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ABSTRACT

Career education is defined in this handbook as a comprehensive educational program wherein the student's attention is focused on careers, beginning in grade 1 or earlier and continuing through the adult years. It is noted that the expected outcomes of career education are that every student will develop the competencies necessary for life and for making a living. Implementation of an integrated career education program is described in terms of the administrative plan, curriculum development, instructional development teams, pupil personnel services, the school organizations and activities program, placement services, staff development, community involvement, advisory committees, and evaluation. Three levels of career education programs are discussed: (1) the program designed for the elementary school, which should be developmental; (2) the junior high school program, which is basically explorative; and (3) the high school program, which is built upon the cumulative experiences of the student and which provides opportunities for investigating careers in depth. Lists of career development materials and audiovisual and instructional materials are included, along with copies of suggested resource questionnaires, data card file forms, and letters to be used in developing a career education program. (PS)

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By
Everett D. Edington and Howard K. Conley
Educational Resources Information Center (ERIC)
and
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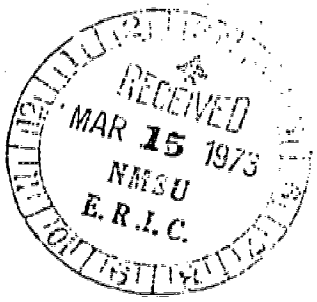

CAREER EDUCATION HANDBOOK FOR RURAL SCHOOL ADMINISTRATORS

by

Everett D. Edington
Director, ERIC/CRESS
Professor of Educational Administration
New Mexico State University

Howard K. Conley
ERIC/CRESS Research Associate
New Mexico State University

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EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS (CRESS)

New Mexico State University

Las Cruces, New Mexico 88003

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CONTENTS

INTRODUCTION

A great many of the young people in our nation are served by career and vocational education programs in comprehensive high schools and area vocational schools. Large numbers of our rural youth, however, do not have such opportunities--particularly in small schools in isolated areas where it is impossible to have large, coordinated programs of career education (Swanson, 1959).

In addition, rural communities often lack the business and industry necessary for providing work-experience programs. Most rural schools do not have an administrator whose primary responsibility is vocational education, and there are no direct lines of communication relative to resources for vocational education programs.

With these problems in mind, this handbook was developed to provide guidelines to assist the rural school administrator in planning and administering career education programs and to provide insights into developmental programs which will aid the administrator in the isolated school in establishing a program within his school which will assist his students to become career oriented. Included in this handbook are suggested career education programs, sources of curriculum materials, possible routes of additional funding, evaluative criteria, a survey of existing programs, and an extensive bibliography.

At present, more persons are graduating from a four-year college with a bachelor's degree than there are jobs for degree holders. By the end of this decade, eight out of ten jobs in America will not require a baccalaureate degree (DHEW Publication #[OE] 72-39, 1971). Considering these facts, it is hoped that career education will provide the students with an attainable goal orientation; will broaden their horizons by making them aware of the vast range of career options open to them; will provide motivation to encourage them to pursue appropriate educational routes to their chosen career goals; and, by integrating the traditional curriculum with the career education curriculum, make the educational process more relevant to them.

Career education is, to a large extent, a process of self-development. It is the process of helping a student to understand accurately both himself and the world of work, the specific educational and job requirements of occupations, entry and progress in educational pursuits, and, ultimately, the choice of a vocation.

Effective career education must start at the very beginning of a child's education. It must be continuous and properly sequenced until the child completes the educational gamut and is established in a career. Also, career education must provide opportunity for continuing education to update skills and/or to provide opportunity to prepare for a new career. Provision must be made for reentry into the educational system by those who are already established in the world of work but who wish to upgrade their employment or change to another line of work to attain more personal satisfaction.

DEFINITION

Career education is a comprehensive educational program wherein the student's attention is focused on careers, beginning in grade 1 or earlier and continuing through the adult years. For elementary and secondary education, the program includes a structuring of basic subjects, grades 1-12, around the theme of career opportunities and requirements in the world of work. In elementary school, students are informed about the wide range of jobs in our society and the roles and requirements involved. In junior high school, students may explore several specific clusters of occupations (see Fig. 1) through hands-on experiences as well as through classroom instruction. Assistance in selecting an occupational cluster for further specialization is offered at the senior high school level. In senior high school, students are ready to pursue their selected occupational cluster by exercising one of three options: (1) intensive job preparation for entry into the world of work immediately upon leaving high school, (2) preparation for postsecondary occupational education in a technical school or formal apprenticeship program, or (3) preparation for a four-year college (Career Education: A Model for Implementation, 1971).

Career education not only provides job information and skill development but also helps students develop attitudes about the personal, psychological, social, and economic significance of work. Extensive guidance and counseling activities assist the student in developing self-awareness and in matching his interests and abilities with potential careers. However, adequate programs of this nature are often not available in rural areas.

Thus, comprehensive career education includes a sequentially developed education program offering career awareness, career exploration, and job preparation for all students. A major benefit of such a program is that students' performance in basic subjects should improve as the entire curriculum is made more relevant and meaningful by being focused and unified around career education. The responsibility for career education rests with every teacher in such an integrated program. This is very important in rural schools where there may not be guidance personnel. Each teacher must teach for transfer of his subject into the world of work. Teachers cannot assume that the student will make the relevant interpretation on his own.

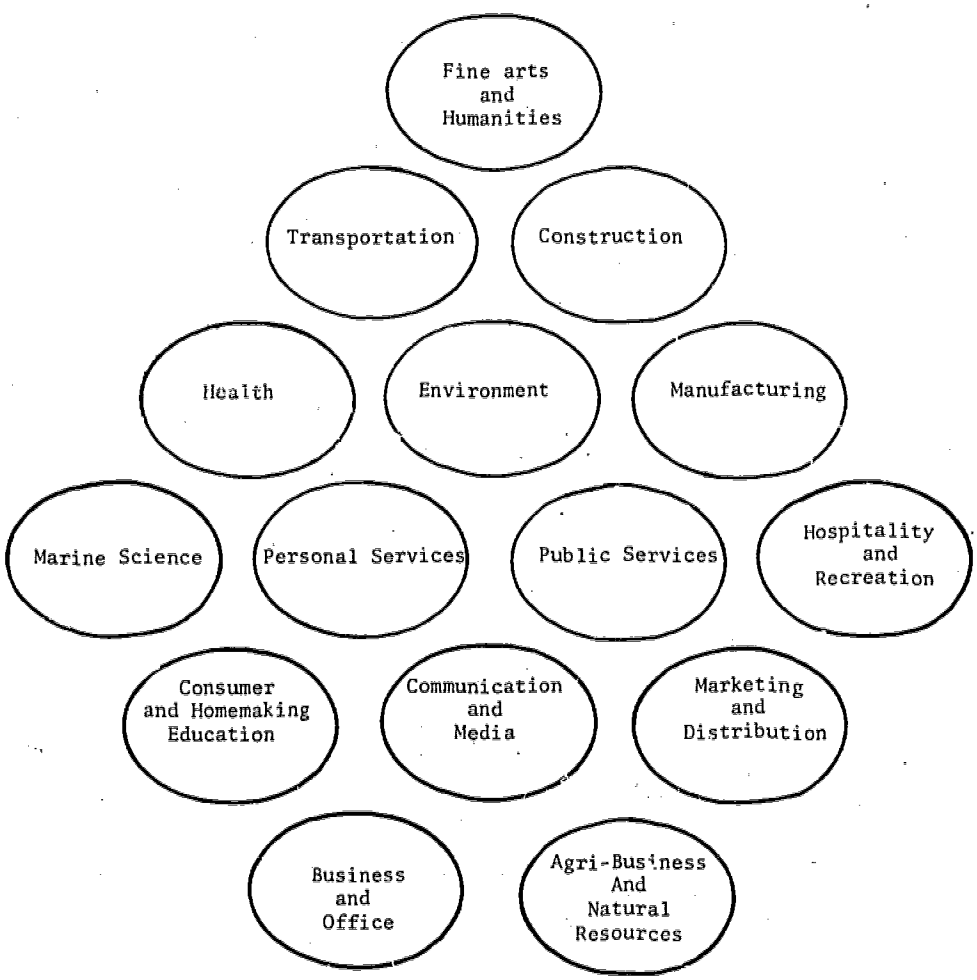

Figure 1. Occupational clusters (Career Education, 1971).

OBJECTIVES

The expected outcomes of career education are that every student will develop competencies necessary for life and for making a living and will develop appropriate attitudes toward work and the worker. Students should become aware of a large number of occupations and careers, be involved in the investigation of selected occupations and careers, use this information to make wise choices, and acquire the competencies and/or academic background requisite to one or more occupations.

Work toward the objectives, however, should not be rigidly held to all organizational levels suggested in this handbook. Rather, each objective should be developed whenever it is most appropriate. In addition, work toward some of the objectives suggested for elementary school may be continued in the junior high school. In some cases, such a continuation of concept development may be necessary since some of the concepts should not be taught until students have had sufficient experience and are sufficiently mature to understand them. Figure 2 depicts the developmental process of career education.

