Written to provide local educational administrators with a definition and rationale for career education as well as information for organizing and implementing career education programs, this document describes the four U.S. Office of Education sponsored career education developmental models in addition to 26 federally-funded exemplary career education programs found throughout the nation. The four career education models are: (1) school-based, (2) employer-based, (3) home/community-based, and (4) rural residential. Characteristics of school-based programs are discussed, focusing on program organization and the scope of several program components. State and local planning and administrative problems and responsibilities are described, as well as operational activities and program goals. Appended resource materials include an extensive bibliography and lists of various federally-funded career education projects. (AG)
MISSION OF THE CENTER

The Center for Vocational and Technical Education is an independent unit on The Ohio State University campus. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach and interinstitutional in its program.

The Center's mission is to strengthen the capacity of state educational systems to provide effective occupational education programs consistent with individual needs and manpower requirements by:

- Conducting research and development to fill voids in existing knowledge and to develop methods for applying knowledge.

- Programmatic focus on state leadership development, vocational teacher education, curriculum, vocational choice and adjustment.

- Stimulating and strengthening the capacity of other agencies and institutions to create durable solutions to significant problems.

- Providing a national information storage, retrieval and dissemination system for vocational and technical education through the affiliated ERIC Clearinghouse.
CAREER EDUCATION PRACTICE

WESLEY E. BUDKE
GLENN E. BETTIS
GARY F. BEASLEY

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

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U.S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

National Institute of Education
Information contained in this publication should be of particular interest to local educational administrators charged with organizing and implementing career education programs.

The four U.S. Office of Education sponsored career education developmental models (school-based, employer-based, home/community-based, and rural residential) are described as well as twenty-six exemplary career education programs found in the literature.

Several common components of career education programs are identified and their scope described. Planning and administrative problems and responsibilities are addressed. An extensive bibliography and listing of federally funded career education projects should serve as valuable resources for those seeking practical information.

The profession is indebted to Wesley E. Budke, Glenn Bettis, and Gary Beasley, The Center, for their scholarship in the preparation of this report. Recognition is also due Kenneth B. Hoyt, University of Maryland; B. J. Stamps, Skyline Center, Dallas, Texas; and Harry Drier, The Center, for their critical review of the manuscript prior to final revision and publication.

Robert E. Taylor
Director
The Center for Vocational and Technical Education
ERIC Clearinghouse on Vocational and Technical Education
INTRODUCTION

American school systems are part of a changing society that constantly creates demands for new insights into the learning process, new ways of teaching, and workable strategies for relating the traditional academic focus of the classroom situation to the real world outside the schoolhouse walls. Students, parents, educators, businesses, and civic groups are calling for more effective and efficient resolutions of educational and societal problems. Since education is the responsible link between social needs and social improvement, new and better relationships in education must be provided to help the individual find his place in society. Hence, career education has emerged as a major focus in reforming and redirecting the American educational structure.

This document is written to provide educators with a brief overview of career education in terms of what it is, the models being sponsored by the U.S. Office of Education, examples of locally developed programs, and possible concerns and implications for program development. The primary intent of this publication is to provide "food for thought" to those persons involved in developing career education programs. The programs that are reviewed in this publication are not presented as being model programs; but rather, represent various strategies and activities that are being used in career education programs.

Resources used in the preparation of this document were primarily printed materials. In reviewing the programs, the reader is reminded that no on-site visits were made. The document base for this paper were the collections of the Comprehensive Career Education Model at The Ohio State University, the Educational Resources Information Center (ERIC), the ERIC Clearinghouse on Vocational and Technical Education, and the Research Library of The Center for Vocational and Technical Education.
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CAREER EDUCATION PRACTICE
WHAT IS CAREER EDUCATION?

A widely accepted definition of career education is yet to be identified in the American educational structure. However, several eminent educators and institutions have described or given their opinions as to what career education is or what it should be.

Taylor (1971) relates that career education is designed to capacitate individuals for all of their life roles: economic, community, home, avocational, religious, and aesthetic. Designed for all students, career education should be viewed as lifelong and pervasive, permeating the entire school program and even extending beyond it. Career education is a systematic attempt to increase the career options available to individuals and to facilitate more rational and valid career planning and preparation. Through a wide range of school and community resources, young people's career horizons should be broadened and their self-awareness enhanced. The framework for accomplishing these goals are the phases in a career education program: career awareness, career exploration, and career preparation.

Hoyt, et al., (1972) define career education as:

The total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.

Goldhammer (1971a) suggests an idea of "careers" education. He argues that what has been lacking in American education, but sorely needed, is a concept of education which stresses the role of the school in helping each individual become capacitated so that he can develop his potential both for his own self-fulfillment and his contributing to the maintenance and healthy functioning of society. "Careers education" would be a fusion of academism and vocationalism.

To Evans (Hoyt, et al., 1972), career education is the total effort of the community to develop a personally satisfying succession of opportunities for service through work extending throughout life.
In trying to establish a working definition for the Comprehensive Career Education Model, the commissioner's committee on defining career education (U.S. Office of Education, '971b) suggests that career education is the infusion into all educational curriculum and student counseling, K through fourteen, of information and hands-on-experience pertinent to real life jobs and world of work experience. The main thrust of career education is to prepare all students for successful work lives by improving the basis for occupational choice, by facilitating the acquisition of job skills, and by enhancing educational achievement in all subject areas and at all levels by making education more meaningful and relevant to students. Career education recognizes the critical decision points in life when students must be prepared and equipped to decide whether to pursue a job, further education, or some combination of both work and education.

In summary, career education might best be characterized as "education for something," in which youth reach at least the beginning of a career path along with well developed basic skills, a positive self-concept, understanding of the ways of using leisure time, and appreciation of and ability to function and participate in social and political structures. In a real sense, career education is not a "thing." It is all of education. Career education involves the academic, personal adjustment, sociopolitical and other thrusts of the kindergarten through secondary school years. Additionally, career education is intended for adults who wish to or must--explore new career paths and enter and exit educational programs throughout their lifetimes.
RATIONALE FOR CAREER EDUCATION

For large numbers of American youth, the public school system represents a maze of meaningless nondirected activity. They fail to see any relationship between their current school experience and some identifiable next step beyond school (Bottoms and Matheny, 1969a). Such a view is especially common to a large percentage of the students who do not continue on to higher education.

Marland (1971b) contends that vocational education's sense of continuity should be extended to all education. The connection between education and a person's life work should be made a part of each individual's education. Marland states that:

A shockingly high number of unemployed youth are products of the general curriculum and we can expect small improvement until the general curriculum is done away with in favor of a system of high school education with but two exits--continued education or employment--and nothing else.

Not only is career education needed for high school students, but it is needed in the lower grades and during the adult years as well.

Men and women are faced with difficult problems in adjusting to and preparing for the dual roles of family member and worker. Adults are experiencing mid-career redirections which require assistance in career planning and development. Overlaying all these groups are the severe problems of the disadvantaged--those which represent the results of failures in our social systems such as education, economics, and health (Taylor, 1971).

While discussing the need for lifetime, comprehensive career education for all Americans, Pucinski (1971:194) says:

Economic growth, personal security and satisfaction, the vitality of our social fabric and durability of the democratic system--all depend on the effectiveness of a strong, successful public educational system and, most of all, on our own national courage to change.

To meet the challenge of change, education must assume the major responsibility for creating career awareness and career
consciousness in all students at all levels to help them develop the necessary competence, attitudes, and values that enable the visualization of a career life.

Gysbers and Moore (1971) stress the need for career education:

The necessity for gaining knowledge and insight into the phenomenon of career development has come, in part, from the fact that our present society is substantially different from what it was at the turn of the century. The work world in particular has undergone dramatic changes both structurally and occupationally. Industrial and business structures have become highly complex and occupational specialization is increasing. As a result, the work world frequently is invisible and unknown, particularly to youth. Their knowledge and understanding of the industrial and occupational world and their relationship to it is often diffuse and distorted. Suffering in varying degrees from occupational illiteracy, many youth find it difficult to visualize a career life.

In the quest for relevancy in education, nothing is more pertinent than providing every youth with the capability to make intelligent career decisions and the opportunity to prepare for entry and progress in such careers. The National Association of State Directors of Vocational Education (1971) stresses that:

Career decisions must be made through sensible choice rather than by haphazard chance--and that actual preparation for entry into careers in an organized, purposeful manner is a self-evident requisite--is the proposition that public education, from kindergarten through college, must set about making arrangements of organization and instruction that will meet such needs. The National Association of State Directors of Vocational Education believes that career education, constituting a central theme in the total universe of public education, should be assigned high priority throughout the nation--in every state--and in every public educational agency.

As a part of an ever changing society, the American education system must provide people with the ability to project themselves into future career roles, analyze these roles, and relate these projective roles to a meaningful life. Such is the purpose for career education. Commissioner Marland sums up the rationale for career education this way:

Career education would provide the training . . . students require for successful employment and it would give them motivation and purposefulness for the academic education they need to bring personal fulfillment.
into their lives. While career education will necessarily and properly embrace many of the vocational-technical education skill-producing activities, it will also reach a large percentage of students presently unexposed to the usual vocational offerings.

Career education, in sum, would reflect a far broader understanding of the purpose of education in today's highly sophisticated, technical, change-oriented society--the need not only to fit a person to function efficiently, but to make him aware of why he is doing what he is doing . . . and to bring relevance to our classrooms for many who, with reason, now find learning meaningless. (Marland, 1971f)
CAREER EDUCATION MODELS

To facilitate career education goals, the U.S. Office of Education (USOE) is making substantial efforts in research and development (R&D) activities. The National Center for Educational Research and Development is concentrating resources on the development of four models of career education or alternative ways of facilitating career education goals. These four models are:

1. the School-Based Model;
2. the Employer-Based Model;
3. the Home/Community-Based Model; and
4. the Residential-Based Model.

The following is a brief description of the four models. These descriptions are based on USOE statements, various papers by the directors of the models, and personal contacts with staff developing the models.

Model I: School-Based Career Education

The Model and Its Development. The objective of the School-Based Career Education Model (Model I) is to develop and test an educational system (K-twelve) that will develop in students (1) a comprehensive awareness of career options; (2) a concept of self which is in keeping with a work-oriented society, including positive attitudes about work, school, and society, and a sense of satisfaction resulting from successful experience in these areas; (3) personal characteristics, such as self-respect, initiative, and resourcefulness; (4) a realistic understanding of the relationships between the world of work and education which assist individuals in becoming contributing members of society; and (5) the ability to enter employment in a selected occupational area or to go on for further education.

The School-Based Career Education Model is based on the infusion of career development objectives into comprehensive K-fourteen educational programs. The purpose of this redirection is to acquaint students more intimately with a wide variety of career opportunities through school experiences. This infusion must insure that every student receives an education which integrates his academic skills, social development and career preparation so that after high school his options are open to enter the labor market.
in a productive career or pursue his choice of a post-high school education. Students must be provided a continuing awareness of educational choices for career planning, which permits them to become fulfilled, productive, and contributing citizens.

Extensive guidance and counseling activities are provided in this model to help students develop self-awareness, self-confidence, and mature attitudes; and to match their interests and abilities against potential careers. The ultimate goal of Model I is to provide every student with an entry-level job or further education.

