careers--in such fields as chemistry biology, geology and physics--and the impact of technology in the world of work. The key to the success of career exploration for this age level is early involvement in real experiences through hands-on or simulated occupational activities supplemented by field trips. For example, a student's interest in a course of American history could be related to an interest in public service. His exploratory experience and field trips might concentrate on visiting and working with members of local, county and State government.

OCCUPATIONAL PREPARATION

Development of salable skills is an essential component of career education. The principal vehicle in the schools for this has been vocational education. Federal and State support for vocational education have increased since the 1960s, but available data indicate that a large number of persons still are not being reached.

Also, because of the diversity of State programs and the inconsistency of data, nobody at the national level knows with a high degree of certainty what vocational education is accomplishing. With the present national data collection system, it is virtually impossible to tell who is being prepared for what occupation, at what cost, and whether or not the benefits justify the costs.

Congress in 1971 asked for better information on vocational education and directed that specific funds be allocated to gather it. To handle the research, Project Baseline was established at Northern Arizona University, and the National Advisory Council on Vocational Education was given a monitoring responsibility.

Some tentative findings from Project Baseline's Fiscal Year 1972 data indicate that:

(1) Vocational education continued to grow at an annual rate of 14.5 percent over the past decade.
(2) Secondary school enrollment accounted for 56 percent of the total enrollment; however, only 30 percent of the critical age group 15-19 years was enrolled.
(3) Thirteen percent of the total vocational education enrollment was at the post-secondary level, but this accounted for only 8 percent of the age group 20-24 years.
(4) Adult vocational education enrollment represented 31 percent of the total. But, of the age group 25-64 years, only 3.4 percent were being served.

(5) Expenditures for vocational education were at an all time high of $2,654,338,633. State and local funds accounted for 82.5 percent, and Federal money, 17.5 percent.

While the findings of Project Baseline indicate a marked increase in availability of vocational education, there is evidence of significant need for further expansion. There is no indication that vocational education has even approached the saturation point in terms of labor demand. Other State and national studies have indicated that at least 60 percent of high school students should be enrolled in programs preparing them for employment. The Bureau of Labor Statistics has predicted that only 17 percent of jobs to be filled in the next decade will require a baccalaureate degree. It is essential that the vocational education component of career education at the upper secondary level be made available to at least twice as many persons as it is now reaching and that it be substantially expanded at the post-secondary and adult levels.

CAREER GUIDANCE AND COUNSELING

Career education has many implications for guidance and counseling. Certainly, of major relevance to career education is the entire subject of the goals for career choice in career guidance and the process of career choice. Career education should not attempt to dictate career choices, but to give adequate assistance in the decision-making process. Most individuals will choose in ways beneficial both to themselves and to society in general, if through career education they learn how to choose knowledgeably from among all the careers available to them.

Attempts to improve and expand career guidance and counseling have gained impetus. It is helpful to take a systematic look at what nationally influential spokesmen have been saying about career guidance and counseling in recent years.

Several years ago, Gene Bottoms, Norman Gysbers and David Pritchard researched the field by identifying and analyzing dozens of source documents bearing on the subject. They then synthesized from their findings a catalog of areas of "national concern" about career guidance and counseling. The 28 areas of nationally expressed concerns were grouped into five broad categories: direct service functions, management and support functions, media and methods, staff development, and target population groups.[4]

Eli Ginzberg has made many criticisms and recommendations. He says career guidance functions have been restricted by "manpower, money and other constraints." He also reports that "counselors appear to spend the bulk of their time in approving courses of study, in assisting with college application, in dealing with rule infractions and test administration. Few spend a significant amount of time in activities designed to lead to improved decision-making and long-range planning..." He charges that "guidance, like education, has been caught up in its own rhetoric for so long that it balks at anything less than re-making man and society."[5]

Ginzberg offers many specific recommendations, a number of which are already widely accepted in principle, if not yet in practice. These include treating minorities and women as special target populations; teamwork by

counselors and teachers; closer ties with resource persons and agencies outside the school; revision of counselor and teacher education to include more field work and training in the dynamics of the labor market; and modification of counselor and teacher certification standards.

Substantial new provisions for guidance and counseling were incorporated in the Education Amendments of 1972. A significant requirement was that a career guidance expert be appointed in the newly mandated USOE Bureau of Occupational and Adult Education. This person was to be appointed at the Civil Service rank of G.S.-16, which is one step removed from the Associate U.S. Commissioner.

Shortly after the President signed the bill into law, a committee was appointed to review the provisions affecting guidance. The committee consisted of Robert Hoppock, Kenneth Hoyt and John Odgers. After a thorough review of the legislation and consultation with the staff in the Office of Education, they made recommendations concerning the organization and staffing of the new office and suggested qualifications for the career guidance specialist.

Among other qualifications, the committee recommended that the person selected have "demonstrated commitment to the objectives of career education, career guidance, career counseling and placement rather than to psychotherapy, liberal arts education, and other educational activities sometimes considered to be in competition with vocational education or vocational guidance." Despite the fact that the law requiring the appointment of this career guidance specialist has been on the books since June 1972, no one yet has been named.

A good deal of forward-looking work in career guidance and counseling has been going on for a number of years. Unfortunately, it is not generally well known by educators and is even less known by non-educators.

An example of the Federally funded innovative programs now being developed is the Mesa, Arizona, program for career guidance, counseling, and placement. This program, part of the Career Comprehensive Career Education Model development discussed beginning on page 24, was implemented K-12 on a limited basis in Mesa schools during the 1973-74 school year.

The first step taken in the project was toward a new definition of guidance. It was determined that guidance was to signify the total content and personal problem-solving process of programs aimed at helping students develop and protect their individuality and potential. Guidance personnel committed themselves to accountability based both on what they did and on the outcome of student behaviors.

In developing a new program, needs and on-going programs were assessed, and, based on this assessment, a guidance model was designed. An implementation schedule was programmed and evaluation strategies were designed. Competencies of practitioners needed to deliver the program were determined by a task analysis. In-service programs with appropriate training packages were designed to bring the practitioners to desired competency levels.

From these steps emerged a series of guidance units administered through a

teacher/counselor team relationship. This kind of systematic approach to career guidance and counseling deserves very close scrutiny as a potential national model.[6]

PLACEMENT AND FOLLOW-UP

The National Advisory Council on Vocational Education stated in 1970: "If the nation is to establish a society in which there is equal opportunity to learn and work, the first step is to recognize that employment is an integral part of education." To accomplish this goal, the Council recommended that every secondary school should function as an employment agency, especially in disadvantaged neighborhoods. Noting that a school which is successful in placing its students in jobs may motivate more students, because they will understand the correlation between school and work, the Council suggested that part-time employment be a part of the curriculum to link education with productivity. A change in the national attitude toward dropouts also was called for by the Council, with a recommendation for further education of the dropout.[7]

The only area in the past in which school guidance personnel have excelled has been college placement. However, with funds available through the Vocational Education Amendments of 1968, job placement programs have grown in several States. These placement programs should be available to all students and should work toward objectives such as: strengthening school guidance and counseling; developing student career knowledge; motivating students to attain their full potential; expanding career information and opportunities for all students; improving lines of communication among counselors, teachers, and work experience program coordinators; expanding coordination with business and the community; and providing job experiences as an integral phase of the curriculum to help all students achieve greater educational relevancy.