At each level it is possible for community-based experiences to serve as the thread to an interdisciplinary approach; thus in many school districts the boundaries of the community for the purposes of career education will, in order to ensure student job experience, extend beyond the boundaries of the school district. The interdisciplinary approach involves integrating the natural relationships of the academic and occupational aspects of the curriculum so that selected concepts and skills of general and academic courses are acquired through career-oriented activities. Such an approach places a focus on the total resources of the school in promoting the career development of the individual.

Awareness

The following objectives are suggested as a framework for local schools to use in providing career education in the elementary school. By the end of the elementary school years, students should (1) demonstrate wholesome attitudes toward a person's career choices, toward work as a means of achieving many satisfactions, and toward work in relation to themselves; (2) demonstrate an understanding of the life styles, values, and major duties and responsibilities involved in a large number of careers; (3) demonstrate their ability to apply

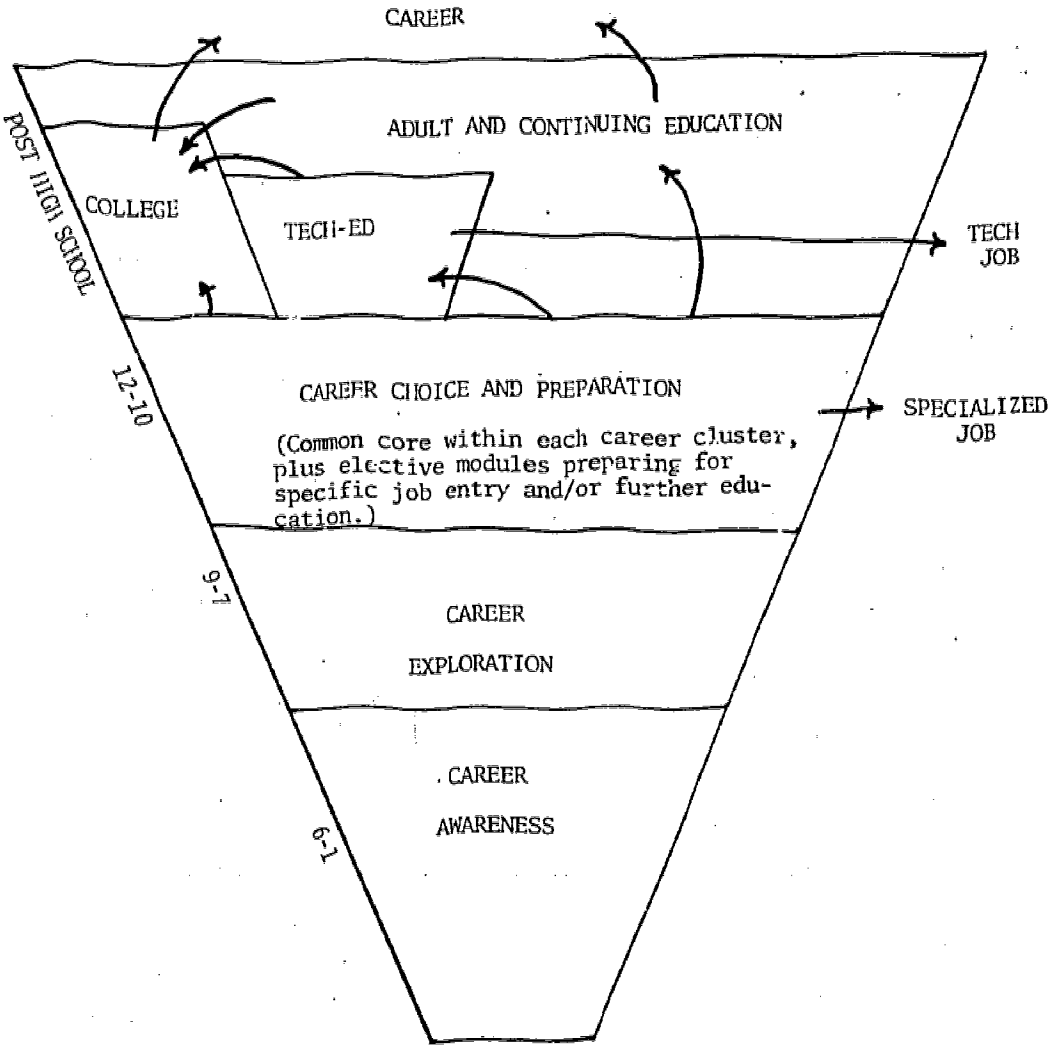

Figure 2. Career education model ("Career Education: A Model for Implementation," 1971).

basic economic concepts to problems which can be understood by children of their age and experience level; (4) show interest in exploring many careers; and (5) know how to obtain additional information about careers.

Exploration

The following general objectives may provide the framework for local schools to use in developing opportunities for exploration in the junior high school. At the end of their junior high school years, students should (1) have in-depth knowledge of several major career fields; (2) have become aware of many additional career fields; (3) have explored rather thoroughly their own values, interests, and educational achievements; (4) have a first hand acquaintance with the economic system--as consumers and as observers of those who work to produce goods and services; and (5) be prepared to select a tentative high school plan of study best suited to their individual needs and desires.

Choice

As a basis for career preparation, each student should learn to integrate his knowledge of himself and the world of work in order to identify a career or careers for which he will prepare; also, a student should recognize the changing nature of career commitments throughout an individual's lifetime and be able to reevaluate his career choices with the possibility of making further choices later. By the end of high school, the student should have identified the career cluster in which he wants to work.

Preparation

In addition to continuing the objectives of previous levels, the student should be able to find gainful employment at an entry level appropriate to his career objectives upon leaving high school or be ready to enter a junior college, technical institute, preparatory school, apprenticeship program, or a four-year college for continued career preparation (Career Education, Texas, 1972).

The United States Office of Education lists specific objectives for career education under seven general objectives:

1. To make all education subject matter more meaningful and relevant to the individual through restructuring and focusing it around a career development theme.

2. To provide all students with the guidance, counseling, and instruction needed to develop their self-awareness and self-direction; to expand their occupational awareness and aspirations; and to develop appropriate attitudes about the personal and social significance of work.

3. To assure the opportunity for all students to gain an entry-level, marketable skill prior to leaving school.

4. To prepare all students completing secondary school with the knowledge and skills necessary to pursue further education or to become employed.

5. To provide services for placing every person in the next step in his development, whether it be employment or further education.

6. To build into the educational system greater utilization and coordination of all community resources.

7. To increase the educational and occupational options available to all persons through a flexible educational system which facilitates entrance and reentry either into the world of work or the educational system (Career Education Progress, 1972).

The Career Education program model (Table 1) demonstrates how the objectives of the program are met at the various grade levels in the school. Once again, it will be noticed that there is continuity from one grade level to the next and that the entire program is built upon the foundation which was established at the preceding level of instruction.

TABLE 1

CAREER EDUCATION PROGRAM MODEL

	Elementary (Grades K-6)	Early Secondary (Grades 7-10)	Late Secondary (Grades 11-12)	Post-Secondary	Adult Continuing Education
Objectives	To develop an awareness of the occupational world.	To stimulate occupational interest and provide exploratory and pre-vocational experiences.	To provide specific training for a grouping of closely related occupations and further exploratory experiences for those needing it.	To provide advanced specific occupational education and training.	To provide occupational training, upgrading, and/or retraining.
Depth and Scope	General understanding with unrestricted exposure to all fields of work. Guidance and counseling for development.	Acquaintance with many specific occupations. Opportunities for practical experiences. Guidance and counseling development continued.	Training for job entry skills. Guidance and counseling for career development continued. Placement services provided.	In-depth training. Many advanced technical offerings. Guidance, counseling, and placement services provided.	Training for specific employment needs of individual. Job counseling for adults. Placement service provided.
Courses or Curricula	Integrated as part of total program.	Continue integrated program and provide separate courses which include experiences related to all fields of work.	Separate courses with skill development objectives. Program offerings will be dependent upon student interest and manpower demands.	Separate courses. Offerings dependent upon student interest and manpower demands.	Offerings will be dependent upon demand. Many short term programs.
Location of Instructional Program	Every elementary school.	Every junior and senior high school.	High schools, area centers, private occupational schools, and business and industry.	Community colleges, state colleges and universities, private occupational schools, business and industry.	Local schools, area centers, community colleges, colleges and universities, private occupational schools, and business and industry.

IMPLEMENTATION

The purposes of career education are to orient students to the world of work, to enable them to make realistic occupational choices, and to prepare them for employment or for advancement in their chosen occupations. Such preparation requires competence in manipulative, computational, interpersonal relationship, communicative, and other special skills necessary for success in the chosen occupation.

Fortunately, the transferability of many of these skills into the non-employment aspects of life is great, and the student thereby derives an increased or multiple benefit from his efforts. Thus, if the career education offering is effective in meeting its goal of preparing students for successful employment, added benefits are an incidental but expected product of the career education effort. This expectation becomes the basis for the integrating of the career education curriculum with the traditional curriculum.