The School-Based Career Education project is being developed through a grant to The Center for Vocational and Technical Education (CVTE) at The Ohio State University in Columbus, Ohio. The Center contracted in 1971 with six local educational agencies (LEA's) as development sites: Atlanta, Georgia; Los Angeles, California; Pontiac, Michigan; Hackensack, New Jersey; Mesa, Arizona; and Jefferson County, Colorado. These school districts were selected because they were implementing a career education program on their own, had demonstrated leadership in innovation, and had a history of implementing and continuing new programs once research and development efforts had been completed.

Progress and Involvement. The Center for Vocational and Technical Education and the six educational agencies developed a hierarchical structure around eight elements which were established as the components of career education. These elements are considered in all courses at every grade level of participating schools. They are:

1. career awareness which leads to career identity;
2. self-awareness which leads to self-identity;
3. appreciation and attitude which lead to self and social fulfillment;
4. educational awareness which leads to educational identity;
5. decision-making skills which lead to career decisions;
6. economic awareness which leads to economic understandings;
7. skill awareness and beginning competence which lead to employment skills; and
8. employability skills which lead to career placement.

From these eight elements, thirty-two themes have been identified. These themes have led to the development of almost fifteen-hundred goal statements from which some three thousand behavioral objectives have been derived. The Center for Vocational and Technical Education and local educational agency staffs are refining
existing curriculum treatment units and conducting limited development of new units that meet these objectives at levels K through twelve. The treatment units constitute the curricular materials and teaching techniques necessary for implementing the career education project. During the spring and summer of 1972, the LEA's have been refining and pilot testing approximately 140 treatment units. Extensive in-service teacher education was conducted during the summer of 1972. During the 1972-1973 academic year, continuous additions and revisions will increase the completeness of the model.

All six of the participating LEA's are assisting in developing the curricular and instructional materials, with overall coordination by CVTE. In addition, a national search for curricular materials, instructional material, and related information which supports the School-Based Career Education project is underway. Each of the participating LEA's have sent to The Center the "treatments" or techniques they are using to accomplish specific objectives. All possible "treatments," whether developed by one of the participating educational agencies or located in some other agency, are being classified and cataloged for eventual dissemination to other agencies.

The treatment units will be approached differently at different grade levels. Elementary students will study a wide range of jobs in our society and the role and requirements involved. Junior high students will explore several clusters of occupations through experiences and field observations as well as classroom instruction. Senior high students will pursue their selected occupational areas, exercising one of three options: intensive job preparation for entry into work immediately or preparation for four-year college. Students preparing for further education will continue occupational cluster experiences, including work experience where possible, with academic subjects related to the professional area for which they are preparing. Students in specialized job preparation will be provided basic academic skills for further education. All students will leave the system with at least entry-level job skills and with facility in basic academic subjects for entry into further education.

The school-based model involves 115 schools, 4,200 teachers and some 85,000 students in the six LEA's. (See Koziarz, 1971; Marland, 1971b; A. Miller, 1972; Taylor, 1972; USOE, 1972b.)

Model II: Employer-Based Career Education

The Model and Its Development. The Employer-Based Career Education Model is being created, developed, operated, and supported primarily by businesses in companionship with schools. The idea supports the proposition that a group of industrial, commercial, and other firms collaborate in developing the program for the benefit of the thirteen-twenty age group. The objectives of this model
are (1) to provide an alternative educational program for students in an employer-based setting; (2) to unify the positive elements of academic, general, and vocational curricula into a comprehensive career education program; (3) to increase the relevance of education to the world of work; and (4) to broaden the base of community participation, particularly by involving public and private employers more directly and significantly in education.

The Employer-Based Career Education project seeks to serve teenage students through an optional out-of-school program. Many of the students are characterized as the "disaffected, alienated, and unmotivated." Although this optional program does accommodate such students, it is intended to be a real option for consideration by all students. Its primary goal is the presentation of a comprehensive set of personalized educational experiences to secondary school students who voluntarily choose to participate in this mode of education instead of the traditional classroom curriculum.

Specifically, Employer-Based Career Education is an attempt to define individual learning elements within the curriculum, either existing or ideal, and to locate actual work or adult activity situations in which students can learn these specific elements. Materials presented are composed of all elements in the school curriculum, both academic and vocational in addition to other life skills. To facilitate learning situations most relevant to individual interests and needs, a special attempt is made to allow each student to participate in the selection of his own work pattern or activity situations from a variety of opportunities. The model allows students to function in a real adult-centered world. High school educational requirements will still be met, assuring high school graduation and an appropriate range of options upon graduation.

Employer-Based Career Education projects are planned to be operated by consortia of businesses and other organizations, both public and private. Such consortia are being formed presently under the sponsorship of Research for Better Schools, Inc., Philadelphia; the Far West Laboratory for Educational Research and Development, Berkeley, California; the Northwest Regional Educational Laboratory, Portland, Oregon; and the Appalachia Educational Laboratory, Charleston, West Virginia. They are operating under contract with the U.S. Office of Education, and have prime responsibility to develop and pilot test Employer-Based Career Education projects.

Progress and Involvement. All of the contractors are proceeding with preparatory work in anticipation of accepting students during the 1972-1973 academic year. Some consortia have already been formed. Curricular components are being identified and developed. Steps are being taken to meet legal requirements and obstacles which have been encountered. Although the several laboratories communicate and share ideas, they work independently, and are
expected to come up with models unique to their own community needs and structure.

Because the laboratories work separately, progress on all points is not expected to be uniform for each of the sites. All organizations are still in the formative and planning stages and only a limited number of students have yet been enrolled as participants in their projects. In the case of Research for Better Schools, Inc., 100 students are expected in October 1972. The Far West Laboratory for Educational Research and Development currently has about ten student enrollees; it should have fifty by September 1972, and a total of seventy-five by January 1973. The Northwest Regional Educational Laboratory expects to have twenty-five students in September 1972; the laboratory’s goal is fifty students by February 1973. Figures for the Appalachia Educational Laboratory are not yet established, but will approximate those of the Northwest Regional Educational Laboratory (Koziarz, 1971; Maryland, 1971b; Taylor, 1972; USOE, 1972b).

Model III: Home/Community-Based Career Education

The Model and Its Development. The Home-Based Model is designed to introduce a variety of experiences using the home as a center for learning. One of its primary purposes is to reach persons eighteen-twenty-five years of age who have left the traditional school environment. Involving various community agencies, this model will place great emphasis upon an extensive educational television program designed to reach youth and adults in the home.

The objectives of the Home-Based Model are: (1) to develop educational delivery systems for the home and the community; (2) to provide new career education programs for adults, (3) to establish a guidance and career placement system to assist individuals in occupational and related life-roles; (4) to develop more competent workers; and (5) to enhance the quality of the home as a learning center.

The three major components of the model are: (1) a career-oriented mass media program with motivation to study for a career, and information concerning career opportunities; (2) home and community-centered education systems, using such media as cable television, audio cassettes, correspondence programs, radio, and instructional aids; and (3) career clinics in the community, to provide career guidance and counseling, referral services, and information on relevant career-oriented education programs. The need for a central screening and switching mechanism will be met by the establishment of a total systems management entity. This systems management entity will involve representatives of the target populations, service agencies which will accommodate the target population adjustment/education/training/placement needs, employers, and other national/regional/local organizations which will participate in guiding or operating the program.
The Model seeks to bring together existing career education agencies to coordinate their efforts to reach the home/community-based population, to tackle problems of accessing the target population, and to identify and fill the gaps in providing career education. The Career Education Extension Service will be established as a central vehicle to carry out network functions. It will function through: (1) receiving and interpreting feedback from home/community-based population; (2) referring individuals to existing agencies; (3) identifying problems of access, and aiding in their solution; (4) identifying services gaps and assisting in meeting them; and (5) gathering and disseminating information about approaches to career education and about the effectiveness of existing approaches to it. A central theme of the Model is to orchestrate, through the Career Education Extension Service, the use of mass media and the existing career education resources in order to help them reach and respond to the career education needs of home/community-based populations.

Progress and Involvement. The Education Development Center (EDC) at Newton, Massachusetts, has led in developing the approach. The criteria for target area selection (for the pilots) have been established. Providence, Rhode Island, has been actively examined and is intended to be the site for a pilot project to be established in fall of 1972. EDC will phase out of the program during Fiscal Year 1973, and a contractor to operate the Providence program is to be competitively selected by spring of 1973.

The Southwest Cooperative Educational Laboratory in Albuquerque (SWCEL), New Mexico has commenced planning for a Model III test site in Albuquerque by late spring 1973. The Albuquerque test site will take advantage of the communications satellite which will beam into the city as part of the overall satellite demonstration being performed by the Federation of Rocky Mountain States. The satellite will be activated in 1973 for an expected life of nine months. The satellite will be one element of the Albuquerque program, but will not be utilized in such a fashion that the program cannot exist without it. This pilot study will rely heavily on the work completed by EDC.

The target date for beginning Model III activity is fall 1972. Numbers of participants are difficult to estimate. Participants may drop in and out and some may be repeaters. Best estimates at present are three hundred to five hundred weekly (Marland, 1971b; Taylor, 1972; USOE, 1972b).

Model IV: Rural Residential Career Education

The Model and Its Development. The objectives of the Rural Residential Model are to provide rural families with employment capabilities suitable to the area, to provide leverage on the economic development of the area, and to improve family living in
The model might be conceptualized as a "socioeconomic development project" to serve disadvantaged families and some single persons drawn from a six state area.

The Rural Residential Career Education Model is a research and demonstration project which will test the hypothesis that entire disadvantaged rural families can experience lasting improvement in their economic and social conditions through an intensive program at a residential center. The center is designing programs to provide services for the entire family. Services will include day care; kindergarten, elementary and secondary education; career and technical education; young adult, adult and parent education; family/living assistance; medical and dental services; welfare services; counseling; and cultural and recreational opportunities for single and married students and their families.

In addition to the education and social services systems, a research and evaluation system, a management system, and a staff in-service training system are being designed and developed at the center. Included will be a program of research on the educational services and programs required to improve the economic viability of the region and a program for expansion of regional efforts authorized under existing local, state, and federal programs in economic development. It is the intent of the project that students be able and ready to find employment in the local (six state) region after completion of the program.

The Mountain-Plains Education and Economic Development Program, Inc. (MPEEDP) is responsible for developing and coordinating the various components of the Rural Residential Model. The project is located in Glasgow, Montana, on a U.S. Air Force base and is being designed to serve the needs of target families in the six state region of Idaho, Montana, Wyoming, North Dakota, South Dakota and Nebraska. These state offices will provide for selecting participants, assistance in job placement, liaison with state offices, and activities in the areas of economic development.

Progress and Involvement. Representatives of the six state governments, the public school systems, and local populations have been consulted in the process of designing the project to meet local needs. Housing was arranged on the air force base itself for the total expected number of families. Development of various systems has begun. The systems include an education and social services system, the management system, an in-service training system and the research and evaluation system.