There must be a commitment to place all students leaving the schools, whether in employment or further education. A good placement program also provides for complete follow-up of these students. This applies not only to students who are graduated--means must be found to make the schools responsible also for young people who have dropped out, whether unemployed or working. Too often, the schools have encouraged certain young people to leave, and then assumed no further responsibility for them. If the noble goal of career education is to be accomplished, "that every young person exiting the school be ready to enter further education or useful and rewarding employment," then all schools must be involved in comprehensive programs of placement and follow-up.

SUMMARY

Career education acquaints students with the world of work in elementary and junior high school, and prepares them in senior high school and beyond to advance in career fields of their own choice.

Career awareness, the initial component of the career education continuum, focuses primarily on grades K-6. It provides a broad overview of the world of work and helps to develop self-awareness and positive attitudes about the personal and social significance of work.

Occupational exploration usually begins in the middle school or junior high school and, for many persons, may continue through adulthood. Occupational exploration programs provide students with a wide variety of firsthand experiences which help them to evaluate their abilities, interests, and aptitudes.

Vocational education is the principal vehicle in the schools to provide the skill development component of career education. Studies indicate that vocational education in the upper secondary level should be made available to at least twice as many persons as it is now reaching. It also should be substantially expanded at the post-secondary and adult levels.

Career guidance, counseling, and placement must be further improved and expanded, if career education is to become a reality. There must be a commitment to the placement and follow-up of all students leaving the schools, whether in employment or further education, whether they drop out or graduate.

FOOTNOTE REFERENCES

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CHAPTER 3

STATE OF THE ART NATIONALLY

WHERE THE ACTION IS

In gathering information for this report, the researcher met with John Ottina, the U.S. Commissioner of Education; Thomas Glennan, Director of the National Institute of Education; William Pierce, Deputy U.S. Commissioner of Education for Occupational and Adult Education; Kenneth Hoyt, Associate U.S. Commissioner for Career Education; and numerous staff members of the Bureau of Occupational and Adult Education of the U.S. Office of Education, including Sidney High, Elizabeth Simpson, Howard Hjelm, Paul Delker and Howard Matthews. Two of the original six school-based model sites were revisited: Mesa, Arizona, and Hackensack, New Jersey.

The author also conferred with Robert Taylor, Director of the National Center for Research and Leadership in Vocational Education at Ohio State University, and members of his staff. In addition, Arthur Lee, Director of Project Baseline, made available the services of his staff and the facilities of his office in Phoenix.

Career education materials from throughout the nation were collected and reviewed in order to draw some conclusions as to where career education is making a real impact in the schools. This chapter summarizes in a very limited way some highlights of this review.

The broad goals of career education are being implemented to some extent in every State. State and local funds are being allocated, new legislation is being written, new partnerships are being formed among schools, business, industry, labor, and the community, and instructional materials are being developed to blend academic and occupational education.

Selected States which have made significant progress in career education include: Arizona, California, Maryland, Minnesota, New Jersey, North Carolina, Ohio, Oregon, and Texas. The programs in these States have been singled out for discussion. For the purposes of this brief report, it is impossible to describe activities in every State.

Arizona

Arizona is installing the concept of career education rapidly in the entire State through the efforts of the State legislature, which has appropriated nearly $10 million for K-12 career development programs.

Beginning with an appropriation of $1.9 million in 1971, the State Department of Education established pilot projects in 13 locations. State appropriations have increased each year, with $3.8 million in fiscal 1973 and $4.6 million in fiscal 1974, covering each of the State's 14 counties with pilot projects. A Project PACE (Plan for Arizona's Career Education) task force has developed a comprehensive ten-year plan through 1980.

Mesa, Arizona, was chosen as one of the six local education agencies in the National School-Based Comprehensive Model Project. Career education is being implemented in 35 Mesa schools, involving 28,000 students in K-12. Career units are fused into ongoing curricula at all levels with a matrix of goals based on eight career elements: career awareness, self-awareness, appreciations and attitudes, decision-making skills, economic awareness, skill awareness, employability skills, and educational awareness.

One innovative approach taken by Mesa was to develop a competency-based individualized course of instruction to be taken by all certified employees, who had an opportunity to select all materials which might suit their purposes. They were then post-tested and were compensated beyond their normal salaries for successful completion.

Mesa's high school students are able to earn credits through work experience or community service. They also can achieve credits through an alternative high school for career preparation, where examinations are given to determine competence in stated objectives. Community involvement is considered essential, and it is utilized by the program through speakers, field trips, and hands-on exposure to career opportunities. A community resources and public information program keeps everyone informed of career education developments.

In addition, Mesa is developing support services, such as a computerized pupil data system, a career information system, and a guidance and placement program.

California

California has been a leader for many years in the development of community colleges which have both strong vocational and strong academic components. The Career Education Task Force within the State Department of Education, financed with $2.2 million in Federal funds, is now moving California to implement a pre-kindergarten through adult approach in all of its public schools.

At selected pilot project sites, "activity packages" (pre-kindergarten through adult to meet career education goals are being developed and tested. The sites are Camino Union School District, Ceres Unified School District, Covina-Valley Unified School District, Los Angeles City Unified School District, Monterey Peninsula Unified School District, Orange Unified/Santa Ana Unified School Districts (consortium), Richmond Unified School District, Sacramento City Unified School District, San Diego County Office of Education, San Mateo County Office of Education, Santa Barbara School District, and Sonoma County Office of Education.

There has been considerable emphasis on in-service activities, which include summer workshops, seminars, and other training for selected teachers, who then train other teachers in their schools.

High school students receive credit through the work experience program. In addition, the development of a proficiency test by January of 1975 will allow 16-year-olds who earn a "certificate of proficiency" to leave school or enroll in a community college.

Maryland

In 1971, Maryland's State Board of Education developed a five-year plan for implementing the career education concept in all of its 24 school districts by 1977. This plan aims for provision of services to both youth and adults in the areas of career orientation, exploration, preparation for entry and/or further education, and guidance and counseling. It is intended that each of the 24 local districts and 16 community colleges will have a career education coordinator and financial support for various pilot projects. Maryland places strong emphasis on dissemination activities such as a quarterly newsletter about current developments and a $50,000 multi-media presentation.

Some State money has been allocated through general education funds, and some vocational-technical allocations have been used.

The components of the Maryland Career Development Project, funded under the Vocational Education Amendments of 1968 and under way since 1970, were incorporated into the five-year plan. These include: elementary school career awareness; junior high interdisciplinary career education team development; development of a computerized placement information system for high school students; a "work advocate" program for drop-out prone junior high students; production of a TV series on careers, aimed at fourth through eighth graders; and development and dissemination of a career development notebook for teachers at all levels.

Minnesota

A position paper adopted by the Minnesota State Board of Education on May 2, 1972, defined career education and set up career education goals for students. To help students reach these goals, occupational resources were to be utilized at all levels. In addition, area vocational-technical institutes were to work toward post-secondary goals and take leadership in meeting the goals of continuing education.

Under Section 131(a) of Part C of the Vocational Education Amendments of 1968, eight exemplary projects in career education were funded for FY 1973. The eight project sites were Cloquet, Osseo, Owatonna, Plainview, Red Wing, Roseville, Willmar, and White Bear Lake.

The program sponsored by Red Wing, entitled "Career-Oriented Education in the Red Wing Public Schools", is illustrative of these projects. A comprehensive K-12 program was designed for six elementary schools, a junior high school, and a senior high school. Elementary school principals assisted in the orientation of their teachers in concepts of the world of work. There also was a strong emphasis on involving parents as resource persons.

