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, personal fulfillment, and an appreciation for the dignity of work. It is a lifelong systematic way of acquainting students with the world of work in their elementary and junior high school years and preparing them in high school and college to enter into and advance in a career field of their own choosing. For adults it is a way to re-enter formal or informal educational programs at any time to upgrade skills or to enter a new career field. Career education consists of five educational levels, beginning in the elementary years with an emphasis on awareness, and proceeding through exploration in the intermediate years, specialized job training and occupational preparation in the secondary and post-secondary years, and continuing personal development and enrichment in the adult years. Currently four models are being utilized by high schools, colleges, employers, and others to adapt the career education concept to their particular needs. These include the school-based, employer-based, rural-residential, and home-community models. (SB)
THE IMPLICATIONS OF CAREER EDUCATION FOR
ADULT EDUCATION IN THE UNITED STATES

Background Paper Presented By:
Dr. Robert H. Worthington, Chairman,
United States Delegation and
Associate U.S. Commissioner of Education

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I am very pleased on behalf of my government to have an opportunity to address this distinguished group of educators, government officials, businessmen, and other leaders gathered here in Tokyo for the Third International Conference on Adult Education convened by UNESCO. Much has happened in the United States in the twelve years since the 1960 Montreal conference in terms of our perspectives on adult education. I want to discuss today the developing concept of Career Education and its implications for adult education in the United States.

Although there are more than 20,000 possible careers in America, diverse enough to encompass everyone's interests and abilities, each year more than 2.5 million of our young people leave our high schools and colleges with no planned career and few, if any, marketable skills. It costs us $28 billion a year to "educate" them for potential failure.

Despite our concerted efforts in recent years to make education more relevant for all the students in our schools, our record is still not very encouraging either in terms of human resources or financial investment. Consider for example that:

- There is increasing separation between students and the world of work. They feel they are not needed by our technological society since fewer and fewer workers are needed to produce more and more consumer goods.
- About one-third of all American students pass through high school via what we call the "general curriculum," a type of education which leaves its graduates neither trained with a salable skill nor qualified to pursue higher education.
There is, in many of our schools, an undesirable counter-productive separation of the vocational education, general education, and academic curricula, with the result that those in the vocational curriculum are often viewed as low status individuals, while those in the academic curriculum emerge with little contact, preparation toward, or qualification for the world of work.

Because of the widely held view that a degree is the only kind of socially acceptable occupational preparation in our society, many high school students choose academic preparation. However, many of these students do not go on to college and more begin than complete it. In addition, the numbers who do complete college are increasingly out of proportion to the occupational opportunities in our society. In fact, the Bureau of Labor Statistics of the U.S. Department of Labor predicts that in the foreseeable future, nearly 80% of the jobs to be filled will not require a college degree. This is not to imply that a college education has no value other than that of preparing a student to procure employment. We fully recognize the fact that the educated adult mind is essential to our citizen-guided government concept. However, we do believe that there has been a misguided assumption in our society that you need a college education in order to get a job.

Our present system often results in hasty career decision making and fails to offer individuals the option of changing directions during their years of preparation or of obtaining new training and shifting occupations later in life.
Our current system neither provides students with adequate career guidance and counseling while in school nor adequate opportunities for counseling, retraining, and re-entry once they have left the system. Our economy which is based upon technological change, where the rate of change itself is ever increasing, thus freezes out a large number of adults who do not have an adequate level of education.

Other industrially advanced nations faced with similar problems of economic growth have solved them in a variety of ways. In the United States our response is Career Education. We think it is an absolute necessity for a healthy, expanding post-industrial society. Let me explain what we mean by the term.

Career Education is a revolutionary approach to American education 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, personal fulfillment, and 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, by facilitating their acquisitions of occupational skills; by enhancing their educational achievements, by making education more meaningful and relevant to their aspirations, and by increasing the real choices they have among the many different occupations and training avenues open to them. While it is anticipated that Career Education would increase the opportunities available to the disadvantaged, it is not explicitly designed to involve
any particular group or segment of society. It is directed at changing the whole educational system to benefit the entire population.