The first twelve families (limited to a maximum of six members per family) arrived on base in March 1972. When fully developed, the maximum load to be achieved by fall of 1972 is estimated to be two hundred disadvantaged low-income families (Hudelson, 1971; Taylor, 1972; USOE, 1972b).
CHARACTERISTICS OF SCHOOL-BASED PROGRAMS

Career education is still in the formative stages and many changes and innovations will be experienced in the next few months and years. As mentioned earlier, a concrete definition has not been set forth for career education. For the most part, the intent is to make career education a common thread around which to build the school curriculum.

Several school-based career education programs were reviewed during the preparation of this document. The review was limited to program proposals, interim reports, and instructional materials. The authors did not attempt to describe programs in detail, but to synthesize vital information that might be found useful by local educators in planning and developing their own career education programs. It is important that the reader understands that program selection was based only on materials immediately available to the writers. To assume that the following twenty-six programs are the best in the nation would be a mistake. However, the programs do seem to be representative of the current types of activities in career education nationally. The matrix of program versus grade level and components in Figure 1 shows the nature of existing career education programs, and the remainder of this section describes in some detail the vital program characteristics which may interest educational practitioners.

Program Organization

There are currently hundreds of career education programs being developed by local education agencies over the nation. Some of these are comprehensive programs for grades K-twelve that incorporate every subject area in the school. Others are resource units to be used in one or two subject areas or grade levels for a limited period of time. Many programs have been developed or are in development that fit somewhere between the extremes mentioned above.

Most comprehensive career education programs have an overall theme for a range of grade levels. These vary from program to program, but the terms career awareness, career orientation, career exploration and career preparation appear frequently. Figure 2 illustrates the comprehensive career education concept.

Grades one through six comprise a "Career Awareness" stage. In this system, first and second grade students might begin by
**FIGURE 1**

**CAREER EDUCATION GRADE LEVELS AND PROGRAM COMPONENTS**

<table>
<thead>
<tr>
<th>Program Number</th>
<th>State</th>
<th>Elementary</th>
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*NOTE: Programs are listed in Appendix A in the same order used here.*
A COMPREHENSIVE CAREER EDUCATION SYSTEM

FIGURE 2

FIGURE 2

A COMPREHENSIVE CAREER EDUCATION SYSTEM

1. CAREER AWARENESS
2. CAREER ORIENTATION
3. CAREER EXPLORATION
4. PREP
5. COLLEGE PRE-TECH
6. ENTRY LEVEL JOBS
7. UNIVERSITY
8. TECHNICAL EDUCATION
9. TO ENTRY LEVEL JOBS
10. SPECIALIZED JOB
11. TO TECHNICAL JOB
12. PREPARATION FOR SPECIALIZED JOB
13. TO PROFESSIONAL JOB
14. ADULT AND CONTINUING EDUCATION
15. TO PROFESSIONAL JOB
16. ADULT AND CONTINUING EDUCATION

GRADES K-1
examining occupations in the immediate environment and gradually broaden this to encompass the larger community. Students in grades three through six might compare and contrast occupations in the immediate area to those found in other communities. Occupational awareness, however, is only one of the intended outcomes. As Goldhammer (Goldhammer and Taylor, 1972) points out, there could be five major functions fulfilled in these grades: (1) teach children the basic skills of learning and social involvement; (2) help students examine the essential functions that pertain to life and the individual and social activities of human beings; (3) help students to become sensitive to the types of social roles in which they will engage; (4) help students understand both the limitations and the potentialities inherent in their environment; and (5) help students to know more about themselves, their basic interests and their own potentialities.

Grades seven and eight comprise the "Career Orientation" stage of the program. This might be characterized by the study of occupational clusters across content areas.

The "Career Exploration" stage includes grades nine and ten in which the curriculum is characterized as exploratory. In this stage, actual work situations and "hands on" experience might be provided which relate to specific occupational clusters.

Goldhammer (Goldhammer and Taylor, 1972) outlines major functions for these grades as: (1) emphasizing continued growth and increased competence in the use of basic skills; (2) emphasizing the examination of a broad range of career potentialities in all areas of life; (3) encouraging students to select certain elements for specific exploration; (4) helping students acquire skills necessary for making selection on the basis of pertinent criteria; (5) directing attention toward the selection of one's own vocational career potentialities; (6) directing students' attention upon what it takes to become involved in specific types of careers or specific life activities; and (7) exploring man's value and belief systems.

Grades eleven and twelve incorporate a stage called "Career Preparation." This may include student involvement in cooperative work experience, specific vocational courses and preprofessional courses. Again, Goldhammer (Goldhammer and Taylor, 1972) lists major functions for these grades. They are: (1) placing emphasis upon the continuous refinement and application of basic skills; (2) placing emphasis upon the development of the specific knowledge and skills needed for family life, avocational citizenship and cultural careers; (3) providing an opportunity for students to explore and personally test the vocational opportunities within a specific cluster or areas; (4) providing an opportunity for students to select a specific career; (5) providing an opportunity for students to engage in the initial preparatory knowledge and skill building experiences while they explore the post-secondary
preparatory potentials; and (6) helping every student acquire some salable skills before graduation.

Program Components

Numerous components combine to make up a career education program. Some of these are unique, while others may be common to several programs. Seven components emerged as being common to nine or more of the twenty-six career education programs reviewed. They are:

1. cooperative education;
2. career guidance;
3. placement;
4. follow-up;
5. programs for disadvantaged youth;
6. programs for handicapped youth; and
7. in-service teacher education.

Over three-fourths of the twenty-six career education programs reviewed included cooperative education. Career guidance was an integral part of all programs. Provisions for student placement and follow-up activities were found in twenty percent of the programs as was special consideration for disadvantaged youth. About a third of the programs provided some special instruction for handicapped youth, but less than ten percent provided a component to care for the educable mentally retarded (EMR) student. In-service teacher education activities were included in nine out of ten programs.

As a note of explanation, some of the career education program descriptions concentrated on the development of resource materials and did not include all of the components. Also, as was pointed out earlier, the information gathered in this review was based on limited descriptive material; therefore, some of the components may not have been mentioned. The following seven sections identify the scope and importance of each of the above components and offer several suggested references for more in-depth study.

Cooperative Education. Cooperative education programs provide actual job experience while students are in school. Students spend part of the school day as paid employees in productive employment and part of the day attending classes. Cooperative education programs are planned, organized, and supervised by teacher-coordinators working with school personnel, parents, students, and
employers. Planned, on-the-job experience and coordinated, in-school instruction are the essential elements that make cooperative education programs different from part-time employment for general work experience. An advisory committee and a training plan for each student are significant features of the cooperative education plan. This experience and individual attention by teacher-coordinators and employers helps students build self-identity and confidence as workers. The following references should prove very helpful in planning, organizing, and implementing a cooperative education program: Butler and York (1971a, b), Law (1970), University of Minnesota (1969), Wallace (1970), and York and Butler (1971).

Career Guidance. To a large extent, the success of career education hinges on the effectiveness of the career guidance program. Career education needs an integrated, cross-disciplinary guidance program which can help each student explore and understand his interests, abilities, and aptitudes. Students must be assisted in making relevant decisions about their life so they can enter into a career in an organized, purposeful manner. This developmental, multicontact approach to career guidance requires more counselors, using new and diverse methods of helping youngsters. Teachers must be highly involved in the guidance process, especially at the elementary level. Parents and other community resources must be used in career guidance to help the student explore career alternatives and understand his potential for success. Guidance paraprofessionals should be trained to provide some of the routine services with the counselor sometimes assuming a managerial role. Hansen (1970), Campbell and Vetter (1971), Budke (1971), Herr (1972), and Hoyt, et al. (1972) may be referred to for assistance in developing career guidance programs.

Placement. Successful placement of dropouts or graduates in jobs or in special or additional education programs should be viewed as the real measure of educational program effectiveness. This is a task that cannot be handled by a single student personnel agency, but requires the support and cooperation of all school personnel. Miller and Budke (1972) identify the following reasons for support of a job placement program:

School personnel should urge the establishment of a job placement program within the school. School administrators should recognize the opportunity to sell the school's products to the local community and develop added support for school programs; vocational directors should see successful placement as promoting the expansion of vocational programs; guidance personnel service as a means of extending services to students with added personnel to do the job; vocational teachers should see it as the final reward for their own investment of time and effort to help the student; and the student should see it as a supportive service to help them reach job-oriented goals.
The same kind of reasoning should be true for the placement of dropouts into jobs and placement of graduates desiring further education into post-secondary or higher education programs. Some of the activities involved in a placement program are: developing contacts with employers, developing contacts with post-secondary and higher education institutions, coordinating with post-secondary and private employment agencies, developing cooperative agreements with the Bureau of Employment Security, establishing a clearinghouse for job openings, coordinating with cooperative education and work experience programs, soliciting full-time and part-time jobs, developing student resumes, coordinating job interviews, and providing legal information. Helpful references are: Little (1970), Miller and Budke (1972), Job Development Service (1967), and Wasil (1971).

Follow-up. Information can be collected through a follow-up program to evaluate the effectiveness of the educational process and its product. Following the successes and failures of former students provides the most valid information to the school on its program strengths and limitations and helps identify additional student needs. Follow-up studies may serve the following purposes:

1. provide job placement and job competency information indicating needed curriculum modifications and changes;
2. provide student and employer satisfaction and job skill information useful in evaluating instructional methods and procedures;
3. provide descriptive information about various jobs useful in guiding students into a training program compatible with their interests and abilities;
4. provide information about student needs for additional education and training; and
5. provide information useful in evaluating the effectiveness of the career guidance program and to measure the demand for special needs programs. (Miller and Budke, 1972)

The frequency and timing of student follow-up varies, depending upon the program objectives, however, the greatest amount of accurate data can be collected at twelve to eighteen months following exit from school. How long the school should be responsible for dropouts and graduates is at this time unclear. Information regarding student follow-up can be found in Little (1970), Miller and Budke (1972), and Starr, et al. (1970).

Disadvantaged Youth. Assisting all students to realize their full potential is one of the goals of career education. Students should not be labeled as failures because they are educationally,
economically, socially, or culturally disadvantaged. The disadvantaged need well designed programs to raise their educational and employment levels. Particular emphasis is needed in providing career orientation, exploration, and preparation experiences for these students. Several instructional techniques have proven successful with both urban and rural disadvantaged. They are: (1) plan experiences that will develop and improve the student's self-concept; (2) group students according to ability levels and in small classes; (3) provide activities that require small group or individual study; (4) use field trips and demonstrations to motivate students; and (5) utilize problem-solving techniques in teaching.

Instructional personnel should be selected with care, insuring that they have respect, compassion, understanding, and empathy for the disadvantaged, along with full knowledge of their employment problems. References that may be useful to the reader in pursuing this component include: Boss (1971), R. Campbell, et al. (1969), Feck (1971), Lockette and Davenport (1971), National Committee (1969), Oaklief (1971); Robinson and Schmitt (1971), State University of New York (1968), and Walker (1971).