Exploratory experiences were provided for junior high school students through projects within subject matter areas. At the senior high school level there also were projects within various subject matter fields, plus development of provisions for work experience and student job placement services. This project should provide valuable information for the planned installation of career education in every Minnesota school district.

New Jersey

New Jersey has long been an initiator of career education activities and can claim many career education "firsts." Among these are the following: 1965 -- a career exploration program for junior high with hands-on emphasis; 1966 -- a Statewide elementary program that combined career education with academic studies; 1968 -- establishment of the State position of Director of Career Development; 1970 -- a career resource center and a comprehensive Statewide K-12 career development project.

Although many activities were initiated in 1965, the career education program achieved a major breakthrough in 1970, when the state legislature appropriated $318,000 for a pilot project in "career development vocational education" covering elementary through high school. Three districts were named as sites for the project -- Camden, New Brunswick, and Rahway. Each project contained six elements: (1) Technology for Children in grades K-6; (2) Introduction to Vocations in middle school/junior high; (3) Coupled Pre-Vocational Work Study; (4) job placement; (5) a career resource center; and (6) teacher in-service training. By 1974, State appropriations for this project totaled more than $4.6 million. In September 1973, 11 new sites were added to the project, bringing the total by then to 17 districts.

In addition, Hackensack was chosen in 1971 by the federal government as one of the six sites for developing and field testing the School-based Career Education Model funded by the U.S. Office of Education.

North Carolina

North Carolina's career education acitvities began in 1964, as a result of Governor Terry Sanford's pledge to improve guidance in the schools. With State funding, an "Introduction to Vocations" program was introduced for secondary students. In 1969, career exploration was implemented for grades 7-9, and, in 1971, career awareness was started for grades K-6.

The middle school program in career exploration now operating in more than 70 districts, features hands-on experiences in shops and laboratories as well as group guidance activities, and infuses occupational information into academic subject matter. The sequence is as follows: seventh graders explore seven of the 15 occupational clusters, eighth graders explore the remaining eight clusters for longer periods of time, and ninth graders are involved in extensive exploratory activities in four clusters in which they are most interested.

Ohio

Ohio moved toward a comprehensive K-adult Career Continuum Plan in 1970, when the State provided $75 million in matching funds for construction and materials pruchased to help local districts offer comprehensive vocational education programs. Currently, three out of four Ohio high school students have access to comprehensive vocational education programs. Components of this plan include: a family life program; a career motivation program (K-6);

a career orientation program (7-8); a career exploration program (9-10 or 14-15); an occupational work adjustment program for dropout-prone students (14-15); a career preparation program (16 and up); and a career training and retraining program for out-of-school youth and adults.

The State provided $2.5 million to assist 24 local districts for fiscal 1974. Ohio's goal is to provide a career education program for all two million of its public school students by 1980. Supplemental funds are available to participating districts at a rate of $20 per student for career motivation, $25 per student for career orientation, and $30 per student for career exploration.

Ohio is also experimenting with a pre-post-secondary program, which is designed for students who have identified career goals in business administration, engineering, health, or social science degree programs. An already strong vocational education program is being expanded with $46.5 million of Ohio's Federal revenue sharing funds and $20 million in State funds earmarked for construction of vocational education facilities.

Federal funds provided under Section 131(a) Part C of State-administered discretionary funds have been utilized by the cities of Akron, Cincinnati, Dayton, and Toledo as project sites for developing and demonstrating career education components.

Oregon

In 1970, the Oregon State Board of Education established the career education concept as one of its priority goals. By 1974, the State had moved rapidly toward installation of career education. During 1973-74, 30 percent of elementary students were involved in career awareness experiences; career exploration programs reached 40 percent of the students in grades 7-10; 40 percent of all 11th and 12th graders were enrolled in occupational clusters; and 12 administrative regions had career education coordinators.

Oregon has been a leader in developing occupational cluster programs. Some of the high schools around the state designated as Cluster Developmental Centers include: Adams (Portland) -- mechanical; Aloha (Beaverton) -- food service; Cascade (Turner) -- agriculture; Lebanon -- secretarial; Madison (Portland) -- marketing; Grants Pass -- health occupations; Canby -- construction; Pleasant Hill -- forest products.

Other projects include career guidance counselor in-service training in the Portland area, teacher preservice education in career education at Oregon State University, and a career exploration project in the Portland Public Schools. State officials attribute the rapid development of career education to strong local financial support. No State funds have been specifically appropriated for this purpose.

Texas

Career education has been assigned by the State Board of Education as one of the priorities for the State Department of Education. To implement this,

a guide has been developed, entitled "A Tentative Framework for Developing Comprehensive K-12 Career Education," and disseminated to all school districts in the State.

Funds from Title III of the Elementary and Secondary Education Act (ESEA) are being used for approximately 70 career education projects in Texas public schools in areas such as guidance and counseling, special education, reading, and mathematics.

A steering committee has been formed and given the responsibility for planning a Statewide assessment of career education.

Regional Education Service Centers are being utilized as a Statewide delivery system for career education components. They have been conducting awareness conferences throughout the State, and plan to select and recommend school districts within their regions for pilot-demonstration projects.

Texas Education Agency consultants provide expertise for career education programs in their primary fields, such as math, social studies, science, English, music, and industrial arts, with emphasis on infusing occupational information into all subjects.

The Advisory Council for Technical-Vocational Education in Texas has taken a strong stand in support of career education. It recommended development of a comprehensive State plan for career education, with special priority given to curriculum revision, evaluation of student progress, and in-service education.

MODEL DEVELOPMENT

Beginning in Fiscal Year 1971, the United States Office of Education's National Center for Research and Development funded four career education model development projects. The projects grew out of the idea that people of all ages should have access to career education and that all educational institutions and community organizations should be involved. The models were as follows:

Model I (school-based) -- to provide career education to young people grades K-12, designated by the research team as the Comprehensive Career Education Model (CCEM).

Model II (employer-based) -- to help teen-agers (13-18) not functioning well in the traditional school setting, by utilizing businesses and industries as an alternative educational setting.

Model III (home/community-based) -- to aid out-of-school unemployed adults, by using media technology to bring career education information and activities to persons in their homes.

Model IV (rural/residential) -- to help disadvantaged rural families in a residential setting; entire families to receive educational, occupational, and social services.

After the National Institute of Education (NIE) was established in the year 1973, it took over the responsibility for the model projects. NIE's educational research philosophy, coupled with its evaluations of early model development, resulted in major changes.

Model development has not occurred as rapidly as planned, and there have been a variety of problems. The federal investment in these projects has been nearly $50 million ($4.6 million in FY 1971, $15 million in FY 1972, $15 million in FY 1973, and $14 million in FY 1974). There is no question that the model projects, particularly the school-based model, have had significant impact on the development of career education. The original schedule called for installation of the "first generation prototype comprehensive career education model" by September 1973. Yet at this point, there is serious doubt that transportable career education models will result from this major investment.

Descriptions follow of each of the models, and of some of the problems encountered.

Model I: The School Based Model

In 1971, Office of Education consultant teams visited 12 cities selected from an original list of more than 50 potential sites for development and field testing of the school-based model. Of those reviewed by the teams, six districts were chosen: Mesa, Arizona; Los Angeles; Jefferson County, Colorado; Atlanta; Pontiac, Michigan; and Hackensack, New Jersey. The project sites were coordinated and directed by the Center for Vocational and Technical Education (CVTE) at Ohio State University, the prime contractor for development of this model.

This model shows the most promise for changing American education. However, serious problems arose with transfer of the project from the Office of Education to the National Institute of Education, which appears to have been a mistake.