Career Education recognizes the critical decision points when students must be prepared and equipped to decide whether to pursue a job or further education or some combination of both work and formal study. It is a lifelong systematic way of acquainting students with the world of work in their elementary and junior high school years and preparing them in high school and in college to enter into and advance in a career field 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 career field or to enter a new career field. It is similar to vocational education, but there is a fundamental distinction. For while vocational education is targeted at producing specific job skills at the high school level and up to but not including the baccalaureate level, Career Education embraces all occupations and professions and can include individuals of all ages whether in or out of school.

Career Education, as the United States envisions it, has five levels which are not distinct and often are overlapping. Each level has appropriate academic as well as vocational education. The first is the level of career awareness from kindergarten through the sixth grade. The second is occupational information and career exploration ranging from grades seven through nine. The third is specialized job training and placement extending from the tenth through the twelfth year of schooling. The fourth is specific occupational preparation at the post-secondary level. And the fifth and
most important level is adult and continuing education. It is concerned with the continued personal development and enrichment of the adult citizen as a decision maker at a time when he faces the challenges of family life, community problem solving, expanded leisure time due to the trend toward a shorter work week and increased mechanization, and the estimated 8 to 12 career changes he will have to make during his working lifetime. It is the most important level from a time-line viewpoint since an adult has approximately two-thirds more time to learn than his younger counterpart who has generally completed his formal educational preparation during the first third of his life span.

The U.S. Office of Education has grouped all of the various possible careers into families of "clusters" of occupations as follows:

AGRIBUSINESS, BUSINESS AND OFFICE, HEALTH, PUBLIC SERVICE, ENVIRONMENT, COMMUNICATIONS AND MEDIA, HOSPITALITY AND RECREATION, FINE ARTS AND HUMANITIES, MANUFACTURING, MARKETING AND DISTRIBUTION, MARINE SCIENCE, PERSONAL SERVICES, CONSTRUCTION, TRANSPORTATION, AND HOMEMAKING.

We are developing four research models to help schools, colleges, employers, and others visualize and begin to work out their own approaches as they adapt the concept of Career Education to the particular needs of their States, cities, and communities. The first of these is the:

School-based Model. In the early grades Career Education means that the vital academic program is expanded to make children aware of the many fields of endeavor open to them in coming years.
Teachers are trained to relate a science lesson, say, to a career in X-ray technology or oceanography. Curriculum specialists organize course work in social studies to include future job possibilities as an historian, geographer, cartographer, artist, printer. Guidance counselors -- in the elementary as well as secondary schools -- build field trips to factories, shipyards, and salesrooms into career orientation.

In junior high school, Career Education encourages students to explore in some depth two, three, or more broad career clusters. For example, a student's outside interest in an American government course could be keyed to his interest in public service or communications. His field trips might concentrate on visits to his State legislature and to newspapers and radio and TV stations. Students interested in construction could actually take and analyze soil samples and string electric cables.

By senior high school, each student should have made a tentative career selection and begun appropriate training. In the health field, students who want to be paramedics might work part-time in a nearby hospital, along with students who plan to be doctors and pharmacists. All would take the same academic program. Each would leave high school with a skill that has market value immediately or that can be applied to advanced education for a professional degree.
In the 1971-1972 school year, the Office of Education funded pilot projects in six school districts that were already well along in developing the Career Education concept: Mesa, Arizona; Los Angeles, California; Jefferson City, Colorado; Atlanta, Georgia; Pontiac, Michigan; and Hackensack, New Jersey.

In these six projects, the year was devoted largely to planning, teacher training, and curriculum development. About 85,000 students will become fully involved next fall.

In addition, 100 mini-model projects -- at least one in each State -- are serving 700,000 students under small grants authorized by the Vocational Education Amendments of 1968.