Handicapped Youth. When referring to educational programs for the handicapped it is necessary to be very specific about the nature of the handicap. There are numerous types of afflictions such as mentally handicapped; neurologically handicapped; orthopedically handicapped; and those with sight, hearing, and speech impairments; each requiring individualization of instruction. Most career education programs could, with some innovativeness, adapt instructional materials and resource materials to fit the needs of the physically handicapped. Special education teachers for the educable mentally retarded (EMR) should provide career information to help students find a useful and satisfying place in society. Young, et al. (1971) offers suggestions for organizing and implementing programs for the handicapped. Other references include: Anderson (1970), Bureau of Adult, Vocational, and Technical Education (1970), Gary (1971), Greenleigh Association (1969), Moss (1971), Stone (1971), Bockus (1968), R. Campbell, et al. (1971), and Mississippi State Department of Education (1970).

In-service Teacher Education. Because career education is infused into the education curriculum it requires incorporation of career information into existing learning objectives rather than adding more. The career education concept should not be accepted in part, but as a total package. Career education has tremendous implications for teacher education and in-service education, acquainting and committing all teachers to the broad concept of career education. Academic classroom teachers must be provided the time to modify the curriculum, new knowledge and expertise about the world of work, new instructional materials, and receive support personnel in the classroom. Vocational educators need to develop an interest and competency in working with elementary and
junior high school children. They need to become acquainted with the concept of occupational clusters and convert larger blocks of instruction into shorter units offering more flexibility to the student.

Before effective career education can occur, instructional personnel must be trained through in-service teacher education programs. At the present time there is no single in-service teacher education model, as evidenced by the varied approaches mentioned in the literature. Suggested activities would include in-service sessions conducted at regular intervals throughout the year, one and two week workshops, orientation meetings prior to program implementation, after school work sessions, program planning activities, periodic seminars, intensive training periods, and provisions for university credit courses. Some sessions are conducted during the school day, some after school, others at night and several during the summer months. At the time of this writing specific guidelines and content for in-service education are in development and may be available at a later date from individual programs listed in Appendixes A, B, and C.

In addition to the above clearly identified components, several career education programs mention specialized personnel, activities, and materials. They include: occupational specialists, role playing, team teaching, psychologists, on-the-job training coordinators, resource centers, field trips, resource speakers, games, summer programs, occupational information packets, remedial education, elective classes for students, hands-on experiences, and instructional packages.
PLANNING AND ADMINISTRATIVE PROBLEMS AND RESPONSIBILITIES

Problems

Educators must give careful consideration to planning, administering, and implementing the programs to insure maximum effectiveness. Excellent ideas may bring about serious disappointment in the absence of sound planning, astute administration, or skillful implementation. Imperative to any successful program are positive attitudes of lay people and educators, legislation to provide a sound and adequate program, commitment of key state leadership, and backing of local school districts. A major obstacle to change is complacency. People tend to take comfort in adhering to an established routine, which makes it difficult to promote a new program. Resistance will likely be commonplace because new projects or programs are often viewed with skepticism. Costs and financing must be considered, and although ongoing programs can serve as a foundation, a substantial amount of additional funding is required. These and many other factors relate directly on the program's effectiveness.

Swanson (1971) relates various problems that may confront those establishing career education programs. (1) Large school systems will find it much easier to implement career education than will small districts. School districts with limited enrollments and resources will find difficulty in providing a wide range of career experiences covering all occupational clusters. (2) Implementing career education at the elementary level will likely present some perplexing problems. Emphasis on career decisions at this level is subject to superficiality because the concept of careers is remote to elementary students. Also, the school-based model of career education assumes that students will move through all of the career clusters by the time they reach the sixth grade. This may involve more developmental effort than has been contemplated. (3) The entire program pivots on the curriculum in the middle school because students are expected to begin making career choices at this level. This necessitates an exceptionally strong program in the middle school. (4) Seldom will a school district have the staff and personnel needed to teach career clusters; therefore, adequate teacher education programs will be needed to provide qualified teachers and staff. (5) One of the most serious problems is the need for guidelines which permit local education agencies to plan a systematic entrance into career development programs.

The developmental needs of career education should not be underestimated, and every level of education must be adequately
considered. As Swanson (1971) states, "Its durability will depend on the willingness to invest in the needs for development or the willingness to bear the long run costs or not doing so."

State Responsibility

One key to a successful program is good state leadership. State leadership should demonstrate an aggressive stance in administering the state's educational system. The state provides four basic functions in establishing exemplary programs.

1. A priority determination function in assigning priorities to problems identified by intensive study. An exemplary program advisory council should be established to aid in identifying problems and in assigning priorities.

2. A consultative function in providing consultation service to assist personnel from local school districts, colleges and universities, and other organizations eligible to participate in the program in developing adequate proposals and in developing adequate plans for the evaluation of programs.

3. A management function in establishing criteria for proposal evaluation, proposal selection, provision of funding for implementation, and monitoring programs in operation.

4. A coordination and dissemination function in coordinating various programs within the state to maximize their combined impact, and to disseminate program results. (Bottoms and Matheny, 1969b)

Local Responsibility

Guidelines are needed to propose organizational and structural alternatives available to schools, personnel requirements for installing programs, space and equipment requirements, and the sequential process of installation. A helpful guide is Career Education: A Handbook for Implementation (Olympus, 1972). This document details ten action steps for implementing career education programs.

1. Organize the appropriate interactive network of interested individuals and groups. An aggressive public information program should be organized to stimulate interest in career education and coordinate the flow of information and resources for program development and implementation. Five groups of particular importance are: parents and organizations with a particular concern for the home and family; educators from all levels; employers, trade union leaders, and other parties representing business and labor; representatives from public agencies and
elected officials; and other organized groups in the community, such as the service clubs and the retired.

2. **Promote an understanding of the concepts of career education and establish appropriate educational objectives.** A previous section entitled "Program Goals" suggests many career education program goals, but notes that in the final analysis the individual school must decide on specific objectives which meet their needs. An attempt should not be made to promote career education until the goals and objectives are well defined.

3. **Study the current educational system to determine the changes necessary to turn it into a true career education system.** The career education process and objectives must be well in mind before trying to determine needed changes. Some examples of questions to be asked in determining changes are: What are the components of your career education program? Briefly list and describe the main goals and objectives for the overall career education program and for each component of the program. How is the career education concept being assimilated into the educational program? What supportive services (e.g., guidance, counseling, placement, follow-up) are available to students? What in-service training is needed for administrators, teachers, and staff in implementing the career education program?

4. **Inventory and marshall all available resources.** Field trips to business, industry, and museums have long stood as examples of using community resources. Work study and cooperative education are still far from being fully exploited. A vast pool of human talent resides in every community waiting to be tapped. Community resources can be identified through questionnaires and then be evaluated, classified, and analyzed by professional educators.

5. **Design the career education system most appropriate for your community.** After a general understanding of career education is formulated, a detailed set of desired goals and objectives is drafted, and available resources are assessed, program planning can begin. The emphasis should be on experimentation and directed toward the following areas: instructional objectives, curriculum design and development, pupil personnel services, educational professional development, early childhood development, human ecology, and community organization with experience in working with business and labor leaders.

6. **Gain the cooperation of all necessary organizations, institutions, and individuals.** Necessary cooperation might best be achieved through the formation of a school-community career education advisory committee. The
committee would advise the local school board, the school administration, the faculty, and the community at large of recent developments, needs, and future plans concerning career education in their school and community.

7. **Implement the system.** A rigid set of developmental major events or target dates must be applied to insure implementation on the appointed dates. This requires a system for reviewing progress on the various components of the program, so resources may be reallocated to prevent costly delays.

8. **Build in an evaluative process to determine how well the system is working.** Evaluation provides the planner with an opportunity to use objective criteria to supplement personal opinion. Common evaluative techniques are: direct solicitation of the reactions of the students, employers, and the community; individual and group tests to actually measure achievement and attitudes; performance tests or observations of a student actually demonstrating his ability in the use of a skill; comparison of results of new techniques and procedures with traditional methods; and observation of the career education process to determine problems.

9. **Create a feedback system to use evaluation findings to adapt and improve career education programs.** Feedback is concerned with taking the results of an evaluation and applying them to correct or improve any part of the system requiring modification. Feedback systems should provide information on students, the instructional system, and community resources.

10. **Make provision for a program of maintenance to sustain early initiative and tie these activities into the interactive network.** This final step is concerned with expanding and maintaining the system. The administrative process, the instructional program, and support services must be examined to determine how a local school system in partnership with the community can cooperate and interact with other schools and state level agencies to improve and expand the career education process.

The above discussion is centered around implementation steps as proposed by Hoyt and associates. Before attempting to implement a career education program, a review of existing programs should be made, as numerous approaches to provide career education are already being tested in many states and local school districts. A list of some of these are provided in Appendixes A, B, and C of this paper. In addition to reviewing operational programs, a review of writings and presentations regarding career education would be helpful. One source is the bibliography in this document.
OPERATIONAL ACTIVITIES

Program Goals

The following list of goals indicates the types of results educators wish to achieve through career education programs. The numbered programs are identified in Appendix A.

Occupational Information and Guidance

1. To introduce the world of work (Program 19)
2. To provide an integrated occupational orientation program at the elementary and secondary level to broaden the experiences of students (Program 1)
3. To acquaint students with the major occupational fields including economic structure, organizational structure, specialization relationships to other occupational areas, kinds of work involved and educational and other experiences (Program 15)
4. To help the student become acquainted with occupational and educational opportunities in the community (Program 18)
5. To provide occupational information, concepts of work, vocational preparation and placement along a sequence of vocational life stages (Program 9)
6. To provide students with more occupational information (Program 16)
7. To relate occupational instruction and counseling to elementary students and faculty members (Program 11)
8. To provide exploratory career and occupational guidance to every student K-twelve (Program 13)
9. To integrate occupational information into the elementary curriculum (Program 22)
10. To explore new approaches for presenting occupation information K-nine (Program 7)
11. To provide extensive personnel services, including guidance, counseling and placement for each school trainee (Program 1)
12. To help students learn about job opportunities not only in the community but on a national and international basis (Program 19)

13. To help students gain a first-hand knowledge, understanding, and appreciation of the changing employment patterns and opportunities in the world of work (Program 15)

14. To encourage area-wide implementation of vocational orientation guidance, work experiences, and placement in grades one to fourteen (Program 21)

15. To prepare the student to make an appropriate career choice (Program 4)

16. To provide information about a wide range of occupations (Program 10)

17. To increase the individual options available to each student (Program 9)

18. To provide the student with an opportunity to begin planning a future curriculum that will best satisfy one's needs and interests (Program 18)

Assessment of Interest and Abilities

19. To help students compare their ability, interests and aptitudes to the various careers which they study (Program 18)

20. To help students learn to appraise their own interests, aptitudes, and skills in relation to a variety of vocational opportunities (Program 15)

21. To help students learn to value the dignity, importance, and interdependence of all types of work and skills (Program 19)

Attitude Toward Work or Fellow Workers

22. To help students understand the basic processes of production, processing, and distribution in the American work economy and the importance of human relations and ingenuity in these processes (Program 15)

23. To help students learn that all workers are interdependent and contribute to the positive overall welfare of society (Program 19)

24. To develop a positive attitude toward work (Program 19)
25. To develop a positive concept of self by learning (Program 19)