The original concept of the model had been that of a "capstone" effort, but it was designed to be handled through "fast track" product engineering. That is, CVTE was charged with the dual responsibility of energizing and activating the six sites in career education, and concurrently developing products and materials that were transportable and useful to other school districts throughout the nation. Although the intent had been for a "capstone", it has to be recognized that any "fast track" effort implies some compromises; that is, if time and resources are limited, the quality of research and development obviously will be variable.

The new institute, however, was overly concerned with research and development quality and, in effect, killed off the project by failing to capitalize on the early results. About 80 curriculum units developed at the six model sites and submitted through CVTE to the institute have been held for more than a year by NIE. They have not been made available even when other schools or States have asked for them, and there is no further

development or revision under way.* NIE apparently believes the "infusion strategy" of integrating career education materials may not be the best approach, and the NIE Forward Plan[1] makes it clear that there will be an effort to refocus the project away from the total curriculum. However, considerable energy and resources were invested in the "fast track" mode, and the products developed at the sites should have been made available to other schools as soon as possible to capitalize on that effort and expenditure - to delay them clearly jeopardizes the project.

In failing to release the Model I materials, and thus not delivering on the commitment to assist schools in implementing career education, the government defaulted in its leadership roles and on its promises. This lack of follow through resulted in bitterness and resentment - in varying degrees - at all six sites. One school district has indicated it will not become a major part of any Federal project in the future.

The experience with this model points up the difficulty from the perspective of states and local school districts in interfacing with the Federal government. It is not important to them whether the project is housed at OE or NIE. But, discontinuites and other negative side effects that result through major redirections, such as those that came about because of the transfer from OE to NIE, are magnified at the local level. As James Gallagher, former assistant secretary of Health, Education and Welfare for planning, research and evaluation in education, said upon leaving Federal service: "Someone needs to be sure the Federal government keeps its promises." In this case of career education model development, it has not.

Hackensack: A Successful System-Wide Career Education Model

The experience of the Hackensack, N.J., school district, one of the Model I sites, shows how comprehensive career education can be successfully implemented and development continued.

Hackensack first became involved in selected components of career education as early as 1965, when the district received a grant from the Ford Foundation for a experimental pre-technical program at the upper secondary level. That project also received State financial support. In addition, in 1966, Hackensack began to install the New Jersey Technology for Children Project, which became the career awareness component of career education in each of its elementary schools.

The superintendent of schools, Carl Padavano, his assistant, Joseph Reilly, and the career education coordinator, Irving Moskowitz, were very candid in their appraisal of the CCEM Project and its impact on their district.

A most significant outcome is that every member of the teaching staff

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*Editor's Note: Shortly after this report was completed by the author, NIE announced the completion of field tests and revisions of the curriculums and that they will be distributed.

of the entire school district is in some way involved in career education and that the use of the term "career education" has been infused into the entire school system, which the school administration now calls the "Hackensack Curriculum." It seems appropriate to share some of Superintendent Padavano's thinking, since school administrators may benefit from Hackensack's experience.

According to Padavano, the career education program was begun with certain expectations concerning the staff, the administration, and the students. "Regarding the teaching staff, we hoped to bring a new dimension of realism to their teaching approach through the infusion of career education material into the curriculum." The main goal was to "induce a fresh look at the educational goals of the school system, particularly a consideration of the potential value of career education as a teaching/learning stimulant." For the students, there was an attempt to "increase academic proficiency through the use of more meaningful subject matter, in this case a career-oriented curriculum."

Padavano feels the major portion of these original expectations has been met, with teachers who are using more relevant material, administrators who have become more conscious of evaluation, and students who indicate they are more aware of their career options and the implications surrounding career choice. "Most important," he said, "we have made the school system conscious of the need to make career education a central part of the total program."

Currently, Hackensack is involved in total curriculum revision. All curriculum materials in every subject will contain three elements: career awareness, educational awareness, and values. Until the new curriculum is completed and implemented, the schools will continue to use an interim plan, which makes every teacher responsible for conducting a prescribed number of career education units or activities with each class. A new social studies curriculum, which has career education materials built in and which will replace the interim plan, is now being implemented in grades 1-8.

Model II: Employer-Based/Experience-Based Model

The Employer-Based Model (renamed Experience-Based by NIE) currently holds contracts with four regional educational laboratories -- Research for Better Schools, Inc., in Philadelphia, the Far West Laboratory for Educational Research and Development in Berkley, California, the Appalachia Educational Laboratory in Charleston, West Virginia, and the Northwest Regional Educational Laboratory, Portland, Oregon.

Model II is to serve both students who drop out of school and those who are forced out. It is intended to be a secondary education program operated by a "consortium" of employers outside the school setting. The program is highly individualized to relate to each student's personal career goals.

The four HEW-funded Research and Development Laboratories assembled business consortiums, designed educational programs, and recruited student volunteers for developmental testing. It was planned to document in case

study form the program experiences of each student and identify ways in which traditional disciplines occur in occupational situations.

NIE states that Model II is based on the assumption that "...public high school is of little educational value for many adolescent students, and for these students the local employer and community environment can carry the bulk of the educational burden." Model II has the responsibility of testing the validity of these assumptions. In 1975, NIE will test the prototypes to see whether all four sites need to be used. It remains to be seen whether these very expensive programs will work on a large scale, since present experiments involve small numbers of students and employers.

Model III: Home/Community-Based Model

Model III, which is being pilot-tested in Providence, Rhode Island, is intended to provide career information and counseling services to three adult groups: young adults who have not made career choices, retired people, and housewives. These services are provided through five communications media -- telephone, press, radio, television, and correspondence.

NIE's Forward Plan says Model III "exhibits an impressive clarity of purpose" and that it "may be the best example of uniting research with a major operational development." The plan suggests further examination of the original model concept, which is the development of a sophisticated home-based education system.

Model IV: Rural/Residential Model

The Rural/Residential Model was set up in 1971 as a five-year, $20 million project directed by the Mountain-Plains Education and Economic Development Program, Inc. A vacant Strategic Air Command base at Glasgow, Montana, was converted into a residential educational facility. Entire families were recruited from a six-state area -- North Dakota, South Dakota, Wyoming, Nebraska, Idaho, and Montana. The program was designed to serve rural disadvantaged families who would receive educational and related social services at the site.

CURRICULUM DEVELOPMENT - NATIONAL LEVEL

A major impact on career education has been made by an unheralded program with limited funding. This is the curriculum development effort under Part I of the Vocational Education Amendments of 1968. Most of the funds available under Part I of the Vocational Amendments of 1968 have been directed toward career education. Part I authorized the Commissioner to make grants or contracts with colleges and universities, state boards, and other public or nonprofit private agencies and institutions for curriculum development in vocational and technical education.

The Curriculum Development Program provides for the development, testing, and dissemination of vocational education curriculum materials for use

in teaching occupational subjects, including curricula for new and changing occupational fields and vocational teacher education. It further provides for determining standards for curriculum development in all occupational fields, coordinating the efforts of the states with respect to curriculum development and management, surveying curriculum materials produced by other agencies, evaluating vocational-technical education curriculum materials, and training personnel in curriculum development.