The second of these models is the Employer-based Model. This is a total education program for a cross-section of youngsters aged 13 to 18 who find their school offerings unchallenging and want to try a different approach to learning. Operated by a consortium of public and private employers, this model program will use employer know-how and, where appropriate, employer facilities. It will provide both academic and job-related preparation. Students will graduate from the employer-run program with credentials at least equal to those offered by their high school, or they will return to their high school with full credit for work completed. Projects serving about 100 students each will get under way this fall in Portland, Oregon; Charleston, West Virginia; Philadelphia, Pennsylvania; the San Francisco Bay Area; and perhaps one or two other sites.
The third of these models is the Home-Community Model. Designed to enhance the employability of out-of-school adults, this approach will use TV and radio programs to encourage people to utilize career services available in their own communities. Project staff will provide counseling, guidance, and some instructional services. The staff will also assess community effectiveness in providing career training and recommend new services as needed. The Rand Corporation has analyzed four successful TV programs for compatibility with a Career Education series keyed to the home-community model. Under a $300,000 contract, the Educational Development Center in Newton, Mass., is studying the potential population of participants, developing an evaluation plan, and drafting concepts in ways in which media and community efforts could most effectively mesh.

The fourth of these models is the Rural-Residential Model. Designed for disadvantaged families living in remote rural areas with few career opportunities. This model provides the opportunity to move temporarily to a training center where every member of the family can learn new skills for employment, homemaking, or further study. The first group of families is now training at a pilot center on part of an Air Force base near Glasgow, Montana. By the fall some 200 families should be in residence. The program is operated under a $4 million grant from the Office of Education by the Mountain-Plains Education and Economic Development Program, Inc. The center serves residents of Idaho, Montana, Nebraska, North Dakota, South Dakota, and Wyoming.
In addition to research and development support for the four Career Education models, the Office of Education held 16 regional workshops this Spring to bring industry, labor, civic, and ethnic representation into the growing dialogue about Career Education. More than 1,200 spokesmen for some 30 national organizations met with Federal, State and local school educational leaders to map strategies for similar workshops in their States and communities.

The Office of Education also sponsored conferences of teacher educators to develop in-service and pre-service training programs for teachers. For example, education deans of 75 major American colleges and universities were convened to explore ways of building Career Education into their undergraduate preparation of teachers. The deans in turn nominated senior professionals from their schools of education to attend subsequent workshops.

The Office of Education also supports curriculum development in the 15 occupational clusters. We have developed and tested in 25 schools over a 3-year period junior high curriculums for the construction and manufacturing clusters. We have invested $2 million in this development effort.

Commissioner of Education, S. P. Marland, Jr., has made Career Education a top priority of the U.S. Office of Education, utilizing $114 million in Fiscal Year 1972 to support the initiatives. He has asked Congress for nearly $55 million more for Fiscal Year 1973.
President Nixon supports Career Education as a White House priority, giving it special emphasis in his 1972 State of the Union Message to Congress. He said: "Career Education is another area of major emphasis, an emphasis which grows out of my belief that our schools should be doing more to build self-reliance and self-sufficiency, to prepare students for a productive and fulfilling life. Too often, this has not been happening. Too many of our students, from all income groups, have been 'turning off' or 'turning out' on their educational experiences. And - whether they drop out of school or proceed on to college - too many young people find themselves unmotivated and ill-equipped for a rewarding social role. Many other Americans, who have already entered the world of work, find that they are dissatisfied with their jobs but feel that it is too late to change directions, that they already are 'locked in.'"

"One reason for this situation is the inflexibility of our educational system, including the fact that it so rigidly separates academic and vocational curricula. Too often vocational education is foolishly stigmatized as being less desirable than academic preparation. And too often the academic curriculum offers very little preparation for viable careers. Most students are unable to combine the most valuable features of both vocational and academic education; once they have chosen one curriculum, it is difficult to move to the other."

"The present approach serves the best interests of neither our students nor our society. The unhappy result is high numbers of able people who are unemployed, underemployed, or unhappily employed on the one hand - while many challenging jobs go begging on the other."
"We need a new approach, and I believe the best new approach is to strengthen Career Education."

"Career Education provides people of all ages with broader exposure to and better preparation for the world of work. It not only helps the young, but also provides adults with an opportunity to adapt their skills to changing needs, changing technology, and their own changing interests. It would not prematurely force an individual into a specific area of work but would expand his ability to choose wisely from a wider range of options. Neither would it result in slighting of academic preparation, which would remain a central part of the educational blend."