26. To serve as a motivating force to enhance all types of learning (Program 9)

27. To change student attitudes concerning the dignity of work (Program 10)

28. To provide students with an opportunity to develop a self-understanding (Program 20)

29. To provide students with wholesome attitudes (Program 20)

30. To improve student attitudes toward themselves and others (Program 16)

31. To increase student interest in post-secondary training and in obtaining job entry level skills (Program 16)

32. To promote positive attitudes toward: all fields of work, work as a means of obtaining many satisfactions, and one's self in relation to work (Program 26)

33. To develop an understanding of the fundamental types of interpersonal relationships generated as a result of the interaction of various occupational and career roles (Program 3)

Worker Placement and Adjustment

34. To demonstrate a model vocational education system within elementary schools, middle schools, a high school and a community college (Program 21)

35. To prepare the student to function satisfactorily as an employee in a particular occupation area (Program 4)

36. To provide short-term intensive training for seniors (Program 2)

37. To place in employment 100 percent of graduates and dropouts who seek employment (Program 16)

38. To meet the manpower needs of society (Program 9)

Skill Development

39. To provide intensified skill development activities for those students who have not previously been enrolled in a vocational program and who have chosen to terminate their formal education (Program 26)
40. To provide general work experience for junior and senior high students who are fourteen years of age or older (Program 13)

41. To provide vocational work experience related to the vocational area being studied (Program 13)

42. To provide post-secondary placement and job-entry training (Program 13)

43. To provide for specific training in job entry skills for students who have had access to vocational education (Program 13)

44. To create a favorable attitude in marginal students, slow-learners and socioeconomically disadvantaged toward the value of education and the world of work (Program 16)

45. To identify disadvantaged and handicapped students and provide a program of cooperative education for them (Program 14)

46. To establish the career-centered curriculum as an integral part of the school system's curriculum (Program 26)

47. To develop curriculum guides and instructional materials which might be utilized by other career-centered programs (Program 26)

48. To prepare the student to be a knowledgeable consumer of particular services (Program 6)

49. To bridge the gap between education and the world of work (Program 16)

50. To provide an in-service program for counselors (Program 14)

Instructional and Community Activities

The subject areas used as the vehicle for teaching career education concepts vary from program to program. A few programs rely on one or two subject areas such as social studies, industrial arts, vocational education, and economics. The most common trend,
however, is to incorporate the career education concept into all program areas within the school setting.

Career education may take the form of complete units to be used independently of other courses, supplementary units for existing programs, or aids for program improvement. Supplementary units used with existing instructional programs are the most common.

Several innovative instructional activities and community involvement activities were identified through study of the twenty-six career education programs referred to earlier. These examples may be adapted by the program planner or trigger additional ideas. The numbered programs are identified in Appendix A.

**Instructional Activities**

1. Development of an "occupations mall" or high school career development center (Program 5)
2. Coordination of the school program with the Model Cities program (Program 25)
3. Use of paraprofessionals from minority groups (Program 13)
4. Use of the language of the home to provide occupational information where many languages are used in a particular locale (Program 13)
5. Transportation provided for the cooperative education program (Program 13)
6. A residential post-secondary vocational and technical school provided for disadvantaged youth (Program 17)
7. Materials classified according to difficulty with no grade level assignment (Program 7)
8. Cluster curriculum at the secondary level is coordinated with the program at the post-secondary level (Program 21)
9. Vocational and academic education programs are integrated into one general education program (Program 21)
10. Students alternate in a work slot under a team plan for cooperative education (Program 1)
11. Cooperative project established between the hospital and school for allied health program (Program 4)
12. Development of a guide which contains grade level, subject matter, and units of instruction (Program 20)
13. Development of strong ties with community action groups (Program 9)

14. Strong concentration on human resources development concept (Program 9)

15. Simulation experiences in the occupations being studied (Program 10)

16. Mobile units used for teaching consumer education (Program 11)

17. Parental participation in conferences (Program 26)

18. Exploratory programs offered during the summer (Program 26)

19. Skilled craftsmen used as part-time instructors (Program 16)

20. Establishment of an occupational resources center for the middle grades (Program 16)

**Community Involvement Activities**

The success of any educational program is largely dependent upon the support of the community. Some very fine programs have failed in the past because of the lack of understanding and involvement of the community sector.

Some activities and procedures which might be helpful in implementing career education programs are:

1. use of community volunteers (Programs 12, 19, 21);
2. use of instructors from industry (Programs 19, 21);
3. support from community agents (e.g., government employees) (Programs 9, 12, 16, 19, 21, 22, 26);
4. support from community action groups (e.g., civic organizations) (Programs 9, 12, 16, 19, 21, 22, 26);
5. reliance on employer contacts for placement (Program 13);
6. working through university students (Program 7);
7. conducting workshops (Program 15);
8. dissemination through local, state and national professional associations (Program 7);
9. use of newspaper articles (Programs 2, 5, 7, 11, 15, 16, 21);

10. utilization of television and radio spot news announcements and talk shows (Programs 2, 5, 7, 15, 21);

11. articles in professional journals (Programs 5, 7);

12. talks to civic organizations (Programs 2, 12, 15, 21, 22, 26);

13. use of advisory committees made up of local and state persons (Programs 10, 12, 16, 21, 23);

14. making home visits (Program 11);

15. mailing newsletters to parents (Program 11);

16. cooperation with parent-teacher associations (Programs 2, 15, 22, 26);

17. conducting open house activities (Program 15); and

18. sponsoring occupational fairs with local businesses and industries participating (Program 15).

All of the goals and activities will not be appropriate for every educational program and community. Program planners need to determine the specific goals of their career education program and identify resources available in the community before selecting instructional and community involvement activities. More detailed descriptions of activities and/or implementation techniques might be secured by contacting the referenced programs.
SUMMARY

Career education has received special attention by the U.S. Office of Education since early 1971. In this time much has been accomplished, due to direct action taken by USOE and because many local educators have recognized the value of the career education concept. However, the success or failure of career education is dependent upon the imagination and innovativeness of educators at all levels.

The concept of career education certainly is not new, many of the ideas have been advocated and tried by hundreds of persons and institutions in the past. What is new, is that many of the scattered successful ideas are being put into a single program which encompasses the entire educational curriculum. The dichotomy between academic and vocational education has never before had so great a chance of being eliminated. If educators will accept career education and put forth the effort and resources necessary, students should have the opportunity to develop to their full capacity and become contributing members to the maintenance and healthy functioning of society.

Considerable effort, time, money and other resources are needed to provide a viable program of career education. Taylor (1972) identifies several implications career education has for educational leadership. These include:

1. determine the knowledge and beliefs of key community groups concerning career education;
2. determine the state of readiness of the educational staff to provide leadership in career education;
3. exploit the knowledge base which supports career education;
4. visit ongoing programs;
5. secure board action on career education and establish long-range program goals;
6. assess the congruence of current programs to career education goals;
7. involve the community in developing career education;
8. assess alternative delivery systems;
9. initiate staff development programs;
10. establish instructional materials development teams;
11. review manpower projections;
12. expand cooperative education;
13. provide continuing career education;
14. initiate an active community action program;
15. establish career education advisory councils;
16. operate a job placement service; and
17. maintain an effective evaluation capacity.

The purpose of this publication is not to "sell" individual programs. The intent is to give educators ideas from which to draw in designing and implementing their own programs. Individual schools have individual needs, and programs must be conceptualized, planned, and operationalized to meet those needs. Those who are waiting for a "packaged" program that can be bought and installed, may find themselves left behind. If education is to become purposeful and relevant, immediate action must be taken.

Through the material in this document and through a review of suggested programs and literature, educators should be made aware of just what the concept of career education means. By examining characteristics of other programs, a basis should exist from which individual programs can be planned. Implementation should be simplified and expedited if educators become aware of the potential problem areas and initiate action to overcome the problems. The responsibility for program development must be accepted by local educators.
APPENDIX A

CAREER EDUCATION PROGRAM ANNOTATIONS AND REFERENCES

1. Alabama

COMPREHENSIVE OCCUPATIONAL EDUCATION PROGRAM FOR THE ELEMENTARY AND SECONDARY SCHOOL

Grades four-twelve are included in this program designed to provide occupational orientation, guidance and counseling, vocational programs and student personnel services. Vocational education and industrial arts teachers are heavily involved, and a unique feature of the program is a team plan for cooperative education.


2. Arkansas

SCHOOL AND BUSINESS RELATIONSHIPS

Developed for grades ten-twelve, this program relates to business education with performance objectives included for students along with teacher objectives. Major program objectives include: (1) to provide students with information related to vocational legislation; (2) to develop an understanding of interpersonal relationships between persons in various occupations and career roles; and (3) to provide cooperative education opportunities and occupational guidance.

Jordan, Mabel, comp. Arkansas General Cooperative Education Course of Study--1st Year, Units I-IV. Fayetteville: Department of Vocational Education, Arkansas University; and Little Rock: Division of Vocational and Technical Adult Education, Arkansas State Department of Education. n.d. 615 pp. VT 015 432, see AIM Vol. 5, No. 4.

3. Arkansas

PILOT OCCUPATIONAL EDUCATION PROGRAMS FOR SMALL RURAL AND SUBURBAN ARKANSAS SCHOOLS, GRADES FIVE THROUGH TWELVE.
This program for grades five-twelve integrates occupational orientation into the curriculum. Special attention has been focused on the dropout prone students and those about to make a decision on work. The program varies according to pupil needs with concentration on small rural and suburban schools.


4. California

**THE UCLA ALLIED HEALTH PROFESSIONS PROJECT**

This program is designed to begin in grade ten and prepares students to make an appropriate career choice within the allied health occupations. Also, preparation of the student to continue in advanced training and to function satisfactorily as an employee are major goals. Cooperative arrangements with hospitals and clinics, and field trips are unique features.


5. Delaware

**AN OCCUPATIONAL-VOCATIONAL EDUCATION MODEL FOR THE STATE OF DELAWARE**
Designed for grades K-twelve, this program was established to provide: (1) work experience and cooperative education; (2) specific job skills; and (3) intensive occupational guidance and counseling. An occupations mall is being developed, and consideration is also being given to students who are emotionally and mentally retarded. A career education resource center contains over 100 books.


6. Florida

AN EXEMPLARY MODEL FOR A TOTAL ECOLOGICAL APPROACH TO NONGRADED VOCATIONAL PROGRAMS IN SEPARATE EDUCATIONAL CENTERS

This exemplary program was developed to: (1) improve attitudinal interaction of the student with his environment; (2) improve academic achievement; (3) develop occupational skills; and (4) better prepare teachers to deal effectively with disadvantaged students. Students range in age from thirteen to eighteen years, and include both the disadvantaged and handicapped. Nongraded vocational skill training, individualized instructional packages and around-the-clock counseling are utilized.


7. Illinois

THE OCCUPAC PROJECT

This project was designed to explore new approaches for presenting K-nine occupational information. Individualized instruction is used to provide self-contained, self-directing activities with no implications in terms of prerequisites or required topics. Materials are classed according to difficulty and can be used for specific occupational areas.
8. Kansas

**LAWRENCE CAREER EDUCATION K-TWELVE**

This program is intended to: (1) help students become aware of the types of jobs available; (2) give students an opportunity to explore the possibilities in relation to their own self-awareness; and (3) prepare students to qualify for their role in the world of work. Components for disadvantaged and handicapped youth, and the educable mentally retarded are included. All subject areas within the school are involved.