Seven major categories of curriculum development have been funded under this legislation since 1970. Under category one, Development of Vocational Curricula, curricula are being developed for occupational orientation and preparation for entry level occupations or for further study in the field in the occupational cluster areas of construction, communications and media, public services, transportation, manufacturing, agri-business, business and office occupations, marketing and distribution, allied health services, and consumer and homemaking education. Guidelines for curriculum development in the cluster of recreation, tourism, and hospitality have been developed. In most of the cluster projects, some attention has been given to the development of occupational awareness at the elementary level. Clusters yet to be addressed include arts and humanities, environment, personal services, and marine science. It is anticipated that by fiscal 1976, curricula for all of the 15 clusters will be under way, if not completed.

Under category two, General Career Education Curricula, two major projects for the development of career education curricula K-6 and K-9 were undertaken to articulate with occupational cluster curricula for the secondary level in order to achieve an instructional system, K-12. Complementing the elementary school career education curriculum development is a series of 16 films, "The Kingdom of Could Be You," on the 16 clusters and the general world of work. Each film has been shown twice as part of the Captain Kangaroo children's TV program.

Olympus recently published a book on Career Education for the Gifted and Talented: Curriculum Guidelines, product of a Part I-funded project. Guidelines for industrial arts in career education and for the arts and humanities in career education also have been disseminated recently. In addition a machine-aided instructional program has been designed to contribute to career awareness on the part of students K-12.

Category three, Curriculum Development for Emerging and Expanding Occupations at the Post-Secondary Level, has received considerable attention. Projects in this area include the development and evaluation of educational programs in bio-medical equipment technology, electro-mechanical technology, laser and electro-optical technology, and nuclear-medical technology.

In category four, Curriculum Development for Groups with Special Needs, projects such as "Developing Career Awareness for Spanish-surnamed Children" have been completed. This project, conducted by Central Texas College, utilized Telecomputer Instruction to familiarize Spanish-surnamed children with career education concepts and to acquaint teachers with new instructional techniques. In applying technology to the educational process, the project combined televised and computer-assisted instruction to provide individualized programmed learning to children, particularly disadvantaged and

minorities. The project has developed a prototype package, containing 60 minutes of instruction with televised and computer-assisted instruction segments, to assist the Spanish-surnamed to develop an awareness of the world of work.

Another project for special needs groups is "Development, Demonstration, and Evaluation of Management Training Programs for Operators of Small Businesses, Including Minorities." The National Task Force on Education and Training for Minority Business Enterprise recommended that career education be used as a means of acquainting students in elementary and junior high schools, as well as in secondary schools and adult programs, with opportunities for business ownership. Small business entrepreneurs have no organized training programs, nor are they linked to management information systems. The purpose of this project, conducted by the University of Minnesota, is to develop, demonstrate, and evaluate a comprehensive management education program for small business owners.

Category five concerns Training Curriculum Development Personnel and Familiarizing Teachers with Curriculum Packages. One of the projects in this category is "Metrication of Technical Career Education." All materials in this project were developed with cooperation of members of the Advisory Board of the Center for Metric Education at Western Michigan University. This Advisory Board consists of internationally recognized leaders in the field of metric education. A specific individual board member worked in cooperation with the staff on each of the several packets of instructional materials to assure their accuracy.

The work of the Center for Metric Education has had a significant impact on introducing metric conversion in the industrial, vocational, and technical areas. The Center has had nationwide recognition and has answered hundreds of requests from schools for information concerning its activities.

Another project under category five is "Cooperative State Implementation Workshops for Curriculum-involved Career Guidance and Counseling." This project was designed to assist the 50 States, the District of Columbia, and territories in developing a home-school-community-based guide for implementing career development guidance, counseling, and placement in their respective local school districts. Assistance has included the identification and distribution of exemplary materials to state liaison guidance personnel, consultative services, and some financial aid. Among the materials developed and sent to the states was a working draft of "Elements of an Illustrative Guide, Career Guidance, Counseling and Placement for State Departments of Education." This serves as an aid to States in developing and implementing their own guides. During the National Training Conference on Career Guidance, Counseling and Placement, conducted in February 1974, this guide and others developed by the project were used by conferees--as a major part of their training--to develop a model guidance program in one locality of each State.

The other categories under Part I are the sixth, National Network for Curriculum Coordination in Vocational-Technical Education, and the seventh, Curriculum Materials Available from Government Agencies.

Establishment of a National Network for Curriculum Coordination has been a major accomplishment. It consists of seven curriculum centers located

in California, Illinois, Kentucky, Mississippi, New Jersey, Oklahoma, Washington, liaison persons in the other States, and the Curriculum Development Branch of the Division of Research and Demonstration. The Network provides a mechanism for sharing information on curriculum materials that are either available or under development, and for reporting on coordination efforts. It also develops and recommends guidelines for curricula and establishes a system for determining curriculum needs.

The Network is proving cost effective in terms of coordinating curriculum development and avoiding unnecessary duplication of effort, and testing and providing for more effective dissemination of curriculum materials. Surveys of such materials available from government agencies have been made and the results disseminated to the vocational education community. There is need for such surveys on a continuing basis.

SUMMARY

Career education is being implemented to some extent in every State, and legislatures have begun to appropriate funds specifically for this purpose. New partnerships among schools, business, industry, labor, and the community are being funded. New instructional materials that blend academic and occupational education are being developed and used.

The federal government has expended more than $50 million on developing and testing four career education models: the school-based, the employer-based, the home/comminity-based, and the rural/residential. In addition, federal funding has established at least two "mini-model" developmental efforts in each State.

The school-based model project gives the most promise for changing American education. Transfer of this model project from the Office of Education to the National Institute of Education resulted in an unnecessary delay in the distribution of more than 80 curriculum units, which by now should have been available to schools.

Limited Federal funds for curriculum development under Part I of the Vocational Education Amendments of 1968 have stimulated the development of curricula and guidelines for the 15 clusters; instructional materials for metric education, career awareness, new and emerging occupations, and groups with special needs; workshops to improve career guidance; and the establishment of a national network for curriculum coordination.

FOOTNOTE REFERENCES

[1]National School Public Relations Assoication. Career Education: Current Trends in School Policies and Programs. 1974.

CHAPTER 4

FINANCING CAREER EDUCATION

INFORMATION NEEDS

In order to make an analysis of funding for career education since the implementation of the Vocational Education Act of 1963, several data sources were studied. First, a review was made of the annual reports submitted by the States to the U.S. Office of Education. Second, a study was completed of the data bank compiled in Phoenix by Project Baseline, including statistical and narrative reports submitted by the States. Third, a survey was made of 31 State education departments whose annual reports indicated considerable activity in career education.

The results of efforts to gather, review, and analyze available data on career education expenditures highlight a number of deficiencies. Importantly, the States have little or no accurate information on local expenditures for career education. Moreover, because there is great diversity among the States in the definition of the term career education, tabulation of submitted data was extremely difficult and in some cases not really meaningful. The survey form requested very simply that the States report expenditures by fiscal year beginning in 1965, the first fiscal year in which the Vocational Education Act of 1963 was funded. The States were asked to provide information on Federal and State funding for career awareness, grades K-6; occupational exploration, grades 7-9; special appropriations for career education; special funding for personnel development, and grants from foundations.

Several States replied that their career education projects have been district-wide K-12 efforts, making it impossible to divide funding into grade levels. Other States reported that they did not have any career education appropriations at the State level, but that there were many career education activities throughout the State using local funds. Table I shows expenditures for career education as reported by the States surveyed for the fiscal years 1965 to 1973.

Information on career education activities funded under various titles of the Elementary and Secondary Education Act is not readily available. The difficulty lies either in identifying the career education components of the usually very broad Title III projects or in the emphasis of Title I funding on projects for disadvantaged students rather than demonstration projects such as career education.