As the rural administrator attempts to integrate a program of career education into the existing curriculum, certain steps and procedures are necessary. The first and most important task to be performed by the school district is the development of an overall administrative plan.

Administrative Plan

The administrative plan should serve as a guide toward development and implementation. To be effective the plan should (1) establish the overall goals and objectives; (2) set the parameters and priorities of the new program; (3) identify possible constraints and sources of support, including the community and regional education centers and area vocational schools; (4) stress teacher involvement; (5) budget funds; and (6) establish an evaluative procedure (Career Education, Texas, 1972).

In following these steps, it must be remembered that no master plan can be developed that will serve the needs of each district. The individual rural administrator must, because of the unique needs and resources of his school district, work within the parameters established by the organization of his own district.

Care should be taken, however, not to complicate the administration of the program for the small rural school district. Existing administrative structures

should be utilized. One person should be designated as coordinator of the program with adequate time allowed to carry out this responsibility. The persons most likely to be qualified are vocational education instructors, guidance counselors, or others with an interest in such a program. An inservice training program for all instructional and administrative personnel in the school is essential for success in a career education program. This program may be coordinated with other districts, possibly by an intermediate educational service center.

Curriculum Development

The development of a plan for curriculum change should be a major result of implementing the administrative plan. Since the curriculum for career education should be sequential, multidisciplinary, and flexible, its development should be a unified, broadly based process involving staff and community. Because of the integration of subject matter necessary for a successful program, it is imperative that staff involvement be extensive. Some of the tasks indicated are enumerated below:

(1) Identifying concepts and organizational levels at which each concept should be stressed.

(2) Analyzing the present curriculum and planning ways to integrate career concepts into this curriculum.

(3) Redirecting or restructuring the present curriculum toward career education objectives; identifying appropriate teaching materials and developing materials as needed.

(4) Planning a system of evaluation for the program (Career Education, Texas, 1972).

Each school district, because of its unique problems and philosophy, will most likely choose its own organizing structure, its own concepts, and will determine the sequence with which they will be developed into the instructional pattern. Table 2 outlines various phases of the program which can be scheduled at grade levels compatible with the local grade structure.

Curriculum development at all grade levels, K-12, represents the central procedure around which other supporting activities would function. The curriculum development undertaking is actually a double-pronged effort involving an occupational cluster curriculum effort, a curriculum refocusing effort for grades 1-8, and a subject-matter-relating effort in grades 9-12. Figure 3 describes this effort.

TABLE 2

SUGGESTED CAREER EDUCATION EXPERIENCES GRADES 1-12

GRADES: 1 → 12

STUDENT DEVELOPS SELF-AWARENESS AND UNDERSTANDING OF HIS INTERESTS & ABILITIES

STUDENT DEVELOPS AND PRACTICES DECISION-MAKING SKILLS

STUDENT DEVELOPS ATTITUDES ABOUT THE PERSONAL, SOCIAL, AND ECONOMIC SIGNIFICANCE OF WORK

				100% PLACEMENT	
OCCUPATIONAL AWARENESS: Student is informed about occupations through a series of clusters representing the entire world of work.	OCCUPATIONAL ORIENTATION Student explores several clusters of his choice.	OCCUPATIONAL EXPLORATION IN DEPTH BEGINNING SPECIALIZATION: Student selects one cluster to explore. Develops entry-level skill. May change cluster if desired.	SPECIALIZATION Student specializes in one cluster. Takes prerequisites for further education and/or intensive skill training for job entry.		JOB NON-BACCALAUREATE PROGRAM BACCALAUREATE PROGRAM

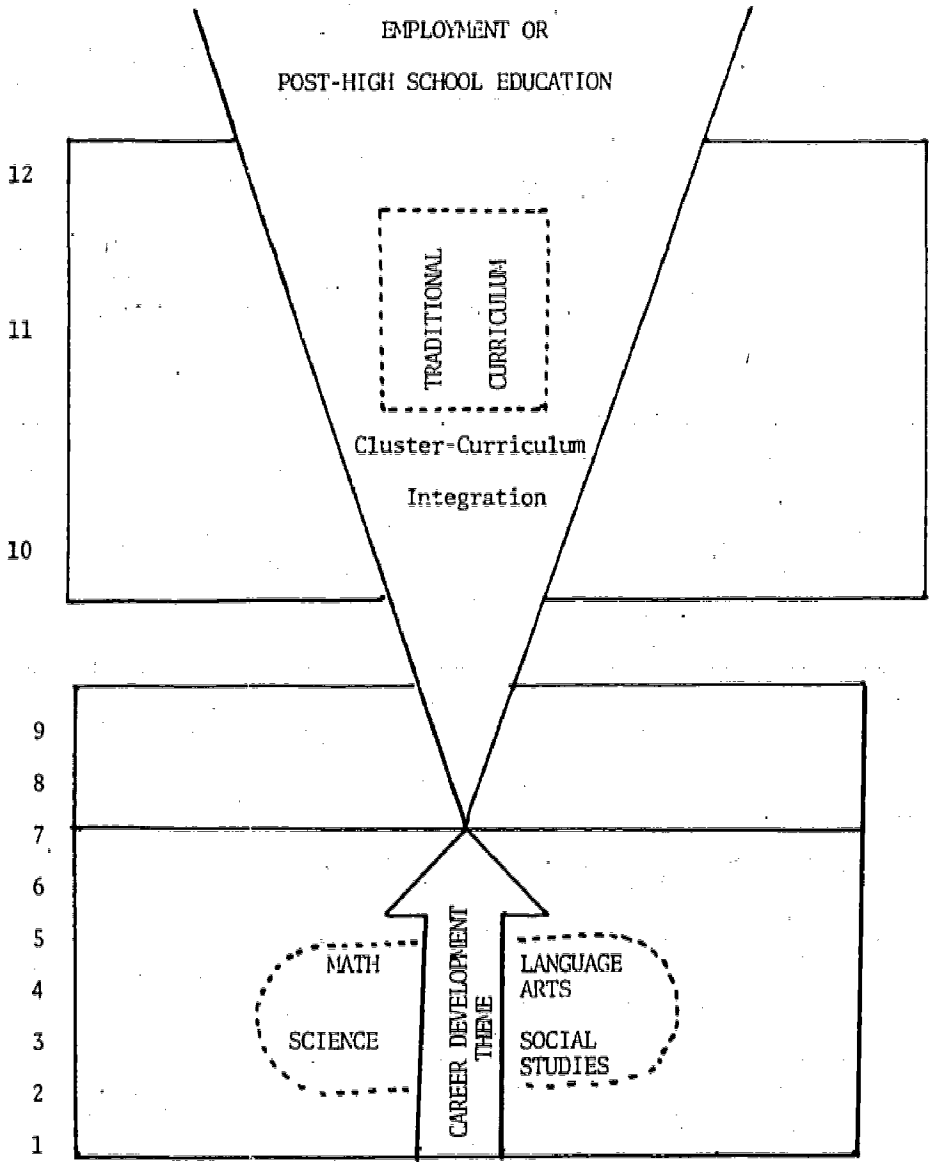

Figure 3. The double-pronged model to restructure the educational program around career education ("Career Education: A Model for Implementation," 1971).

The largest and most involved component of the curriculum development undertaking is the development of the cluster concept. This effort will involve assimilating data and teaching materials for each of the occupational clusters representative of the entire world of work and around which a career education system might be designed (see Fig. 1). The cluster concept and its organization will be discussed in detail in the section on implementation in the junior high school.

Since it is almost impossible for the small rural school to develop an adequate career education curriculum without proper assistance, the local administrator should contact the career education consultant in his state department of education for such assistance. Large sums of money are being spent on development of materials which can be obtained and adapted to rural areas. The National Center for Vocational and Technical Education at Ohio State University and the Educational Resources Information Center (ERIC) Clearinghouse on Rural Education and Small Schools (CRESS) at New Mexico State University are useful resource centers.

In the appendix is a list of school districts, universities, and state departments of education that have already developed materials and courses of study relating to career education. Also, the appendix lists sources of instructional materials, instructional materials available, and a complete bibliography of books and pamphlets on career education.

Instructional Development Teams

Staff members should be organized into committees to plan the development of instructional materials and to take an inventory of the shcool's current instructional system. In some instances, teams will need to represent different subject areas. Time and resources will be needed for this responsibility, and consultative services from the state level will be helpful. Rural school administrators will find it to their advantage to work through information centers such as ERIC/CRESS to keep informed about new instructional materials in career education as they are developed. As these new instructional materials are published, they will be brought under bibliographic control and entered into the ERIC system through the clearinghouses. Such publications are announced in the various ERIC documents, for example, Research in Education and Abstracts of Instructional Materials in Vocational and Technical Education. The curriculum teams should monitor these major sources.