9. Kentucky

**A "UNIVERSE MODEL" OF OCCUPATIONAL EDUCATION FOR PIKEVILLE, KENTUCKY IN CONJUNCTION WITH THE PIKEVILLE MODEL CITIES PROGRAM**

Developed and administered through a project headquartered at Eastern Kentucky University, this program is intended for grades one-twelve. Major objectives are to: (1) meet the manpower needs of society; (2) increase individual options available to each student; (3) serve as a motivating force to enhance all types of learning; and (4) provide occupational information. There is a strong orientation to the total human resources development concept, and integration of occupational orientation activities with basic educational skill development is emphasized.

10. Louisiana

AN EXEMPLARY PROGRAM FOR OCCUPATIONAL PREPARATION

This program has resulted from a three-year exemplary project which is due to end in June 1973. Major objectives of the program, designed for grades one-twelve, are to: (1) change students' attitudes about work; (2) provide vocational guidance and job entry training for disadvantaged youth; and (3) provide information about a wide range of occupations. The program is coordinated with the Model Cities program, and the subject areas involved include social studies, industrial arts and vocational education.


11. Mississippi

THE CAREER-CENTERED CURRICULUM FOR VOCATIONAL COMPLEXES IN MISSISSIPPI

Major objectives of this program, for grades one-twelve, are to: (1) relate occupational instruction and counseling to elementary students; (2) establish a career centered curriculum; and (3) develop curriculum guides and instructional material. A previous project is used and a remedial program is included. In the upper grades, project teachers are used to teach complete units independent of other courses and they provide services to elementary students and teachers.


12. Montana

"THE NEXT STEP" - A COMPREHENSIVE PROGRAM IN OCCUPATIONAL PREPARATION AND PLACEMENT. (Montana)

With provisions for grades one-fourteen, this program relies on all subject areas. Major goals are to: (1) broaden the occupational orientation for youth; (2) prevent dropouts; (3) give practical work experience; and (4) create bridges between school and earning a living. The program is coordinated with Model Cities and special emphasis is given to handicapped and disadvantaged youth.

13. New Mexico

TRI-CULTURAL VOCATIONAL EXPLORATORY CAREER AND WORK EXPERIENCE PROGRAM.

Providing exploratory career education and occupational guidance to every student in grades K-twelve is the primary objective of this program. Information is provided in the language of the homes and Indian and Spanish surnamed paraprofessionals are used in this severely deprived economic situation. Work experience opportunities, placement and job-entry training are provided.


14. New York

MANPOWER AND ECONOMIC EDUCATION

This program has been pilot tested for one semester. The intent is to: (1) enhance student awareness and stimulate discussion; and (2) promote student involvement in exploring the worlds of economics and work. An instructor's guide and student manual were developed with focus on manpower development.


15. North Carolina

INTRODUCTION TO VOCATIONS

Developed for grades six-nine, with primary emphasis in grade nine, this program emphasizes occupational guidance. Experimental units for slow learners, fast learners and special interest groups are unique. A complete unit is for use independent of other courses.


16. *North Carolina*

**THE IMPLEMENTATION OF A COMPREHENSIVE OCCUPATIONAL EDUCATION PROGRAM IN A RURAL SCHOOL SYSTEM (APEX PROJECT)**

The intent of this program for grades one-twelve is to: (1) provide vocational guidance, orientation, and instruction; (2) improve student attitudes toward themselves and others; (3) increase student interest in post-secondary training; and (4) place all students in employment who want to be placed. An occupational resource center is used for the middle grades and skilled craftsmen participate as part-time instructors.


17. *North Dakota*

**A PROGRAM IN DEVELOPMENTAL VOCATIONAL GUIDANCE (K-TWELVE) AND OCCUPATIONAL PREPARATION FOR THE CHANGING WORLD OF WORK.**

Developed by the North Dakota State Board of Education, this project began June 1970 and is due to end June 1973. The program, designed for grades K-twelve, was developed to provide: (1) broad occupational orientation; (2) cooperative education; (3) specific training in job entry skills; and (4) intensive occupational guidance and counseling. Residential post-secondary and vocational-technical institutions are provided, as well as summer programs. Heavy emphasis is placed on guidance.

18. Ohio

CAREER ORIENTATION (SEVEN-EIGHT)

This program for grades seven and eight is one part of a three part program for grades K-ten. All subject areas in the school are involved with providing a career orientation to 100 percent of the students. Major objectives are to help students: (1) learn more about their ability, interests, and aptitudes; (2) become acquainted with occupational and educational opportunities; (3) begin planning a future curriculum; and (4) develop positive attitudes toward work. Outside resource persons and hands-on experience are utilized in the program.


19. Ohio

WORLD OF WORK CAREER PROGRAM K-SIX

This program for grades K-six is one part of a three part program for grades K-ten. The intent is to develop career awareness through materials contained in a teachers guide, through field trips, resource speakers, and other methods. One important objective is to help students learn to value the dignity, importance, and interdependence of all types of work and skills.


20. Oregon

INCREASING THE VOCATIONAL AWARENESS OF ELEMENTARY SCHOOL CHILDREN.

Designed for grades four-six, this program is intended to increase the vocational awareness of students, provide them with wholesome attitudes and give them an opportunity to develop self-understanding. The skilled, semi-skilled, service and professional occupations are taught through all subject areas.

21. Oregon

PROJECT VIGOR

Vocational orientation, guidance, work experiences and placement are activities of concern for grades one-fourteen. A model vocational education system is demonstrated involving elementary and secondary schools and the community college. Awareness of career education as part of general education and encouragement for teachers to propose their own programs are emphasized.


22. South Dakota

K-TWELVE PROJECT IN CAREER DEVELOPMENT AND BRIDGING THE GAP BETWEEN SCHOOL AND WORK

As the central focus for all exemplary activities in the state, this program encompasses grades K-twelve. Occupational information at the elementary level, and occupational information, orientation, and exploration at the secondary level are major concepts covered. Particular attention is given to disadvantaged and handicapped youth.


23. Tennessee

CONTEMPORARY CURRICULUM LABORATORY

This program integrates career education into the total curriculum for grades K-twelve. Major components include occupational guidance, cooperative education, placement and follow-up. Particular emphasis is placed on disadvantaged and handicapped youth. Continuous in-service education activities are provided. The school system works closely with University and Research Coordinating Unit personnel in the program.

Knox County Board of Education. Contemporary Curriculum for Career Development. Knoxville, TN: Knox County Board of Education. n.d. 182 pp. VT 015 533.
24. Utah

DIVERSIFIED-SATELLITE OCCUPATIONS PROGRAM

This district wide program was developed for grades five-twelve. It has three divisions: elementary, junior high, and high school. Occupational orientation, dropout prevention, individualized instruction, occupational guidance, placement and elements for disadvantaged and handicapped youth are major components. All subject areas are involved in the program.


25. Washington

CENTRAL AREA SCHOOLS OCCUPATIONAL DEVELOPMENT PROGRAMS

Students in grades five-twelve are provided occupational information to leave high school with a marketable skill. The program is coordinated with the Model Cities program, and a placement coordinator helps students secure work and educational opportunities after graduation. Leased facilities provide opportunities usually available through cooperative arrangements.


26. West Virginia

IMPROVING A RURAL AREA SCHOOL PROGRAM WITH EXPANDED VOCATIONAL EDUCATION SERVICES BY UTILIZING COMPREHENSIVE CAREER ORIENTATION AND EXEMPLARY ACTIVITIES

This comprehensive program for grades one-twelve provides career awareness, career orientation, and career exploration. Major objectives are to: (1) provide an intensified occupational guidance, counseling, and placement program; (2) provide activities for skill development; and (3) promote positive attitudes toward all fields of work. Two unique features are: (1) parent participation in conferences, and (2) a special summer exploratory program. All disciplines are included in the program.

APPENDIX B*

FEDERALLY FUNDED EXEMPLARY PROJECTS IN VOCATIONAL EDUCATION (Part D of the Vocational Education Amendments of 1968)

ALABAMA

Comprehensive Occupational Education Program for the Elementary and Secondary School. (Huntsville City Board of Education)

Ben Garmon, Director of Vocational Education, Huntsville School System, Post Office Box 128, Huntsville, Alabama 35804

ALASKA

Fairbanks North Star Borough School District Orientation-Work-Study-Placement Program. (Fairbanks North Star Borough School District)

Irene Cleworth, Fairbanks North Star Borough School District, Fairbanks, Alaska 99701

ARIZONA

Tucson Model Cities Exemplary Vocational Education Program (Tucson Public School District No. 1)

Louis J. Bazzetta, Tucson Public Schools, District 1, Robert D. Morrow Education Center, Post Office Box 4040, Tucson, Arizona 85717

ARKANSAS

Pilot Occupational Education Programs for Small Rural and Suburban Arkansas Schools, Grades five through twelve (Arkansas State Board for Vocational Education)

Buel R. "Buddy" Lyle, Director of Exemplary Programs, State Department of Education, Little Rock, Arkansas 72201

CALIFORNIA

Community College Vocational Cooperative Education (San Mateo Junior College District)

Robert L. Bennett, Assistant to the Chancellor, 2040 Pioneer Court, San Mateo, California 24402

COLORADO

Operation Bridge--Innovative, Comprehensive Vocational Education Program for Disadvantaged Youth (Aims Junior College District)

Henry M. DePetro, Associate Director of Operation Bridge, Aims College, Box 69, Greeley, Colorado 80631

CONNECTICUT

Career Education (Bridgeport Board of Education)

Joseph Bonitatebus, Director, Bridgeport Board of Education, 45 Lyon Terrace, Bridgeport, Connecticut 06604

DELAWARE

An Occupational-Vocational Education Model for the State of Delaware (State Board for Vocational Education)

Joseph L. English, Director, Occupational-Vocational Education, Project Office, Milford School District, 906 Lakeview Avenue, Milford, Delaware 19963

GEORGIA

A Developmental Program of Occupational Education (Cobb County Board of Education)

Joel R. Smith, Project Director, Post Office Drawer "R," Marietta, Georgia 30060

HAWAII

Occupational Information and Guidance Service Center (Hawaii State Community College System)

Kenneth Yoon, Occupational Information and Guidance Service Center, State Department of Education, 1150 S. King Street, Suite 304, Honolulu, Hawaii 96814
IDAHO

Exemplary Cooperative Education Program for the Development of Occupational Skills, Work Habits, and Attitudes (Canyon School District Number 139)

Floyd W. Merrill, Canyon School District No. 139, Route 4, Box 56J, Caldwell, Idaho 83605

ILLINOIS

Bridging the Gap Between High School and the World of Work (Chicago Board of Education)

Joseph J. Dixon, Assistant Superintendent, Department of Vocational and Practical Arts Education, Chicago Board of Education, 228 LaSalle Street, Chicago, Illinois 60601

INDIANA

Comprehensive Vocational Guidance Program for Model Cities (Indianapolis Public Schools)

Raymond Winegard, Service Center, Room 206, 901 Carrollton Avenue, Indianapolis, Indiana 46204

IOWA

Area-Wide Project for Occupational Orientation, Exploration, Counseling, Job Training, and Job Placement for Elementary and Secondary Students (Pottawattamie County Board of Education)

Earl E. Winter, Director, Guidance and Vocational Education, Pottawattamie County School System, Route 1, Council Bluffs, Iowa 51501

KANSAS

An Exemplary Program in Occupational Education in Typical Rural, Rural-Urban and Urban School Settings (Kansas State Board of Education)

Wilbur A. Rawson, Director, Exemplary Programs, Kansas State Department of Education, 120 East 10th Street, Topeka, Kansas 66612
KENTUCKY

A "Universe Model" of Occupational Education for Pikeville, Kentucky in Conjunction with the Pikeville Model Cities Program (Eastern Kentucky University)

John Jenkins, Director of the Universe Model, Begley Building, Eastern Kentucky University, Richmond, Kentucky 40475

LOUISIANA

An Exemplary Program for Occupational Preparation (New Orleans Public Schools)

William G. Young, Supervisor of Industrial Education, New Orleans Public Schools, 703 Carondelet Street, New Orleans, Louisiana 70130

MAINE

New Opportunities for Work (NOW) (Lewiston Public School District)

Kenneth C. Jordan, Vocational Director, Lewiston, Public School District, 65 Central Avenue, Lewiston, Maine 04240

MARYLAND

Maryland Career Development Project (K-Adult) (Maryland State Department of Education)

E. Niel Carey, Supervisor of Vocational Education, State Department of Education, 600 Wyndhurst Avenue, Baltimore, Maryland 21210

MASSACHUSETTS

A Community Development Approach to Vocational and Leadership Training Using a Career Development Center (The New Urban League of Greater Boston, Inc.)