"Career Education is not a single specific program. It is more usefully thought of as a goal - and one that we can pursue through the many methods. What we need today is a nationwide search for such methods - a search which involves every area of education and every level of government. To help spark this venture, I will propose an intensified Federal effort to develop model programs which apply and test the best ideas in this field."

"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 teachers, more available to the adult, more relevant for the disadvantaged, and more productive for our country."
Members of the U.S. Council of Chief State School Officers representing each of the States and Territories have pledged a major effort to gain legislative and public endorsement in their individual States. Several State legislatures have already approved substantial sums to design and implement Career Education programs in-school districts.

Large city school systems turning to Career Education as their basic design include those of Dallas, Texas and San Diego, California.

Many professional educational associations have devoted conferences and field investigation to a better articulation of the concept, problems, and potential of Career Education.

Career Education is clearly then an idea whose time has come and its implication for the future of adult education in the United States are many and obvious. It is essential that this concept encompass the entire educational system and all its participants because there can be no adult education program developed which is completely separate from education for young children, adolescents, and college age students. The provision of any new system for education which is geared to the needs of individuals who have completed their typical formal education must constitute the development of a basic factor which redesigns and re-determines the fundamental form of the entire educational system from pre-school through college.

The United States has long been a credentialed society and adult education has traditionally been active in preparing people for it.
Basic skills courses, high school programs, and job skill classes have helped provide adults with the skills to get and keep jobs and to live happy and productive lives. Remedial and retraining programs have thus shaped our approach to adult education in the past. But the Career Education reform movement, presently underway in the United States, seeks to establish a new relationship between education and work. It encompasses not just preparation for low skill work or for the limited number of top professional posts but education for all types of work. It recognizes that the only true form of unemployment insurance in a technological society is a program of education and training which provides people with the skills needed in that society. Career Education has special implications for adult education in a competency-based credentialing society.

As I indicated previously, Career Education beyond the high school includes any preparation required by an individual so he can enter employment at any remunerable task; to improve his knowledge or skills as they relate to his job; or to prepare for a new one at whatever stage in his working career (or careers) that such education might be beneficial to him. Thus described, Career Education has no new elements in it from a decade or even a century ago. What is significant and new about it now is the context and the relationship of preparation for work in our present society and that of tomorrow compared to past practice and the nature of the world of work half a century or two decades ago. The need for retraining and upgrading adults within Career Education has been brought about by the phenomenal growth in the service industry which has been observed by economists in the past several years in the U.S.
This shift toward a service-oriented economy is one of the most important considerations affecting the nature, type, and period of training and education for the young as well as the adults in our society. To be specific, Dr. Herbert Striner in a study done for the Upjohn Institute for Employment Research found that: "In 1947, the goods-producing industries employed 26.4 million people in America. At that time the service-producing industries employed 25.4 million people. But by 1969, a radical shift in these proportions had taken place: in the goods-producing industries employment stood at 27.8 million while in the service-producing industries employment had skyrocketed to 46 million. It is projected that by 1980 goods production will employ 30 million people."

This phenomenon represents more than a shift of interest to persons concerned with the composition of the labor force. It represents a tremendous potential for employee mobility as well as a need for constant training to provide for the skills necessary in our ever-changing, service-oriented economy. With continuing displacement of labor in the manufacturing industries at the low end of the skill level, we will have to provide persons remaining in the manufacturing industries with the means of acquiring continuous upgrading of their skills. The nature of jobs, although perhaps more repetitious will probably require much more in the way of abilities to handle complicated printout electronic mechanisms, indicator mechanisms, and complex monitoring systems. In the service industries, such fields as government (local, State and Federal), wholesale and retail trade, finance, insurance, real estate, transportation, public
utilities, health, automotive repair, and air conditioning will require employees whose initial backgrounds and training are fairly extensive and technical, and who can participate in continuous upgrading and training in depth, made necessary by constant changes in the nature of the services.