Pupil Personnel Services

Since career education attempts to reach the student in as many ways as possible, a vital facet of the program is guidance services, K-12. Guidance, a schoolwide assistance program for all students, is developmental, beginning in the lowest grade level and extending through high school. The assistance provided students should not be a single or special event in the student's school experience. Instead, guidance must be continuous, sequential, and cumulative.

The existing guidance services within the district must be reexamined and reoriented so that career information, educational planning, and individual appraisal can be current, relevant, accurate, and conducive to wise decision making. Counselors and others with guidance responsibilities should be involved in this reexamination and reorientation process.

Small rural districts may need to share the services of guidance personnel who have expertise in career education. This sharing may be done through a cooperative program among the schools within an area, or through the services of an intermediate unit covering a large area.

Guidance cannot be carried on solely by specialists in guidance. It is a cooperative team effort involving the administrator, counselor, teacher, and support personnel. The classroom teacher, being in daily contact with students, serves as a first-level counselor in the career education program. The guidance counselor provides specialized counseling assistance to the student and consultative support to the teachers.

To develop the total individual, the guidance program provides information and instruction to all students concerning their physical-mental, health-social development and their educational-career development. This information and instruction is further supported with counseling services for all students utilizing school and community resources. Thus, through a program of instruction and counseling services, all students are helped to integrate the intellectual, emotional, physical, and social aspects of their personality; to adjust to one another, to adults, and to the environment; to achieve academically; to plan adequately for the future; and to carry out formulated plans.

Through integration of career information into the on-going academic curriculum, the guidance-instructional program is conducted by classroom

teachers as part of the instructional program. The counselor supplements classroom guidance instructional activities with scheduled guidance informational activities through small and large group discussions.

Although the guidance process permeates every level of instruction, as the student proceeds from one level to the next more emphasis should be placed toward directing the students toward their compatible career choice. However, it must be remembered that the final career selection rests with the student and not with the staff.

At the junior high school level, an intensive guidance and counseling program will help students to discover their interests and aptitudes. The program should help students to determine their emotional compatibility with the various careers in which they show interest or aptitude.

The junior high school guidance program should contribute to the exploratory objectives of the career education curriculum. The counselor should serve as a resource person for meeting specific needs and concerns of individuals or groups. He should coordinate information collection, activities, and procedures to facilitate the exploratory processes in career education. He should assist in individual and group assessment and in educational planning. He should make every effort necessary to develop and sustain effective individual and group relationships through counseling. It is essential at this point in the student's life that he become aware of the services available in the guidance office.

As one plans the guidance services for the high school level, it should be kept in mind that there is not a break in this area between junior high school and senior high school; rather, the high school guidance program is merely an extension of guidance services which were started in the elementary grades and have continued up to this level.

At the high school level, more emphasis and time should be placed in assisting all pupils in assessing and understanding their abilities, aptitudes, achievements, interests, and educational needs. Group and individual sessions should be set up with students and parents to explain educational and career opportunities and requirements. Optimum use should be made of such sessions to assist pupils to plan and progress toward well-formulated, long-range goals. As a result of these sessions, it is hoped that courses of study can be designed that will assist the individual student in reaching the career goals he has set. Also, by planning the students' courses of study and projecting the needs into the future, the administrator can create some guidelines as to future needs in

the area of staff and curriculum scheduling.

School Organizations and Activities Program

The school's student activity program also contributes to the achievement of career education objectives. Periodic evaluation of its contribution is appropriate. Staff members responsible for student activities should be involved in planning and evaluating activities which seek to improve the career education potential. Students themselves should serve frequently in staff development, community involvement, and curriculum development. Through such activities as career clubs, much enrichment of the academic curriculum can be achieved.

Vocational youth groups allow students to engage in activities that broaden and enrich their knowledge of career fields. Some examples of vocational youth clubs are Distributive Education Clubs of America (DECA), Future Farmers of America (FFA), Vocational Industrial Clubs of America (VICA), Future Homemakers of America (FHA), Future Business Leaders of America (FBLA), and Future Nurses Club (FNC). Clubs of a similar nature may be organized around other career items. These organizations are not of the usual "hobby" variety. Students become involved in the areas of work denoted by the name of the organization. Students in such organizations are involved in field trips; role-play job interviews and job situations; setting up and operating businesses; conducting student, business, and community career-oriented surveys; visiting with goal-oriented students in high school and community college programs; producing their own "career newsletters"; and helping organize career days in the school. Occupational areas within the main cluster can be explored as they are chosen by members of the club and reported back to the main group.

One source of information available to such groups could be a series of filmstrips, tape recordings, and video tapes of previous field trips. This type of resource material can also include interviews with people of various occupations, descriptions of job situations that would be beyond the reach of a field trip, and introductions to the various career clusters.

Since most of the clubs in a school are related to subjects such as science, drama, history, speech, foreign language, mathematics, and the vocational areas, much of the material gained through the activities of the various organizations can be integrated into the classroom. Organization sponsors should develop programs that link career exploration to the objectives of a club.

Starting in the junior high, students participate in the production of school yearbooks and newspapers. Working on school publications can help students to investigate careers in a field such as journalism and can provide opportunities to experience, in a limited setting, the working conditions of related careers. For example, the student staff of a school newspaper can devote considerable study to the production of a newspaper, investigating careers ranging from typesetting to editorial and advertising work. A visit to a local newspaper office can be part of the exploration.

Not to be overlooked is a school's organized athletic program. The obvious careers in coaching or professional sports more often overshadow the many related careers such as playground supervision, recreation director, or physical therapist. Again it is important to bring forth through the cluster concept the truly great number of career openings available within each cluster.

The same pattern of activities could be followed in investigating careers in farming, ranching, and other occupations related to agriculture. The rural administrator should make a special effort to build upon the strong programs already existing within his school; these will probably be vocational agriculture, home economics, and sometimes, business education. It should be emphasized that within any broad field such as agriculture, there are many diverse occupations, for example, game management, forestry, and landscaping, as well as the traditional ranching and farming.

Placement Services

One important phase of the career education program and one that can provide vital follow-up data is a placement service. A coordinated effort should be made to help students find gainful employment based upon their previous experiences.

Students requesting assistance for job placement should be referred to specific job openings if such exist in their field of interest and should be assisted in every possible way to gain employment or placement in the post-secondary educational area of their choice. Students who will be leaving the area, a common occurrence among today's rural youth, should be referred to appropriate resource people at the new location. The placement service should be available to both youth and adults served by the school district. If small schools cannot adequately perform this function, it may be carried out by an

intermediate unit serving several area schools.

Such a service should be a two-way street. If conducted properly, a placement service will not only be of benefit to the student, but also of benefit to the local employer who is looking for qualified employees. Thus, a well-organized placement service within the local school can serve as another means of bridging the gap between school and community.

State employment agencies can be of assistance in the formulation of such a service.

Staff Development

A plan for staff development should also be formulated as a result of implementing the administrative plan. Since staff development (in-service training) in career education is likely to involve all teachers and will continue for some time, a setting of priorities and commitment of time and resources are crucial to success.

Although some planning and development staff and consultant services can be added from the state level, the major impetus and effort will have to come from existing staff and community resources. Administrators, teachers, teacher aides--all must be involved in planning and development from the beginning of the project. Staff identified as enthusiastic over program prospects must infuse others with that same enthusiasm. Staff already including career activities in their classrooms should be brought into leadership positions to talk with staff, students, and board members.

Once again, the local rural school administrator might find it to his school district's advantage to organize in-service training sessions in cooperation with administrators in other schools who are also implementing the career education concept into their school districts. In a situation where a number of school districts unite to participate in such an in-service session, consultants from the state level could be brought in, as well as representatives of the various educational publishing companies. Too, under this combined effort, administrators who have successful programs already established could be brought in to present their programs.

As a summary to the procedures needed for the development of staff, the following outline should serve as a benchmark to satisfy the need to put process and content together. The rural administrator could ask himself these questions: How many of the following have already been thought through? How many of the

following can be put into practice through the funds and personnel available?

1. A committee made up of classroom teachers and administrators to plan specific behavioral objectives and activities for interested teachers.
2. Visitations to classrooms in other districts where career education is being planned and implemented.
3. Special workshops to focus attention upon educational goals and outcomes.
4. In-service meetings wich staff to learn new methods of teaching.
5. Lay advisory committees to evaluate present products of schools and suggest new directions and priorities.
6. Grade-level teams reporting to school faculty and parent groups.
7. Special projects through media centers to highlight particular careers or to show the relevance of academic content to particular occupations.
8. Special pilot experiments to test selected concepts in the classroom setting.
9. Career education fairs and other all-school activities that bring school and community together.
10. Consultant help from state office personnel, intermediate units, and/or university faculties.
11. Cooperative activities with other districts in the area.

Community Involvement

In most rural areas, the school becomes the focal point of the entire community. Therefore, it is especially necessary that the rural school administrator bring the community into the development of the career education concept. The school cannot function apart from other groups or agencies in the community. The need for an approach built upon a foundation of local initiative and fostered and encouraged at the state, regional, and national level has already been recognized by leaders in education.