Melvin H. King, New Urban League of Greater Boston, Inc., 100 Warren Street, Roxbury, Massachusetts 02119

MICHIGAN

Vocational Career Development Program (School District of the City of Pontiac)
Robert Rochow, Program Director, Vocational Career Development Program, Northeast Oakland Vocational Center, 1351 North Perry Street, Pontiac, Michigan 48058

MINNESOTA

A Project to Demonstrate Making Vocational Education More Accessible to Persons in Rural Minnesota Through Cooperative Vocational Centers (Minnesota State Board for Vocational Education)

Robert P. Van Tries, Assistant Commissioner, Division of Vocational-Technical Education, Centennial Building, St. Paul, Minnesota 55101

Exemplary Vocational Education Program Based on Environmental Studies (K-fourteen) (Minnesota Environmental Sciences Foundation, Inc.)

Barbara Clark, Director of Programs, Environmental Science Center, 5400 Glenwood Avenue, Golden Valley, Minnesota 55422

Cliff E. Helling, Coordinator, Vocational Education District 281, Robbinsdale, Minnesota 55428

MISSISSIPPI

Career Centered Curriculum for Vocational Complexes in Mississippi (Mississippi State Department of Education)

J. H. McMinn, Coordinator of Research, Curricula, and Teacher Education, Division of Vocational-Technical Education, Box 771, Jackson, Mississippi 39205

MISSOURI

Outreach for Urban Inner City Youth (School District of Kansas City, Missouri and Metropolitan Junior College District, Kansas City, Missouri)

Donald J. Welsh, Director of Vocational-Technical Education, Donald R. Sheets, District Coordinator of Vocational-Technical Education

MONTANA

"The Next Step" - A Comprehensive Program in Occupational Preparation and Placement (School District Number 1, Lewis and Clark County)
William A. Korizek, Director of Vocational Education, Helena Public Schools, Helena, Montana 59601

NEBRASKA

Expanded Vocational Education Program for Disadvantaged Youth: Occupational Guidance K-12, Comprehensive Center for Occupational Education (Omaha Public Schools)

Edwin H. Parrish, Assistant Superintendent of Schools, Vocational and Adult Education Services, 3902 Davenport Street, Omaha, Nebraska 68131

NEVADA

Washoe County School District Sequential Approach to Vocational Education - An Exemplary Program (University of Nevada)

Len Lawrence Trout, Jr., Director, Research and Educational Planning Center, College of Education, University of Nevada, Reno, Nevada 89507

NEW HAMPSHIRE

World of Work (WOW) (Contoocook Valley, Regional School District, Peterborough, New Hampshire)

John Mandell, Vocational Coordinator, 3 Main Street, Peterborough, New Hampshire

NEW JERSEY

Career Development - A Pre-School to Adult Model Program for the Hackensack, New Jersey School District (Department of Education, Vocational Division, State of New Jersey)

Robert A. Briant, Supervisor of Vocational Guidance, Thomas W. Gambino, Director of Career Development, 225 West State Street, Trenton, New Jersey 08625

NEW MEXICO

Tri-Cultural Vocational Exploratory Career and Work Experience Education Program (Bernalillo Municipal Schools)

Raymond Gonzales, P.O. Box 158, Bernalillo, New Mexico 87004
NEW YORK

Guided Occupational Orientation-Training and Job Placement (Syracuse City School District)

Sidney L. Johnson, Assistant Superintendent for Occupational and Continuing Education, Syracuse City School District, 409 West Genesse Street, Syracuse, New York 13202

NORTH CAROLINA

The Implementation of A Comprehensive Occupational Education Program in a Rural School System (Wake County Schools)

Riley O. Carroll, Director of Occupational Education, Wake County Schools, Box 6526, 2302 Nobel Road, Raleigh, North Carolina 27608

NORTH DAKOTA

A Program in Developmental Vocational Guidance (K-twelve) and Occupational Preparation for the Changing World of Work (North Dakota State Board for Vocational Education)

Larry G. Selland, Supervisor of Exemplary Projects, State Board for Vocational Education, 900 East Boulevard, Bismarck, North Dakota 58501

OKLAHOMA

An Exemplary Comprehensive Occupational Orientation Vocational Education Program for Selected Oklahoma Schools (State Department of Vocational and Technical Education)

Ralph Dreesen, Chairman of Exemplary Programs, State Department of Vocational Education, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074

OREGON

Project VIGOR (David Douglas School District)

Omer K. McCaleb, Director of Career Education, David Douglas School District #40, Portland, Oregon 97236

PENNSYLVANIA

Selected Functional Components of a Vocational Education Counseling System for Urban Youth (Pittsburgh School District)
Robert G. Lamping, Director, Pittsburgh Public Schools, Occupational, Vocational, and Technical Education, 635 Ridge Avenue, Pittsburgh, Pennsylvania 15212

RHODE ISLAND

A Human Resources Career Development Model for Pawtucket, Rhode Island in Conjunction with the Pawtucket Model Cities Agency (Pawtucket School Department)

Edward M. J. Melucci, Director, Survey of Pre-vocational and Vocational Curriculum for Pawtucket School System, Pawtucket, Rhode Island 02860

SOUTH CAROLINA

"Exemplary Project in Career Education in South Carolina Region V (Lancaster County Board of Education)

Stuart R. Brown, Director, Region V Educational Services Center, P.O. Box 1069, Lancaster, South Carolina 29720

SOUTH DAKOTA

K through twelve Project of Career Development Occupational Counseling, and Bridging the Gap Between School and Work (Watertown Independent School District #1)

Thomas C. Stone, Director, Vocational and Technical Education, Southern State College, Springfield, North Dakota 57062

TENNESSEE

Project SPAN - An Accelerated Project for a Systems Program Approaching Non-Unemployment of Vocational Students (Memphis City Schools)

James E. Hugueley, Northside High School, 1212 Vollentine, Memphis Tennessee 38104

TEXAS

Vocational Opportunities Integrated in Current Education (VOICE) (San Antonio Independent School District)

Louis U. Antu, Program Specialist, San Antonio Independent School District, Area III, 1118 Guadalupe Street, San Antonio, Texas 78207
UTAH

Diversified-Satellite Occupations Program (Granite School District)

John Reed Call, Assistant Superintendent, Granite School District, 340 East 3545 South, Salt Lake City, Utah 84115

VERMONT

Integrated Vocational Education Program (Franklin Northeast Supervisory Union)

Forest Farnum, Superintendent of Schools, Franklin Northeast Supervisory Union, Richford, Vermont 05476

VIRGINIA

Dilenowisco Four I's Project (Intervention Introduction Investigation Involvement) (Dilenowisco Educational Cooperative)

Benny Coxton, P.O. Box 1006, Wise, Virginia 24293

WASHINGTON

Central Area Schools Occupational Development Program (Seattle Public School System)

Richard C. Hunter, Assistant Superintendent, Seattle Public Schools, 1000 Turner Way East, Seattle, Washington 98102

WEST VIRGINIA

Improving a Rural Area School Program with Expanded Vocational Education Services by Utilizing Comprehensive Career Orientation and Exemplary Activities (Lincoln County Schools)

Herbert Holstein, Director of Vocational Education, Lincoln County Schools, P.O. Box 437, Hamlin, West Virginia 25523

WISCONSIN

Articulation of Occupational Orientation Education and Placement in Private and Public Elementary, Secondary and Postsecondary Schools (Sheboygan Public Schools)

Charles Bingner, Board of Vocational, Technical and Adult Education, District 11, 933 Erie Avenue, Sheboygan, Wisconsin 53081
Wyoming

The Development and Demonstration of a Functional Model System of Occupational Education for Wyoming Public Education K-fourteen (Wyoming State Department of Public Instruction and State Board for Vocational Education)

Paul Sizemore, Director of Exemplary Curriculum, Occupational Education Division, Capitol Building, Cheyenne, Wyoming 82001

District of Columbia

Implementing a K-twelve Career Development Program in the District of Columbia (The Public Schools of the District of Columbia)

Paul E. Cawein, 415 Twelfth Street, NW, Washington, D.C. 20004

Trust Territory of the Pacific Islands

Trust Territory of the Pacific Islands, Industrial Vocational Education Curriculum Orientation and Development Project (U.S. Trust Territory of the Pacific Islands, Department of Education)

Puerto Rico

Carolina School District Sequential Approach to Career Orientation and Preparation (Commonwealth Board for Vocational Education)

Gladys Sanchez, Guidance Counselor, Vocational and Technical Education, Department of Education, Calaf and Cesar Gonzalez Streets, Hato Rey, Puerto Rico 00919
APPENDIX C*

FEDERALLY FUNDED RESEARCH AND DEVELOPMENT PROJECTS IN CAREER EDUCATION (Part C of the Vocational Education Amendments of 1968)

In 1972, nine million federal dollars were allocated for use by the states to initiate developmental and pilot projects in career education. By June, fifty-six grant award documents had been issued, one to each state and territory of the United States, to establish a meaningful, well-developed career education program.