Manufacturing industries, more often than service industries, have been related to specific geographical sites. As a result, employees of these types of industries did not have the usual motivation to think of geographic mobility. Instead, their life-styles in terms of buying homes and sinking roots into a local community reflected the fact that the jobs they were doing were ones which would keep them in a specific area throughout their working lifetime. This is not so in the case of the service producing industries. The trained secretary, the insurance salesman, the bank clerk, the medical technician, the mechanic — all possess a greater degree of physical mobility than do persons typically employed in the manufacturing or goods producing sector. Hence, these individuals will be free to move with their families to acquire jobs which are more attractive than the ones they currently have, even though those jobs may be in the same particular type of industry.

Therefore, as many leading educators have pointed out, it will be necessary to provide continuously the adult education which is necessary to upgrade individuals and to improve their ability to market their skills in any part of the country. We believe Career Education will fill this need because wherever there are surplus workers of a particular type, they will be able to move fairly easily into training programs for
new careers with adequate career guidance and counseling to help
them make a choice.

The accumulated results of applied science and technology in all
facets of production have radically changed the world of work during the
last half of the twentieth century. A more demanding educational
preparation is required today in which the necessary specialized skills
must be learned and refined by adults after high school. Machines have
taken the place of the unskilled worker in our mines, forests, factories,
and on our farms and are rapidly displacing the unskilled in offices,
transportation systems, and in most other major fields of employment. In
the past many jobs could be learned by a person working beside an experienced
worker and observing and learning those elements of the work which comprised
most of his employment activities on the job. He needed only to bring to the
job a limited amount of basic educational preparation. In recent years,
however, the U.S. has aspired to a level of general literacy which would
have all people able to read and to write and to exercise a functional
literacy with regard to arithmetic, social understandings, and the tools which
basic education provide as a basis for learning to live and earn a living in
society. To achieve this goal now, it is necessary to provide a broad
educational base plus vocational skills for subsequent specialization
required for employment.

With the unskilled worker largely displaced, the U.S. is faced with
an educational problem never before confronted to the same degree by any
other society. Our social heritage and mores have been built on the
concept that most of our population must work to support themselves and
satisfactorily fulfill their lives.
There is no alternative to providing a better education for our people because the technological society in which we now live will become more complicated rather than less. Technology will not disappear. It is here to stay. We must prepare our people for it. The necessary preparation is an educational problem which we believe can be solved in large measure by Career Education. The emphasis on Career Education in the United States is based on the rapid growth of technology and its concomitant effect on the lives of the American people.

Almost all professionals, most technicians and similar supportive specialists, and many skilled workers will continue into educational institutions beyond the high school before they enter the work for which their career preparation equips them. Almost all of these workers will, at various times in their adult lives, return to institutions beyond the high school for formal upgrading, updating, or additional preparation for their careers or to qualify for new careers in order to cope with changes in technology which affect their choice of occupations.

Under Career Education, persons who seek a career in one of the recognized professional fields may follow a traditional baccalaureate program or other more flexible competency based programs designed to prepare them for their particular profession. They may be doctors, lawyers, clergymen, teachers, managers of businesses, artists, and those people who traditionally require a baccalaureate degree plus additional education of the formal kind usually found in colleges, universities, or specialized professional learning centers.
Generally speaking, these people need the broadest base of underlying organized and theoretical knowledge plus their specialized knowledge and skill preparation, whatever their field. Usually the entry level for their own chosen professional career requires graduation with a baccalaureate degree and often further study.

A major Career Education emphasis then must be to provide educational opportunity and encouragement to more adults. We in the United States recognize that an investment in adult education increases our nation's human capital without which we cannot remain a viable partner for world betterment. Other nations such as Denmark, France, and West Germany, to name a few, have dealt with the problems of economic growth in an advanced industrialized society by reconceptualizing the role of adult education. We are following suit by the installation of Career Education because we have come to realize that our economy whose expansion depends heavily upon new products, new technologies, and new distributions of incomes must also have a labor force constantly being refitted, retrained, and re-educated to meet these needs.