Although the Vocational Education Act of 1963 made it possible for States to establish research and demonstration programs in the elementary and junior high schools, only one reported using Federal funds for that purpose prior to fiscal 1968. That was New Jersey, which in fiscal 1965 began expending Federal vocational research and demonstration funds for occupational exploration programs, grades 7-9. The States have not significantly utilized foundations as a source for funds for research and demonstration programs in career education. The only ones reporting grants from foundations were Kentucky, New Jersey and West Virginia.

TABLE I

TOTAL EXPENDITURES FOR CAREER EDUCATION AS REPORTED BY THE STATES (FISCAL YEARS 1965-73)

	STATE	STATE FUNDS	FEDERAL FUNDS
1.	Alabama	$ ---	$ 336,125
2.	Arizona	10,536,000	---
3.	Arkansas	67,573	362,138
4.	California	---	943,780
5.	Connecticut	7,815,918	308,572
6.	Florida	17,566,000	4,114,104
7.	Georgia	2,254,500	---
8.	Illinois	1,345,623	985,499
9.	Indiana	---	792,965
10.	Iowa	6,750,000	6,750,000
11.	Kentucky	166,818	1,501,357
12.	Louisiana	1,000,000	761,421
13.	Massachusetts	---	421,022
14.	Michigan	100,000	3,539,302
15.	Minnesota	161,380	538,051
16.	Mississippi	392,808	695,886
17.	Missouri	156,000	---
18.	New Jersey	3,960,698	1,311,140
19.	New York	---	2,000,000
20.	North Carolina	12,168,000	---
21.	Ohio	1,976,621	2,584,142
22.	Oklahoma	---	380,786
23.	Oregon	---	---
24.	Pennsylvania	681,748	151,374
25.	South Carolina	7,959	296,398
26.	Tennessee	74,000	865,501
27.	Texas	---	1,185,000
28.	Virginia	---	233,550
29.	Washington	---	628,683
30.	West Virginia	---	668,170
31.	Wisconsin	---	545,391
	TOTAL	$67,181,646	$32,900,357

In seeking information for this report, a survey instrument was sent to State Directors of Vocational Education, because it was felt that they are the most knowledgeable persons in State education agencies concerning career education. Perhaps the survey would have yielded different results if the Chief State School Officers had been contacted directly.

FEDERAL GOALS AND FUNDING CRITERIA

John Ottina, a management specialist, as U.S. Commissioner of Education felt the Marland approach was too broad and attempted to narrow down the career education concept to a more manageable format. Criteria for degrees of support of career education by USOE, and three broad goals were established.

In May 1973, USOE's newly established Center for Career Education was given the task of summarizing and analyzing the broad efforts to date. Because of the lack of a definition, the Center had difficulty determining specific dollar amounts allocated to career education. It had been reported in FY 1972 that $114 million had been allocated and in FY 1973, $122 million. These figures turned out to be inflated estimates of the actual level of Office of Education spending.

At the same time, an important step was taken to synthesize the results of the first two years of the Federal career education efforts. The Office of Education, the National Institute of Education and the Office of the Assistant Secretary of Education, after much discussion and debate, agreed to three broad goals of career education: improve the quality of career choice, improve the individual's opportunity for entry into a career, and improve the individual's opportunity to progress in his or her career. It was made clear that these goals certainly would require help from other segments of society, but that the educational sector must assume specific responsibilities in preparing students for career choice and for subsequent entry and progress in careers.

Commissioner Ottina directed the Center for Career Education to systematically clarify career education by engaging in further articulation and refinement of the concept, by developing the conceptual framework for organizing priorities, and by encouraging support for program development.[1]

Criteria were developed in August 1973 for the analysis of all OE career education activities. These criteria separated OE activities into three categories:

(1) Comprehensive Career Education Projects -- those activities specifically designed to install all the components of a comprehensive career education approach in a given site.

(2) Career Education Support Projects -- those activities which provide training, curricula, or management tools for those engaged in implementing one or more components of a comprehensive career education approach.

(3) Career Education Related Projects -- those activities which OE program personnel consider related to career education, but in less specific and direct ways than activities that fall into the first two categories.

FEDERAL EXPENDITURES

As shown in Table II, in FY 1973 the U.S. Office of Education expended $43,242,028 in support of career education. These funds represent activity in 945 projects in 16 programs authorized under six separate pieces of legislation. Vocational Education appropriations provided $30,934,154 of this total, or about 71 percent. Forty-three percent of the total funds were expended in support of Comprehensive Career Education activities and 57 percent for Career Education Support efforts. Additional funds were committed in the third category, Career Education Related activities, and encompass other programs and legislative authorities. Since these activities are only indirectly linked to career education, they are not included in this analysis.

Table III presents an analysis of Comprehensive Career Education activities during FY 1973 in terms of the educational level of the students served. As can be seen, a total of 40 percent of all such activity was in the K-12 range, and 50 percent in articulated K-14 programs. Another 6 percent was in the "Other" category, which is predominately composed of activities at various levels of the K-12 range.

Clearly, there is little or no activity in prekindergarten, two-year proprietary schools, junior and community colleges, universities, or adult and continuing education. While the Office of Education certainly is spending funds in many ways to aid these educational program levels, it is not doing so in a career education context.

Table IV presents an analysis of Career Education Support activities in terms of the educational level of the students ultimately served. The data indicate that 16 percent of the funds were expended for training of teachers, counselors, administrators, and other educational personnel to enable them to design, operate, and/or evaluate career education activities. The bulk of this effort was in the K-12 range, supported almost entirely through the Vocational Education Acts, Parts C and D, and the Education Professions Development Act, Parts D and F.

Funds expended in the curriculum area represent 61 percent of the total Career Education Support effort. Again, the bulk of the activity is in the K-12 range (most heavily at the 10-12 level), and support was predominantly through the Vocational Education Amendments of 1968, Parts C, D, and I (Curriculum development), the latter of which makes up all but a small portion of the "Other" category.

In summarizing all support activities, the data show that the K-12 area has received the greatest attention, mostly consisting of training and curriculum development (the latter heavily at the senior high school level). As indicated in Table II, this is consistent with the present stage of conceptual and operational development of career education, which is almost exclusively confined to the K-12 range. Where attention has been directed at higher education, it is mostly in the areas of curriculum development and the production of management materials (designs, models, etc.). This is also consistent with the lagging development in these areas. The data further clearly show that little attention has been directed by OE toward career education at the prekindergarten and adult and continuing education levels.