No new agencies need to be organized to coordinate the resources or flow of information to the community. The community should be approached on two levels: (1) for general community or business support and (2) for expertise in a specific industry or a particular occupational field. It should be self-evident that any program concerned with education for a career must make provision for active participation by persons familiar with the industrial and labor relations process and with the skill requirements of the various occupations.

Of equal importance is the role local business can play in providing the school with opportunities to observe working situations or to engage in actual employment of students.

Service clubs are always seeking opportunities to serve the community. In addition, their members are also influential in many other walks of life. Their involvement can be doubly potent. Leaders of Boy Scout groups and other youth organizations are anxious to improve the long-range welfare of their charges. And certainly, the rural school administrator should not fail to recognize the usefulness of the local farm and ranch organizations. Too, the school administrator will find that in many cases retired senior citizens are anxious to be of service.

Men and women with one career behind them represent a rich and valuable resource that can be and should be used fully. Many of the people of the community have mastered skills and crafts that are in short supply. Others are skilled in the use of tools, materials, and processes that perhaps are not practiced in the rural area but which would be of great interest to some of the students.

If career education is to be an integral part of the regular school curriculum, it can profit as a bold and imaginative new concept, from the experiences of these and other community groups. Each rural community will have unique characteristics and special groups that should be identified and recruited for this family-school-community based program. Community surveys (see Exhibits A-F) will assist the local administrator in locating and assessing the availability of such resource people.

The fundamental principle underpinning the involvement of the community, and perhaps its most attractive virtue, can be briefly summarized. Community involvement calls for the sharing of information, materials, ideas, and technology in career education among schools and communities at all levels. It provides an alternative to creating new and possibly duplicating institutions. It enables the rural school administrator to make use of materials and equipment which the small school cannot afford. It places the student in touch with the true world of work.

Advisory Committees

Regardless of the size of school involved, if career education is to succeed, there must be communication between the school and the community. The

Exhibit A. Community Resource File. The following is an approach which may be used to develop a community resource file. On the following pages are examples of typical questionnaires and forms to assist in filing resource data.

Dear_____:

We are presently engaged in a revision of our program of studies to integrate the concept of career education into our regular curriculum. We feel that such a revision will be of benefit to our students as they try to make a decision concerning their future careers.

In order to make the program as meaningful as possible, we are surveying the businesses and industries of this area to see how they can contribute to the new instructional program.

It is our hope that, through businesses and industries such as you represent, our students will be able to observe at first hand the real world of work and thereby gain some insights into the reality of gainful employment.

Please fill out the enclosed questionnaire and return it in the enclosed envelope. If further information about our new program of studies is desired, please contact us.

The strength of our program lies in the response and cooperation we receive from the community. I would like to thank you for any assistance and advice you might be able to offer us.

Cordially,

Superintendent

Exhibit B. Resource Questionnaire.

1. What is the name of your business?_____
   A. Address_____
   B. Phone_____
2. Who should be contacted to arrange the trip?_____
   A. Position with firm_____
   B. Phone_____
3. Would someone be able to visit the classroom to prepare for the trip or follow it up?_____
4. For what age children is the tour appropriate?_____
5. How many can be accomodated at one time?_____
6. How many school groups can be handled per year?_____
7. What is the best time of year to visit?_____
8. What is the best time of week to visit?_____
9. What is the best time of day to visit?_____
10. How much time is needed for the visit?_____
11. What is the cost to the pupils?_____To the school?_____
12. Are there facilities for meals?_____
13. Is there ample parking space?_____
    A. Bus_____
    B. Car_____
14. What can be seen, heard, tasted, felt, etc. that you consider unique to your business?_____

_____

_____

_____

_____

15. Do you have special exhibits, films, tapes, etc. that could be used for instructional purposes? If so, what are the subjects and how may they be secured?_____

_____

_____

Exhibit B, Cont.

16. Brief description of the tour _____

17. Is guide service provided? _____

18. Are there any special safety precautions to be observed during the visit? _____

19. In what other ways can the business and industries of this area contribute to the education of our students? _____

20. What can the school community do for you? _____

Note: From World of Work, ABLE Model Program, 1972

Exhibit C. Resource Data Form.

NAME OF BUSINESS_____ ADDRESS_____ PHONE_____

CONTACT (Whom)_____ POSITION_____ PHONE_____

Resource person available for visit to school: Yes_____ No_____

Name_____ Position_____ Phone_____

Maximum number of students allowed_____ Grade Level_____

Number of school groups handled per year_____

Best time of year_____ Best time of week_____ Best time of day_____

Approximate time needed to make the tour_____

Cost to the pupil_____ Cost to the school_____

Facilities for meals_____

Parking facilities_____ Bus_____ Car_____

Special Instructional Materials Available_____

_____

_____

_____

Ehibits_____ Films_____ Tapes_____

Printed materials_____ Others_____

Description of the tour_____

_____

_____

_____

_____

Guide service provided_____

Special safety precautions to be observed, if any_____

_____

Appropriate follow-up activities_____

_____

_____

(World of Work, ABLE Model Program, 1972)

Exhibit D. A systematic card file could be kept in a learning center or library. These suggestions on how to organize data for quick retrieval and use have been used in several school districts.

(front)

Resource Persons

Subject _____ Age/Grade Level _____

Name & title of person to contact _____

_____

Address (home) _____ Phone _____

Address (business) _____ Phone _____

Best time to contact _____

How far ahead _____

Days available _____ Hours available _____

Occupation _____

Educational Background _____

(back)

Previous experience presenting subject to:

Children _____ Youth _____ Adults _____

	School	Grade	Date	Comments
1.				
2.				
3.				
4.				

(World of Work, ABLE Model Program, 1972)

Exhibit E. Communicate and Involve the Parents.

SCHOOL_____GRADE_____TEACHER_____

Dear Parents,

As a part of our regular instructional program, we would like parents to come to our class and tell the students about their occupations. Our children will benefit by contact with an adult who is contributing to himself and his society. We are sure they will have many important questions to ask.

Please fill out and return this form. You will be contacted to arrange a definite time and date. The general objectives of the program and suggestions for the things we would like to know about will be available. We are interested in all occupations.

Please return to the teacher.

Name_____Phone_____

Address_____

Occupation_____

Company or Firm_____

It would be most convenient for me to be at your school on (days and times)

_____

_____

_____

_____

Signature

(World of Work, ABLE Model Program, 1972)

Exhibit F. The letter shown below could be sent to interested and willing people who are engaged in various occupations.

Thank you very much for your willingness to participate in our program. Without your cooperation this phase of our program could not exist.

The objective of these sessions is not to get students to make career choices but rather to help elementary students realize that people work, that all useful work is honorable. We hope to acquaint them with the wide variety of occupations that exist (there are many things to be besides policemen, firemen, nurses, and teachers) and to make their present schooling more relevant to their future.

Your company or business may have some materials they would furnish for you to bring along, perhaps some pamphlets. You might check with your public relations office. Please bring your tools or whatever you work with. Certainly, if you wear a uniform or special clothing of any kind (welding hood?), bring or wear it if you can. Here are the kinds of things we would like to hear about:

--What is your job title or description?
--Briefly describe what you do.
--What aptitudes or skills are important for your job?
--Do you have to deal with the public? If so, would you care to comment on this?
--If you are separated from people most of the time, working with things, how do you feel about that? Do you prefer not having to deal with the public or fellow workers?
--What do you consider the best points of your job? the worst?
--Is your job personally rewarding and fulfilling? Do you enjoy going to work? Do you recommend your occupation as one of the alternatives students should consider?
--You may want to touch upon the financial aspect. Do you consider the pay to be adequate, very good, unsatisfactory?
--What is the outlook? Will this type of employment exist when these students enter the world of work?
--What changes in equipment, automation, personnel, training requirements have you experienced in the time you have been in this field?
--What training is required? (High school? Trade school? College? Apprenticeship? Graduate degrees?)
--Is the field difficult to enter? (Union membership, professional school entrance quotas, and so on.)
--How does this type of career relate to what these students do now in school?
--General information on working conditions, bosses, employees, etc.

(World of Work, ABLE Model Program, 1972)

very nature of career education, especially at the secondary level, suggests the importance of maintaining a mechanism for continuous dialogue between the school and the world of employment. The rural school administrator will soon find that an "advisory committee" is one way to channel occupational and employment data into the educational process.

Some of the more successful advisory committees have proved very effective in the following ways:

1. Functioning as an excellent source of public relations.
2. Communicating feedback information from the community and employers.
3. Creating mutual respect and confidence between educators and community leaders.
4. Providing experience and expertise in those areas vital to a program preparing students for the world of work.
5. Providing assistance in the selection and development of training stations.
6. Assisting the teacher-coordinator in curriculum development and improvement.
7. Providing assistance in locating instructional materials.
8. Providing a source of input for program evaluation and review.
9. Providing continuity for the program in the event there is a change in staff.
10. Providing a source of employment for graduates of the program (Cooperative Vocational Education in Small Schools, 1972).