Career Education will specifically help adults upgrade their skills and knowledge on their present jobs, learn new skills and knowledge to advance their careers, retrain for new jobs when their present jobs have been eliminated by organizational or technical changes and provide saleable skills to those who have never before been in the work force. It will also provide specialized educational services for women who have already raised families or who must supplement family income or provide all of it; For older workers at all levels displaced by younger, better prepared workers; For retired
military of other persons who want to enter a new field of employment; and for scientists, managers, and other professional leaders who have been displaced by such national technological goal changes as from aerospace to oceanographic study or environmental improvement. We recognize that training and education are essential for an appropriate job-role in our modern society. But beyond that, re-entry into the educational system is equally essential in our new world of work. Not only do the new jobs call for skills resulting from training and education, but the nature of our jobs is such that even high-skill jobs phase out or are changed, so that new skills must be acquired by many already skilled people if they are to remain employable throughout life. And this is increasingly important since people now live longer than formerly and are healthier for a greater part of their lives. The responsibility for providing a means to start where the previous educational preparation left off and to equip them to do work by which they can support themselves with dignity and self-respect is our responsibility. Institutions of many kinds can make a contribution to the saleable skill development component of Adult and Post-Secondary Career Education, such as junior and community colleges, technical institutes, area vocational schools, divisions of four year colleges, both private and public, and proprietary business and technical schools.

More programs to serve these able, motivated, but under-prepared adults are also needed. We now know how to organize such programs; and we as educational leaders cannot fully meet our obligations without providing these necessary services to all who need them.
As indicated earlier, several Western European countries have already responded to the need for developing an educational system which continues throughout the life of the individual to provide him with the skills necessary for his own personal gratification as well as the skills which are necessary to the economy. These countries have analyzed the changing matrix of job-skills which have accompanied the technological dangers in their economies, and have recognized the increasing sense of personal frustration for adults who have not been equipped to participate as the economy and the society change. We in the United States also see adult education as a crucial factor within Career Education for transforming the entire American education system.

The transformation will be permanent in nature and provide a system of continuous career guidance whereby the individual's personal aspirations, avocational, and vocational objective needs may be reconciled. Individuals will be encouraged to develop creative faculties, spontaneous reactions, and critical outlooks, all of which are of immense importance in a highly organized society in which science and technology predominate. In addition the individual will utilize the principle of self-education under the active guidance of teachers by means of the widespread use of up-to-date educational technology communications techniques and group dynamics. As part of this transformation, Career Education will focus on the adult as a citizen in our participatory democracy - that is, one who governs himself and seeks to shape the society and environment in which he lives. It will also focus on the adult as a family member and as a parent because recent research indicates that when the whole family is involved in learning
activities the children stand to gain very directly. Their attitude is changed to one of curiosity which results in lifelong habits of knowledge seeking which can be transmitted through generations. Consequently, adult Career Education is as much concerned with preparing the next generation for responsible and fulfilling adulthood as it is with preparing those individuals who are presently adults to meet their immediate occupational and citizenship goals.

Since the last international conference then, adult education has taken on several new aspects. Statistics show that adults in the United States are looking more and more to adult education as a means for the individual to solve immediate problems and that there is increasing acceptance of the idea that learning throughout life is an ongoing process. Rapid social and economic changes have created societal pressures that have presented adult education its greatest challenge - equipping people to give intelligent and orderly direction to this change.

Today, when more than 70 million American adults still face life without a high school education and countless others need new competencies to obtain jobs and upgrade job skills, the need for lifelong career education is urgent.

Adult needs for career oriented education are presently met by a variety of agencies and groups, both public and private - adult educators, vocational educators, manpower educators, and vocational rehabilitation educators - all of which have an interest in the adult learner. There is a need however, to coordinate efforts of these groups through Career Education to reduce program duplication and improve adult learning opportunities.
Our adults, most of whom are mature and talented but may be handicapped by academic, socio-economic, or other circumstances represent an invaluable pool of human resources which must be developed if our society is to remain spiritually and economically healthy and remain a resource for international development. We believe that Career Education is one of the keys to this development.