A contact for each of these projects is provided below:

Alabama

James Bishop, State Department of Education, State Office Building, Montgomery, Alabama 36104

Alaska

Louis D. Ridle, State Director of Vocational Education, Pouch F, Alaska Office Building, Juneau, Alaska 99801

Arizona

Sid Borcher, Director, Research Coordinating Unit, Division of Vocational Education, 1535 West Jefferson Street, Phoenix, Arizona 85007

Arkansas

Grady Knight, Coordinator of Program Planning, State Division of Vocational Education, State Education Building, Little Rock, Arkansas 72201

California

Paul N. Peters, Chairman, Departmental Task Force on Career Education, State Department Building, 721 Capitol Mall, Sacramento, California 95814

Colorado

Robert F. Barnes, Director, RCU, State Board for Community Colleges and Occupational Education, 207 State Services Building, 1525 Sherman Street, Denver, Colorado 80203

Connecticut

Saul Dulberg, Consultant in Career Education, Division of Vocational Education, P.O. Box 2219, Hartford, Connecticut 06115

Delaware

Walter Stein, Career Education Division, State Department of Education, Dover, Delaware 19901

Florida

Kenneth M. Eaddy, Division of Vocational, Technical, and Adult Education, Room 258, Knott Building, Tallahassee, Florida 32304

Georgia

Gene Bottoms, Associate State Director of Vocational Education, Department of Instruction, State Office Building, Atlanta, Georgia 30334

Hawaii

Emiko Kudo, Administrator, Vocational-Technical Education Section, 2327 Dole Street, Honolulu, Hawaii 96822

Idaho

Janet Latham, Supervisor, Home Economics/Exemplary, State Board for Vocational Education, 518 Front Street, Boise, Idaho 83702

Illinois

Ronald D. McCage, Coordinator, Research and Development, Vocational and Technical Education Division, 1035 Outer Park Drive, Springfield, Illinois 62706

Indiana

Jerry Keiser, State Coordinator, Career Exploration and Guidance, Department of Public Instruction, Division of Vocational Education, 1012 State Office Building, Indianapolis, Indiana 46204
Iowa
Kenneth M. Wold, Chief, Planning and Support Services, Career Education Division, Department of Public Instruction, State Office Building, Des Moines, Iowa 50319

Kansas
Wilbur Rawson, State Supervisor, Exemplary and Special Needs Programs, Division of Vocational Education, State Department of Education, 120 East Tenth, Topeka, Kansas 66612

Kentucky
Floyd McKinney, Associate Director of Vocational Education, Capitol Plaza Tower, State Department of Education, Frankfort, Kentucky 40601

Louisiana
John E. O'Dowd, Jr., Assistant Superintendent, Career Education, State Department of Education, P.O. Box 44064, Baton Rouge, Louisiana 70804

Maine
Charles W. Ryan, Director, Research Coordinating Unit, State Department of Education, Augusta, Maine 04330

Maryland
Nancy Pinson, Specialist, Pre-Vocational and Career Education, State Department of Education, 600 Wyndhurst Ave., Baltimore, Maryland 21210

Massachusetts
Clifford W. Easton, Director, Project CAREER, 123 North Main Street, Randolph, Massachusetts 02368

Michigan
Karl Stearns, Personnel Development, Exemplary and Research Unit, State Department of Education, P.O. Box 928, Lansing, Michigan 48904

Minnesota
Melvin Johnson, Director, Program Planning and Development, Vocational-Technical Education, Capitol Square, 550 Cedar Street, St. Paul, Minnesota 55101
Mississippi

James M. Morris, Division of Vocational and Technical Education, State Department of Education, Box 771, Jackson, Mississippi 39205

Missouri

B. W. Robinson, Assistant Commissioner and Director of Vocational Education, State Department of Education, Jefferson Building, P.O. Box 480, Jefferson City, Missouri 65101

Montana

Benjamin A. Ulmer, Director of Vocational and Occupational Skills, State Department of Education, Helena, Montana 59601

Nevada

Vernon J. Eardley, Director, Adult and Vocational Education, Washoe County School District, 395 Booth Street, Reno, Nevada 89502

New Hampshire

Gloria Cooper, Director, Research Coordinating Unit, State Department of Education, Stickney Avenue, Concord, New Hampshire 03301

New Jersey

Morton Margules, Associate State Director of Vocational-Technical Education, Department of Education, 225 West State Street, Trenton, New Jersey 08625

New Mexico

Dick Harneson, Director, Research Coordinating Unit, State Education Building, Santa Fe, New Mexico 87501

New York

John Surra, Program Manager - Career Education, State Department of Education, Room 1619, 99 Washington Avenue, Albany, New York 12210

North Carolina

Charles H. Rogers, Director, Research Coordinating Unit, Department of Public Instruction, Raleigh, North Carolina 27602

North Dakota

Robert Lamp, Supervisor of Vocational Guidance, State Board for Vocational Education, 900 East Boulevard, Bismarck, North Dakota 58501
Ohio
Cecil O. Tower, Division of Vocational Education, Department of Education, 65 South Front Street, Room 613, Columbus, Ohio 43215

Oklahoma
William D. Frazier, Director, Research Coordinating Unit, State Department of Education, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074

Oregon
Dan Dunham, Coordinator of Applied Research, Career Education Division, Board of Education, 942 Lancaster Drive, NE, Salem, Oregon 97310

Pennsylvania
Ferman B. Moody, Director, Research Coordinating Unit, P.O. Box 911, Harrisburg, Pennsylvania 17111

Rhode Island
Orrin La Ferte, Project Director, Career Education, State Department of Education, Roger Williams Building, 24 Hayes Street, Providence, Rhode Island 02908

South Carolina
Gary J. Lashway, Director, Research Coordinating Unit, Office of Vocational Education, 202 Rutledge Building, Columbia, South Carolina 29201

South Dakota
Roy Ziegler, Assistant State Director of Vocational Education, 222 West Pleasant Drive, Pierre, South Dakota 57501

Tennessee
Edward Hudgens, Coordinator, Program Services Section, Division of Vocational-Technical Education, State Department of Education, 204 Cordell Hull Building, Nashville, Tennessee 37219

Texas
Ray Barber, Director, DORD, Texas Education Agency, 201 East 11th Street, Austin, Texas 78701
Utah

Jed W. Wasden, Coordinator of Secondary Programs, Utah State Board for Vocational Education, 1300 University Club Building, 136 East South Temple Street, Salt Lake City, Utah 84111

Vermont

Walter Faulkner, Consultant in Career Education and Vocational Guidance, State Division of Vocational and Technical Education, State Office Building, Montpelier, Vermont 05602

Virginia

Carl E. Jorgensen, Vocational Education Research and Statistical Information, State Department of Education, Richmond, Virginia 23216

Washington

George P. Pilant, Director, Research Coordinating Unit, P.O. Box 248, Olympia, Washington 98501

West Virginia

Fred W. Eberle, State Director of Vocational Education, State Department of Education, Charleston, West Virginia 25305

Wisconsin

Roland J. Krogstad, Research Consultant, Board of Vocational, Technical, and Adult Education, 137 East Wilson Street, Madison, Wisconsin 53703

Wyoming

Fred P. Black, Director of Occupational Education, State Department of Education, Cheyenne, Wyoming 82001

District of Columbia

Susie Morgan, Supervisor, Career Counseling and Placement, D.C. Public Schools, 5th and K Strs. NE, Washington, D.C. 20004

Puerto Rico

Gladys Sanchez, Director, Guidance and Counseling, Department of Education, Box 759, Hato Rey, Puerto Rico 00919

Virgin Islands

Wilburn Smith, Jr., Director, Vocational and Technical Education, Department of Education, P.O. Box 630, Charlotte Amalie, St. Thomas, Virgin Islands 00801
Guam

Duane I. Pierce, Acting Associate Superintendent for Vocational Education, Guam Department of Education, Agana, Guam 96910

American Samoa

Richard Reinhart, Coordinator for Vocational Education, Department of Education, Government of American Samoa, Pago, Pago, American Samoa 96920

Trust Territory of the Pacific Islands

William Brandner, Pre-Vocational Coordinator, Office of the High Commissioner, Trust Territory of the Pacific Islands, Saipan, Mariana Islands 96950
APPENDIX D

FUNDED PROPOSALS FOR CURRICULUM DEVELOPMENT PROJECTS IN VOCATIONAL AND TECHNICAL EDUCATION FY 1971 (Part I of Public Law 90-576)

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<tr>
<td>Career Education Curriculum Awareness for School Administrators</td>
<td>Maryland State Bd. for Voc. Education</td>
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<td>Baltimore, Maryland</td>
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<td>Career Education in Natural Resources</td>
<td>Pennsylvania State University</td>
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<td>University Park, Pennsylvania</td>
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<td>Cooperative State Implementation Workshops for Curriculum-Involved</td>
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<td>Career Development Guidance and Counseling</td>
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<td>Curriculum Guides for Textile, Apparel and Accessories Indus.</td>
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<td>New York, New York</td>
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<td>Curriculum Guidelines for Recreation, Hospitality, and Tourism</td>
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<td>Curriculum Modules for Child Care/Development Occupations</td>
<td>Atlanta Public Schools</td>
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<td>Development of a Pilot Model Curriculum for Computer Sciences</td>
<td>Central Texas College</td>
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<td>Environmental Occupations Awareness Workshops</td>
<td>Olympus Research Corporation</td>
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<td>Establishment of the Institute for Education and Technology</td>
<td>Edutek, Inc.</td>
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<td>Job Cluster Curricula for Communications and Media at the High School</td>
<td>Oregon State Bd. for Voc. Education</td>
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*Prepared by: Business Management Unit; Bureau of Adult, Vocational and Technical Education. (Washington, D.C., 1971)
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<td>Job Cluster Curricula for Public Service Occupations at the High School Level</td>
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<td>Job Cluster Curricula for Transportation Occupations at the High School Level</td>
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<td>Machine Aided Instruction for Career Education</td>
<td>Ohio State Bd. for Voc. Education</td>
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<td>Pilot Interstate Project: Curriculum for Planning</td>
<td>COMPULEARN</td>
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<td>Pittsburgh, Pennsylvania</td>
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<td>The Inventory of Air Force Vocational Course Materials for Possible Adaptation to the Civilian School System</td>
<td>Utah State Board of Education</td>
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<td>Salt Lake City, Utah</td>
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<td>The Outlook for Careers Through Vocational and Technical Education</td>
<td>Aerospace Education Association</td>
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<td>Vocational Education-AMIDS Curriculum Development Workshops for Vocational Personnel</td>
<td>Science Research Association, Inc.</td>
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BIBLIOGRAPHY


1Bibliographic entries followed by an EL number are generally available in hard copy or microfiche through the Educational Resources Information Center (ERIC). This availability is indicated by the abbreviations, MF for microfiche and HC for hard copy. Order from ERIC Document Reproduction Service (EDRS), P.O. Drawer O, Bethesda, Maryland 20014. Payment must accompany orders totaling less than $10.00.
State Department of Education. May, 1970. 43 pp. ED 048 481 MF $0.65 HC $3.29.


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West Georgia College, Carrollton, Georgia, August 20, 1968.
Columbus: Division of Guidance and Testing, Ohio State Department of Education. April, 1969. 12 pp. ED 033 386 MF $0.65 HC $3.29.


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Mississippi State Department of Education. *Cooperative Program (Educable Mentally Retarded).* Jackson: Division of Instruction, Mississippi State Department of Education. 1970. 46 pp. ED 044 843 MF $0.65 HC $3.29.


. "Perspectives on Career Education." Presentation at the meeting of the Oregon Association of School Administrators, Oregon State University, Corvallis, Oregon, March 30, 1972. 46 pp. ED 064 479 MF $0.65 HC $3.29.