Business and community leaders are in a unique position to help plan educational programs that will prepare the student for employment. Thus, the effective use of an advisory committee is a logical and efficient means of bringing about a closer working relationship between the school, the community, and the world of work.

Evaluation

The evaluation process should be considered one of the major components of the career education program, for through no other process can the true success of the program be determined.

The evaluation of program effectiveness should be based upon the degree of achievement of the measurable objectives established during the planning process. Obviously, it is important that much time and thought be concentrated on the development of objectives that are realistic and concrete for the indi-

vidual district. . School personnel who are to be involved in the evaluation process should be identified and involved early in program planning in order to coordinate the efforts of both internal and external groups and individuals who assist in the evaluation process.

Evaluation of programs should include the use of data drawn from (1) enrollments, completions, identification of disadvantaged and handicapped; (2) surveys of labor demand, labor supply, and student needs to determine the relevance of program offerings to needs; and (3) student follow-up surveys.

Questions should be raised about the manner in which career education is implemented and operated, and information will be needed about student performance. What changes in student behavior are sought? What kinds of evidence that this behavior change has taken place are acceptable?

In the evaluation process, all facets of the educational program--the broad goals of career education, current educational methodology, the structure of society, and the attributes of the student--are combined into five principal components. The five components follow:

1. The goals of the program.
2. The objectives of the program.
3. The operational procedures--for example, the methods, techniques, emphases, and efforts--being utilized to attain the objectives.
4. The resources--both material (including facilities, equipment, and materials) and human (including teaching, administration, supervision, service, and special staff)--provided to facilitate the attainment of the objectives.
5. The actual outcome or products of the program as defined in terms stated in the objectives of the program.

The relationship of these components is illustrated in Figure 4.

The actual evaluation can take many forms, depending upon the option of the local district; however, the following items should be included in the evaluation process: Teacher-made tests; questionnaires administered to staff, students, employers, and community; student anecdotal records; check sheets of accomplished skills and competencies; self-reports by students of inventories of interests, preferences, attitudes, and feelings; attendance records; drop-out records; follow-up studies on students who have graduated; teacher observations; and results of standardized tests.

When evaluating the career education program, the local administrator will

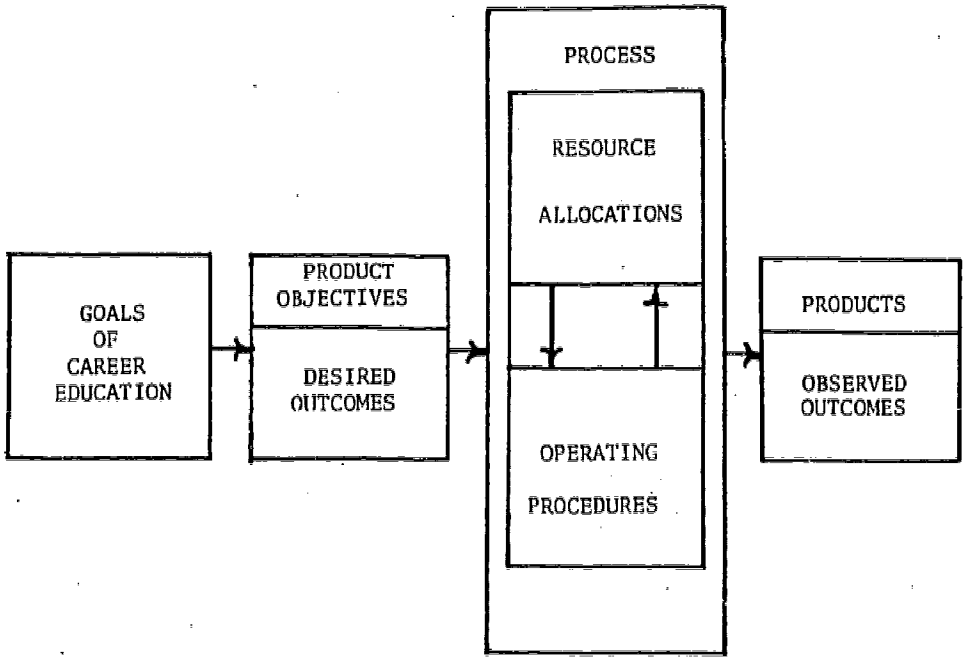

Figure 4. The structural components of the evaluation model ("Proposal for Exemplary Program," 1972).

want to do so within the context of local needs and objectives. In so doing, a comparison with the ten characteristics of career education listed by Undersecretary Marland will prove to be of worth:

1. The fundamental concept of career education is that all educational experiences--curriculum, instruction, and counseling--should be geared to preparation for economic independence, personal fulfillment, and an appreciation for the dignity of work.
2. 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.
3. The career education concept should affect as high as eighty percent of the high school students.
4. It will be offered as part of the curriculum to all students.
5. It will permeate the entire spectrum of a child's education, from the kindergarten through high school.
6. We must also be concerned and active on behalf of those adults who cannot supply the skills and knowledge society now demands.
7. It is a blending of all three (vocational education, general education, and college preparatory education) into an entirely new curriculum.
8. The job is not done properly until each and every one of the youngsters is capable of developing a clear sense of direction in life and is able to make a responsible career choice.
9. It will offer a much wider range of occupational choices than are now available in regular vocational educational programs.
10. All students will have an opportunity to enjoy actual work experience during their high school years through cooperative arrangements with business, industry, and public institutions and agencies (Career Education Progress, 1972).

Such a comparison may be performed by using a "Marland Matrix" as shown in Table 3.

Reporting evaluative findings to the various publics who need and who will use the information is another essential part of evaluation. It is critical for school boards, administration, and staff to be informed about the effectiveness of career education. It is also essential for each component of the elementary and secondary school system to report successes, shortcomings, and problems to other components of the system. For example, the evaluation of career education in senior high school should be useful in improving the program in the junior high and elementary school.

TABLE 3

MARLAND MATRIX RATING

Marland's Basic Parameters	Absent?	Generally Implied?	Specifically Implied?	Explicitly Stated?
1. All education geared to careers				
2. Only two exits: employment or continuing education				
3. Fundamentally change the education for 80% of secondary school students				
4. All students				
5. All grades				
6. Adult education				
7. New curriculum developed				
8. Individual career development must result				
9. Wider range of occupational choices				
10. Work experience opportunities for all students				

NOTE: Career Education Progress, 1972.

CAREER EDUCATION IN THE ELEMENTARY SCHOOL

A program designed for the elementary school should be developmental--based upon a series of concepts and upon the needs and abilities of the students and graduated according to difficulty. The elementary program should assist students to become alert to people who work and to become curious about careers and ready for the exploration of careers which is to occur during the junior high school years. Awareness of the world of work is considered to be the overall goal of career education in the elementary school.

The regular classroom teacher must fuse the concept of career awareness into the ongoing curriculum, thus enriching and adding quality to the school program. It should be understood that the career awareness concept neither eliminates vital elementary curriculum elements nor does it propose to substitute career awareness for long established, professionally sound elementary concepts.

In the first grade, the child's experiences in career education should center around that with which he is most familiar--the home and the school. The limited career information he possesses (based on his knowledge of what his parents do and what work he sees done at school--teaching, bus driving, and so on) is used as a basis for expanding his knowledge of the world of work.

Parents and others can be brought into the classroom to tell about their work. Also, children can engage in such activities as career game playing, field trips, career art work, and other experiences to increase their knowledge and understanding of possible careers. Special efforts should be made in isolated rural areas to provide experiences in more metropolitan areas. Field trips should be made to larger cities or towns in order for the children to better observe the broad spectrum of occupations. Regular school subjects should be used as the vehicle for presenting career information rather than concentrating career education into a special topic in the curriculum.

During the primary years, role-playing becomes quite important. The students can "choose" jobs many times. Such performance is overt and thus subject to guidance from the teacher and available for other student comment. This activity provides an excellent method for developing oral language skills. Many class discussions can be held around the role-playing technique.

As an ongoing program throughout each educational level, the students can help the teacher in making bulletin boards centering on occupations. Also, each child could start a portfolio or scrapbook, starting with drawings and paintings

he has done and augmenting his own work with pictures from magazines.

At the primary level, children can learn that each job has certain characteristics. Later the children will learn that the best occupational choice is achieved by matching possessed characteristics with required characteristics. While these children are as yet too young for accurate self-appraisal, they can begin to form simple judgments about what physical actions people must make in various occupations.

An important concept to be learned at this age level is that everybody should work and that work is not synonymous with hard physical labor or a disagreeable situation. The teacher might start with such simple tasks as hanging up coats, straightening chairs, putting away materials, and so on. If the class has monitors, their jobs should be examined. The children can draw or tell what they do.

The teacher must guide the children to an understanding that all the activities of the school, even those which seem the most fun, are part of their "job" and that they should always do their best. As a preview, it should be suggested to students that, though the nature of the tasks will change somewhat as they progress through school, if they approach their tasks with the proper attitude everything can continue to be enjoyable. Above all, it should be stressed that work is necessary for everyone, that it can be pleasant, and that cooperation with others will make everyone's job more pleasant.