TABLE II

U.S. OFFICE OF EDUCATION
CAREER EDUCATION ACTIVITY BY TYPE AND LEGISLATIVE AUTHORITY
- FISCAL YEAR 1973 -

Unit and Legislative Authority	Type of Career Education Activity: Comprehensive CE	CE Support	Unit and Authority Total
OCCUPATIONAL AND ADULT EDUCATION:			
VEA Part C (discretionary)	44/$ 7,255,631	10/$ 1,248,145	54/$ 8,503,776
VEA Part C (State Grant)[a]	------	108/ 1,800,000	108/ 1,800,000
VEA Part D (discretionary)	61/ 8,377,724	1/ 50,000	62/ 8,427,724
VEA Part D (State Grant)[a]	18/ 400,000	345/ 7,600,000	363/ 8,000,000
VEA Part I	1/ 262,985	25/ 3,286,295	26/ 3,549,280
MDTA	1/ 399,439	------	1/ 399,439
EPDA Part D	------	3/ 175,560	3/ 175,560
EPDA Part F (Sec. 553, 554)	1/ 10,538	30/ 642,916	31/ 653,454
EPDA (Sec. 504 (a))	------	1/ 20,000	1/ 20,000
Subtotal:	126/$16,706,317	523/$14,822,916	649/$31,529,233
HIGHER EDUCATION:			
HEA, Title III	------	30/$ 4,756,500	30/$ 4,756,500
HEA, Title IV-D	------	127/ 3,699,000	127/ 3,699,000
EPDA Part E	------	3/ 53,000	3/ 53,000
Subtotal:	------	160/$ 8,508,500	160/$ 8,508,500
SCHOOL SYSTEMS:			
ESEA Title III (Sec. 306)	3/$ 521,300	1/$ 49,995	4/$ 571,295
ESEA Title III (State)[b]	9/ 447,000	2/ 136,000	11/ 583,000
EHA Title VI-B[b]	1,000,000	60/ 1,000,000	120/ 2,000,000
EHA Part F	------	1/ 50,000	1/ 50,000
Subtotal:	72/$ 1,968,300	64/$ 1,235,995	136/$ 3,204,295
GRAND TOTAL	198/$18,674,617	747/$24,567,411	945/$43,242,028

Key to Data Entries: No. Projects/FY73 $ Expended

Footnotes:
a. Figures are estimates based on FY72 activity. FY73 data are not yet available.
b. Figures are estimates. States not required to submit data according to OE Career Education Criteria.

Source: Office of Career Education: Activities in Fiscal Year 1973, Prepared by the Center for Career Education, November 1973.

TABLE III

U.S. OFFICE OF EDUCATION
COMPREHENSIVE CAREER EDUCATION ACTIVITY BY
EDUCATIONAL LEVEL OF STUDENTS SERVED
- FISCAL YEAR 1973 -

Educational Level	No. of Projects /	$ Expended	Percent by Level
Pre-K	3/	$ 50,000[a]	0.3
K-6	31/	1,385,224	7.4
7-9	18/	652,573	3.4
10-12	29/	1,124,669	6.0
13-14 (non-degree)	1/	31,290	0.2
13-14 (degree)	--	------	0.0
4-year degree	--	------	0.0
Adult and Continuing	2/	662,424	3.5
K-12 (articulated)	42/	4,342,787	23.2
K-14 (articulated)	59/	9,365,898	50.2
Other[b]	13/	1,059,752	5.7
TOTAL:	198/	$18,674,617	99.9

Footnotes: a. Estimate of activity under Education of the Handicapped Act, Title VI-B.

b. Predominantly activity in various portions of the K-12 range.

Source: Office of Career Education -- Activities in Fiscal Year 1973, Prepared by the Center for Career Education, November 1973.

TABLE IV

U.S. OFFICE OF EDUCATION
CAREER EDUCATION SUPPORT ACTIVITY BY
EDUCATIONAL LEVEL OF STUDENTS ULTIMATELY SERVED
- FISCAL YEAR 1973 -

Educational Level	Type of Support Activity[a] Training	Curriculum	Management	Total
Pre-K	------	------	------	------
K-6	20/$ 411,000	59/$1,156,000	------ .	79/$ 1,567,000
7-9	------	42/ 896,000	4/$ 73,000	46/ 969,000
10-12	15/ 286,847	170/ 3,818,000	30/ 999,000	215/ 4,703,970
13-14 (non-degree)	------	58/ 1,238,000	15/ 344,000	73/ 1,582,000
13-14 (degree)	6/ 346,240	8/ 1,484,950	64/ 1,616,000	78/ 3,447,190
4-year degree	15/ 1,077,000	19/ 3,154,000	53/ 1,595,000	87/ 5,826,000
Adult and Continuing	------	1/ 18,000	------	1/ 18,000
K-12 (articulated)	19/ 854,936	33/ 699,995	13/ 216,000	65/ 1,770,931
K-14 (articulated)	2/ 588,422	1/ 15,429	2/ 70,379	5/ 644,230
Other	14/ 450,878	21/ 2,427,212	1/ 25,000	36/ 2,903,090
TOTAL:	91/$1,985,323	412/$14,907,709	182/$4,538,379	685/$23,431,411[b]

Footnotes: a. Figures indicate No. Projects/FY73 $ Expended according to the target group which the trained personnel, developed curricula, or management material will ultimately serve.

b. 62 Projects ($1,136,000), mostly under authority of HEA Title VI-B, cannot be categorized due to insufficient information.

Source: Office of Career Education: Activities in Fiscal Year 1973, Prepared by the Center for Career Education, November 1973.

THE ROLE OF THE NATIONAL INSTITUTE OF EDUCATION

The National Institute of Education has been assigned the primary responsibility by Congress for research and development in American education. Thomas Glennan, Director of NIE, has stated that its activities in career education will be focused on achieving a better understanding of education's role in enhancing career entry and progression as well as developing ways in which education can improve individual opportunities for career success and satisfaction. In order to meet these goals, NIE has identified the following three career education research and development objectives:

(1) To improve our understanding of the relationship between education and work.

(2) To improve access to careers; specifically, to improve the contribution of educational programs to career awareness and exploration for children and to improve career choice, preparation, and entry for youth.

(3) To improve progression in careers: specifically, to improve career choices among adults starting second careers or preparing for advanced positions, and to improve access to, and the responsiveness of, education for serving the career-related educational needs of adults.

A review of NIE's budget for FY 1974 it allocated $18,980,000 to research these objectives. Tentative allocation of these research funds were as follows: relationship of education and work, $1.97 million; access to careers, $18.93 million; and career progression, $1.15 million.

SUMMARY

A survey of available data on funding for career education revealed a number of problems. The States have little or no accurate information on local expenditures for career education, because of the great diversity among the States in the definition of career education. This makes meaningful analysis of financial data extremely difficult. Several States have funded statewide K-12 projects, while others have appropriated no career education funds at all, but have depended on federal or local funds.

USOE has begun to narrow down the career education concept to a more manageable format for funding purposes. Three broad goads for future Federal investment in career education have been agreed to by all agencies concerned: to improve the quality of career choice, to improve the individual's opportunity for entering into a career, and to improve the individual's opportunity to progress in a career.

Analysis of expenditures for career education reveals little activity in the pre-school level or in community colleges, universities, adult and continuing education. Perhaps funds begin expended at these levels for career education activities do not show up in the Federal or State financial reports under the heading of career education.

More than 71 percent of the Federal effort in career education has been financed with vocational education funds. Most of these funds have been

utilized in K-12 programs. Research and development funds available through NIE are very limited.

Although many States have appropriated funds for career education, the Federal government has not yet allocated specific funds for this supposedly high priority activity. Instead, the Administration has chosen to divert funds from other legislative authorizations.

FOOTNOTE REFERENCE

[1]Ottina, J. Expanding Meaningful Career Education. Address before the American Vocational Association, Atlanta, Georgia, December, 1973.

CHAPTER 5

FUTURE PROSPECTS FOR CAREER EDUCATION

A CATALYST FOR CHANGE

Career education has emerged as the most promising vehicle for educational reform in a decade of innovation. Beginning in 1963, major new Federal legislation, such as the Elementary and Secondary Education Act, the Vocational Education Acts, and the Economic Opportunity Act, poured billions of dollars into educational change. Attracting the most attention and the most money were such innovations as non-graded schools, team teaching, computer-assisted instruction, open classrooms, differentiated staffing, modular scheduling, and performance-based instruction. None of these innovations, however, attracted the broad-based acceptance accorded career education, or stimulated more publications, conferences and speeches. This response to career education no doubt reflected the desire of all concerned with education to change the system to better serve the needs of all people.

Roman Pucinski, as Chairman of the Education Subcommittee of the House of Representatives, stated why change is so badly needed:

> The most glaring deficiency in American education can be stated quite simply: Its content for the most part is empty, dull, and meaningless to students; too often, it has no immediate relationship to the adult world they will face; and in too many cases it lacks humanness.[1]

Education centered around a career development theme is the kind of education that most Americans want for themselves and for their children. The Commission of Non-Traditional Study, in a sample survey drawn from a population of 104 million men and women ages 18-60, excluding full-time students, asked citizens what they wanted to learn and what they wanted to learn most. Their answers were as follows:[2]

	Some Interest	First Choice
Vocational (excluding agriculture)	78%	43%
Recreational	63%	13%
Home and Family	56%	12%
Personal Development	54%	7%
General Education	48%	13%
Public Affairs	36%	5%
Religion	15%	3%
Agriculture	11%	3%

The 1973 Gallup Poll on education found that the majority of Americans consider "preparing students for work" as the most important job of the schools. This expectation is not limited to elementary and secondary education. The majority of the adults gave as the most important reason for continuing their education "to get a better job." Unfortunately, the schools have not yet achieved the high expectations of the public in this regard.

There are several problems which must be solved if youth and adults are to be provided with the skills and knowledge necessary for choosing, entering, and progressing in careers. Hopefully, career education, as it is evolving across the country, will assist in providing the solutions.

OBSTACLES TO OVERCOME

Since career development is a lifelong process that cuts across all human experiences, a way must be found to develop a system-wide approach to career education from early childhood through retirement. It requires the involvement of educators at all levels and all segments of the community.

There is a need for real support from all academic areas for the career education concept. Very little progress has been made toward involving academics, such as teachers of English, mathematics, science, music, languages, or social studies. If career education is to involve all students, then it must involve all teachers as well.

Financial support earmarked for career education development must be made available at the federal level. Diverting discretionary funds from other legislative intents can be useful only in the early stages of such a massive educational endeavor. The Federal government, while designating career education as one of its top priorities, has not provided the necessary funds, but has depended to a large extent on state and local money to implement the concept.

Teacher education must change drastically, if young people now in training are to be the future managers of career education. Classroom teachers will either make or break it. Career education teachers, both academic and occupational, must be competent in teaching techniques, development of instructional materials, and their subject matter speciality. Programs that train teachers, school administrators, guidance counselors, and ancillary personnel must be designed or revised so that understanding of the career development process, the world of work, and the relationship of academic to vocational education is clearly understood.

A national clearinghouse should be developed so that materials, methods, and ideas that work can be spread quickly throughout the nation. Several small efforts in this area have failed, because of inadequate support. The National Network for Curriculum Coordination, if used for this purpose as initially planned, will be a valuable asset.

Educators at all levels must develop a better understanding of the total labor market and the career opportunities available. There is a need to improve the matching of people's occupational competencies with job opportunities. Much closer cooperation must be developed among the schools, the community, business, industry, and labor to determine needs and to place students in jobs.

Much more comprehensive services in career guidance, counseling, placement, and follow-up should be provided. Persons of all ages should have access to these services and should be encouraged to use them.

Schools must become more flexible in their scheduling and granting of credits to meet the needs of individual students. Credit for experience in the community and alternative ways to complete formal schooling must become widespread. Improved techniques of occupational analysis need to be developed to provide identification of entry level skills on a systematic, nationwide basis. Proof of occupational competency by examination would be a valuable aid to entry and progression in a career.

In keeping with the concept of recurrent or lifelong learning, opportunities must be made available for adults to be granted paid furloughs from their jobs to enter full-time education for new careers or for upgrading in current careers. Our schools isolate young people from the real adult world. A way must be found to involve all students at the upper secondary level in real work experiences.

Career education can make a significant contribution to the development of a new role for women in the world of work. By beginning early to develop awareness and understanding of the many careers available to both women and men and continuing with exploration through high school, women will gain a more realistic understanding of the world of work. Young women need to be made aware that fields such as business, science and engineering, dominated in the past by men, are not only open to them, but are increasingly inviting in terms of job opportunities and salaries. Existing stereotypes can be combatted by modifying educational materials and by exposing children from nursery school upward to the wide variety of occupations which are open and "acceptable" for women. A new definition of "career" as a meaningful, stimulating, contributing activity without sacrifice to human values needs to be introduced into our society, and the vehicle for this change can be career education.

If the blending of academic and vocational education is to be accomplished, schools must eliminate the distinction between academic, general and vocational diplomas, which too often lock young people into career paths from which they cannot escape.

Support of organized labor, as well as management, for career education must be actively sought. Unions should be encouraged to support exploration and work experience programs as well as skill training programs.

Because of the limitation of paid jobs available to students in cooperative education and other work experience programs, pilot programs should be established with a non-paid work component.

Some legal barriers, both Federal and State, prevent the total implementation of career education. Changes should be made in laws which prevent youth from entering jobs for which they have been trained or from participation in part-time employment while still in school. In addition, greater effort should be made to encourage widespread work experience education, perhaps by providing incentives or tax credits to employers.

Career education has been viewed thus far with mixed reactions by minority group spokesmen, some of whom are not convinced that it is the answer to their economic and educational problems. These reservations may

stem in part from the fear that career education may divert minorities from college. A concentrated and continuing effort must be made to see to it that career education does not become a means of channeling the poor and minorities into low-level, dead-end jobs. As a reform mechanism, career education is intended to open up more career opportunities at all levels for all persons.

A continued effort is needed to assure the skeptics that career education will not "vocationalize" all of education, but rather will assist all students to develop reading, writing, computational, and coping skills. It must be demonstrated also that career education will help people to develop better appreciations of the arts, human and spiritual values, and recreational interests, in addition to helping them select and prepare for careers which will provide maximum fulfillment of personal aspirations.

SUMMARY

Response to the idea of career education, as related previously, has been very positive. And, the idea is supported in general by polls of the public. In one, Vocational Education was rated as their first choice for continued personal growth by three times as many adults as the number who preferred general education. Another found that the majority of Americans consider preparing students for work as the most important job of the schools.

If career education is to fulfill its promise of changing education to benefit all citizens, it requires involvement of business, industry, labor, government, and community leaders, as well as all educators. The responsibility for career education must be shared by all educators and it must involve input from all subject matter disciplines and supportive services.

Federal support for career education has not been adequate. A heavy share of the cost so far has been borne by local and State governments; without sufficient Federal funding, some States and local school systems have done little. Increased Federal appropriations are needed.

Certain legal barriers must be overcome to permit more youth to participate in realistic work experience as part of the transition from school to work. Continued effort must be made to see to it that career education opens the doors of opportunity to the poor and to minorities. Career education can make a significant contribution as well to expanding opportunities for women in the world of work. It can help to eliminate the distinction between academic, general, and vocational tracking, which often locks young people into career paths from which they cannot escape.

FOOTNOTE REFERENCES

[1]Pucinski, R. (co-editor) The Courage to Change: New Directions for Career Education. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1971

[2]Valentine, J.A. Literature and Career Education -- The Odd Couple. Paper prepared for the Conference of the National Association of Teachers of English, October 1973.

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Dr. Worthington is author of numerous articles in professional and technical journals and has served as the editor of "The Journal of Industrial Teacher Education". He currently is an editorial board member of the Education Digest.

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