In the second grade, the concept of the world of work should expand markedly. Up to this point, an attempt has been made to deal with the home and the school and other familiar surroundings. Now the move will be in another direction. The child will be exposed to a much broader spectrum of occupations, and he will learn about specialization and interdependency. While many of the same activities presented in the first grade will be continued at this level as befits the increased maturity, more written work and more complex facets can be brought into use.

The concept of specialization can very easily be tied in with social studies. This concept may be treated through a review of any primitive culture which the class may have studied. The idea to be explored is that because each family unit's needs and wants were simple, it was possible for each family unit to be self-sufficient. Charts or pictures may be made which contrast the simplicity of a more primitive society with the complexity of modern life. The students should then imagine and discuss what it would mean if the family unit could still be self-sufficient--for example, would each family have to build its own

automobile, or would people go to some other means of transportation, and if so, what? How would homes, food, and clothing be purchased? What things would people have to do without?

Thus, one can readily observe how every facet of the regular curriculum is brought into use in the career education concept. Teachers are bound only by their own lack of imagination and initiative.

In the third grade the child's focus can be further expanded as new concepts are built upon those previously introduced. As reading skills increase, career information can be presented through basic and supplementary readers. Other activities dealing with careers can be introduced.

The third-grader can explore many factors which determine available occupations, such as location, supply and demand, and technological and sociological changes. He should learn why in a rural area there is a different demand for jobs, why the rural community is dependent upon the urban community for many of its goods and services, and in what ways the urban community is dependent on the rural community. As the student explores these facets of the world of work, emphasis should also be placed on developing an understanding of the effect that these and other factors have on the worker. For example, how does supply and demand affect the worker?

Probably by this point the students have found one particular occupation which interests them. While a firm vocational choice is not sought at this point, it is time to introduce certain ideas. One of the most important of these is the necessity of an education if one is to enjoy the benefits of our complex society.

As pupils progress to grades 4-6, emphasis should be placed upon enhancement of self-concept as related to career development. During these years, more emphasis is placed upon the vital part school plays in the preparation for a career. Since from this point on in the student's education, different subject areas are treated separately, teachers must make a special effort to show the importance of each subject area to the world of work.

The importance of education, both formal and informal, for success in the world of work should be stressed. The want-ad sections of all available newspapers might be used. Many of the ads will specify a certain educational level, and certain skills or experience. Brochures from the various state employment services also have excellent information in this area.

Rather than exploring the need for individual subject areas, the teacher

might use a different approach. First, the teacher might suggest that many people have special education for entering the world of work. Committees could be formed to do research into the various areas that require specialized education. From this research, students could learn what knowledge all occupations have in common. Among the common needs of the student will be the ability to read, to listen and follow instructions, to write, to communicate orally, to understand, and to relate to other people. These qualities will be of value to him in understanding the various areas of subject matter.

As the student reaches the upper grades in elementary school, it must be made clear that there is no attempt at this level to force students into making occupational choices. What the program should do at this level is to attempt to guide the student toward a more intelligent choice when the time becomes appropriate. The student program tries to broaden his awareness of the almost infinite variety of occupations which do exist, as well as the possibility of new ones which are developing almost daily. Beyond this, it attempts to show him the factors to be considered when the time comes to make a decision.

Through the cluster approach, which is introduced and developed in the sixth grade, the student should become aware that all occupations can be placed in broad groupings and that there are jobs for any level of ability and training within each grouping. Thus, he learns that no area that interests him is beyond his reach. Somewhere within his field of interest there will be a career for him. Figure 5 presents one career cluster and a number of occupations which may be derived from that cluster.

During these years, the importance of preliminary data is stressed. The knowledge that different occupations require certain characteristics and that different individuals possess certain characteristics leads inescapably to the conclusion that the better these are matched, the happier the person will be as he works at his vocational choice.

The students should be aware that making a career choice requires careful study. Some of the areas that need to be explored by the students are the nature of the work, the working environment, the training, the type of people to be found in a particular vocation, the expected income level, and the future of particular vocations. Again, this might be an area for committee work. A committee could be assigned an area to research and could then design a method for presenting the information they gather to the rest of the class.

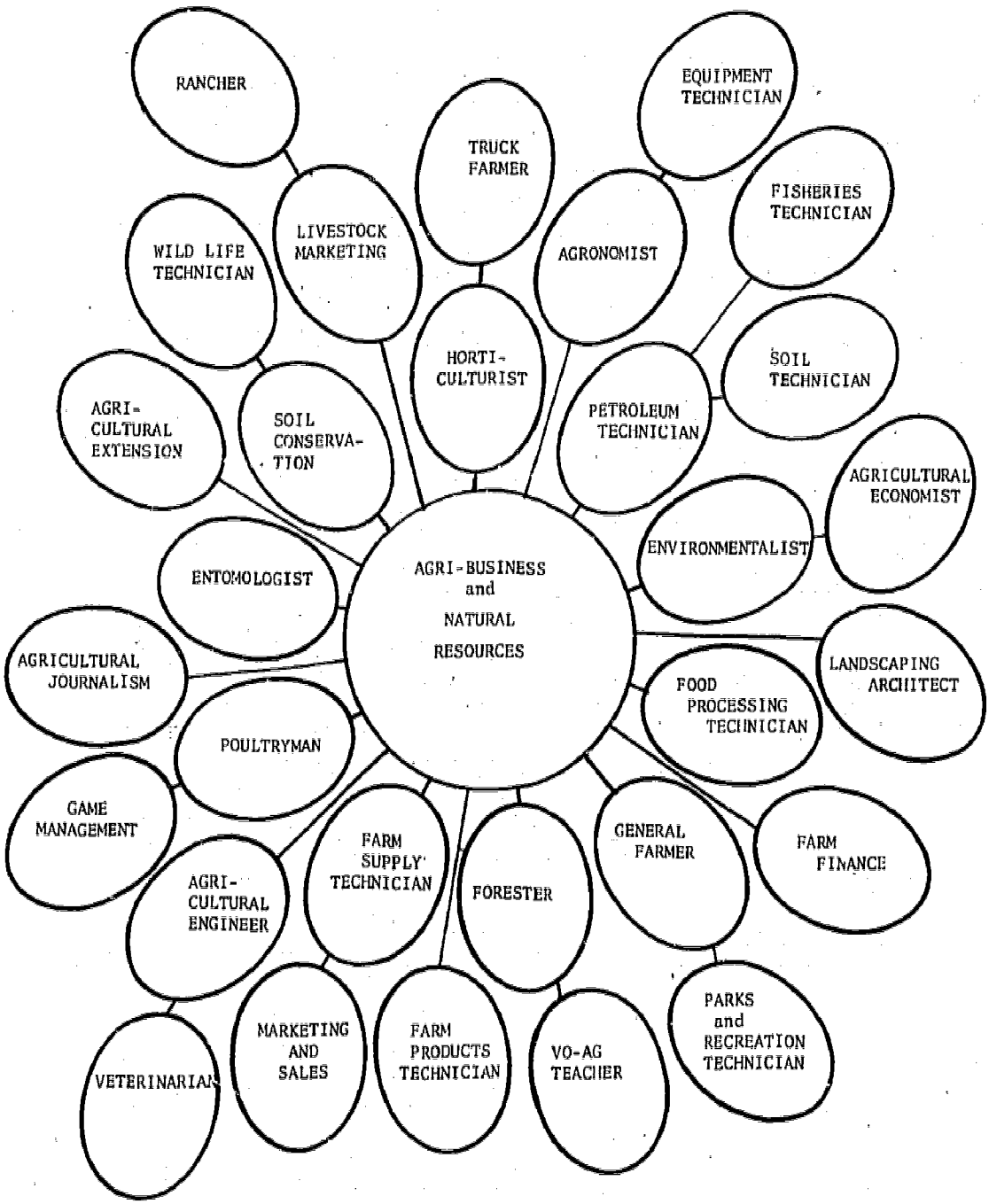

Figure 5. A career cluster.

Such methods might include traditional reports, stories based on what could happen should one fail to obtain the requisite information, cartoons, skits, and so on.

As was stated earlier, these years should be used to enforce self-enhancement and self-awareness. Learning should take place in regard to the way individuals differ in their abilities, interests, attitudes, and values. The student should become aware of himself in regard to these areas. Such concepts can be realized through the use of self-inventory materials available from the various publishers (see Appendix A); or the teacher can conduct a sociogram-type activity. The teacher might list abilities, attitudes, interests, and so on and have the students name those of their peers who fit the descriptions. Examples might be:

Likes to play quiet games
Likes to play active games.
Likes to talk.
Likes to sing.
Likes to draw.
Likes to read.
Is best in math.
Gets along well with everybody.

These are only a few of the areas which might be explored. In such a lesson, or unit of study, the concept of individual differences and the acceptance of the individual for what he is should become very obvious (World of Work. ABLE Model Program, 1972).

As the student accumulates more self-understanding it follows that occupational interests will become more apparent. The pattern thus becomes interest → self-understanding → occupational interest. If the children do not perceive these links for themselves, the teacher should guide their thinking. If the child does not perceive these links then the program has failed and should be looked at carefully.

Every occupation which exists at present can be placed into a family or cluster. The U.S. Government has broken 20,000 jobs into 15 job clusters, each under a general heading such as the "world of manufacturing" or the "world of construction" (see Fig. 1; Career Education, 1971). The sixth grade will be used to orient the student to the concept of clusters and should familiarize him with them. The intention at this level of instruction is to provide a lead-in whereby he will choose 2 or 3 of the clusters to explore in greater depth during his junior high school years.

Each of the elementary grades should be used as a platform for emphasizing the importance of initiating and stimulating self-growth in the vocational realm. Whenever possible, the learning situation should be one that actively involves the student in the learning process.

Projects for the Elementary Curriculum

The following activities have been designed to involve the students in an active manner which should help elementary school children become familiar with the world of work and orient them to the problems of vocational choice and selection at later periods in their development.* The activities are not listed in a particular order. However, an effort was made to group the activities for K-3 grades at the beginning of the list, the activities for grades 4, 5, and 6 next, then activities aimed at grades 7 and 8. Some miscellaneous activities, which could be used at any level, are at the end of the list. Special projects for teachers, counselors, and parents are also found in the list.

1. Engage children in discussions which will help them see the dignity and value of all work in which man engages. This project should help realize one of the major objectives of the occupational orientation and guidance program at the elementary school level. It can be a progressive program with units at each grade.
2. Encourage children to cut color pictures from magazines of "people at work" on various jobs and place them on a special bulletin board designed for this purpose. In the early grades the pictures selected may be related to their father's or mother's job or to a job they are currently interested in, or to jobs in a plant or business which they have visited on a field trip. See that each child has a picture on the board, if possible, and change the pictures frequently.
3. Prepare a color book (grades 1-3) showing people and situations in various types of jobs and the kinds of uniforms they wear on the job (firemen, policemen, doctors, dentists, nurses, soldiers, sailors, marines, engineers, mailmen, professional athletes, etc.) which the children can color. Many of the drawings for the color book can be made by tracing.
4. Permit children in the first and second grades to engage in play activities involving various types of jobs. They can play doctor, lawyer, baker, teacher, nurse, carpenter, and a host of other job personnel. In most of these activities they can use actual tools or instruments.

*From World of Work, ABLE Model Program, 1972.

5. Read stories with an occupational background to first and second grade children. Such a story as "The Little Train That Thought It Could" is a good example of the type of story that can be read. After the story has been read, the children can discuss who runs the trains, what the conductor, brakeman, and engineer do; as well as the value of cooperation and thinking while on the job.

6. Assign the children in one of the classes in grades 4, 5, and 6 the task of writing out the answers to the following questions as a means of getting to know themselves better: "What sort of person do I want to become?" and "Why do I want to be that kind of person?" Analyze the replies to see to what extent occupations determine the answers given. Have the students who answered the questions prepare answers to the same questions one year and two years hence.

7. Have the students in grades 4, 5, and 6 make a survey of the various types of jobs which exist in their community and state and select the ones they would like to visit. It is best to study jobs they will see on their visits and help the children determine what to look for when they make their visit to the plant they have selected. Follow-up reports after the trip has been made are a part of the project.

8. Develop projects which show how various vocations are related to the seasons of the year, for example, what is involved in a wheat harvest? Getting ready for summer, dusting off the air conditioner, sharpening the lawnmower; getting ready for winter, checking the car, storing summer equipment, checking the furnace; getting ready for fall, for cutting the harvest; or getting ready for spring, planting, and cultivating. Each season has many surprises, and there are many occupations for each season. The children may have a great deal of fun observing the occupations and processes they have studied.

9. Discuss with the children, beginning at about the fourth grade, the importance of individual differences, why people differ in so many of their interests, abilities, and aptitudes, how their uniquenesses develop, and the problems of self-acceptance which are caused by their differences. This project can be the basis of a long term study by the children and can be related to the developmental task concept. Some students at the sixth grade level may be ready to relate their uniqueness to aspects of their educational, personality, and vocational development and adjustments. When this is the case, they will almost invariably need individual guidance.

10. Start a vocational scrapbook as a class project and encourage each child to cut out pictures and articles from various newspapers and magazines which they can paste in the scrapbook. A rotating committee to decide what goes into the scrapbook may be necessary. The art class can prepare an attractive cover for the scrapbook.

11. Develop a unit which can move progressively through grades 4, 5, and 6 on the importance of education to vocational choice and on what actually happens to young people who drop out of school before completing high school. The drop-out problem can only be dealt

with effectively if the potential drop-out is identified in the elementary grades.

12. The importance of good mental health in school, on the job, in the home, and how it can be developed and maintained can be a basic discussion in almost any class after the third grade.

13. Games in the nature of the old fashioned "spelldown" can be devised to acquaint students with some occupations. The teacher or one of the students can read a description of an occupation or describe the tools which are used in an occupation, and the students may be asked to identify the occupation on the basis of the information which has been devised.

14. In some schools, characters from the Bible can be named and the children asked to identify the occupation which they represent. Teams can be used to identify the occupations of the presidents or other well-known characters.

15. Jobs in the various government agencies can be used as a unit in a number of classes from the third or fourth grade through the sixth grade. People who work for the government can be speakers and frequently can show slides or films.

16. Give the youngsters a brief look at the glamour careers--movie and television actors and actresses, the entertainers, professional musicians, professional athletes, and the astronauts are highly visible. The study of these occupations presents, in some instances, an excellent opportunity to study values in our society as represented by occupational choices.

17. Provide girls in the various elementary school classes special opportunities to study occupations other than the three traditional occupations for women (nursing, teaching, and secretarial work).

18. Promote hobby shows as a means of helping children develop interests and assume responsibility. Many youngsters have found their vocation through hobbies which they pursued during earlier developmental periods.

19. Permit students to discuss how they can utilize their vacation periods to get better acquainted with various occupations.

20. In social studies units, lead the children to discuss how different personality factors and traits are related to different vocational selections, as well as how personality in general is related to vocational choices which will eventually be made.

21. Teachers can schedule field trips where emphasis will be centered on the workers and the types of skills which they utilize in performing their jobs.

22. Have the students write short papers on "The thing I do best." These papers should also be saved and the project duplicated a year and two years later. This topic can also be used as a topic for class discussion, although many youngsters may be embarrassed to reveal their innermost thoughts.

23. Organize units in the social studies curriculum to show the various ways people in the community make a living. One unit, for instance, can be developed around home building. The children can discuss the work of the carpenter, the bricklayer, the electrician, the painter, the plumber, and others. Another unit can be organized around city jobs and can include sanitary workers, water supply workers, policemen, firemen, and others. Still other units can be organized around transportation, including bus, rail, and air service.

24. Develop a unit for fifth and sixth graders which will help the children be aware of the importance of building a good background during the elementary school years in preparation for the rest of their educational career. Learning good study methods and reading habits can be a part of this unit.

25. "My daddy belongs to the Farm Bureau," and "My brother is in an apprenticeship program," can be the basis for a discussion in the sixth grade.

26. "My mother is a Gray Lady," and "My sister is a candy-striper," can be a program similar to the one above, which children enjoy.

27. Develop a unit to assist the children, particularly in grades five and six, to explore their interests, and discover the relationship of particular interests to various vocational patterns. Some interest tests can be used for this project.

28. Organize a unit for sixth graders which will help them orientate themselves to the vocational developmental tasks which they will face in junior high school with suggestions relative to the specific choices they should be prepared to make which have vocational implications. Class schedules can be discussed as part of this unit.

29. Give children an opportunity to explore the contributions which various clubs and extra-class activities in the community can make to children's knowledge about vocations. This project may be important for children who are preparing to enter junior high school, where selecting the right school activities may be a problem.

30. Students can be encouraged to study individuals who have made a success in more than one occupation. Such a study should help students to become aware of the fact that they, too, can probably find success in more than one field of endeavor.

31. Encourage the children to develop a newspaper in which they can list occupations they have discussed in class, write editorials, and include other items which may be of significance to them.

32. Provide children an opportunity to study unusual and little-known occupations in the professional, technical, and nontechnical fields.

33. Encourage the children to prepare their own personalized vocational notebook, which will include a study of their interests, abilities, special aptitudes, skills, strengths, and weaknesses, with notes from class discussions, test profiles, and clippings from newspapers which are related to vocations of particular interest to them.

34. "My daddy belongs to the Rotary Club (Lions, Kiwanis, and so on)." This is an opportunity to discuss the vocational classifications in the structure and purposes of civic clubs.

35. "My mother belongs to the (one of the women's clubs)." This can be a companion to the discussion of men's organizations.

36. Present children with an opportunity to study, write papers, and discuss how the choice of an occupation conditions and influences other aspects of their life.

37. Encourage students to take tests which will help them understand their interests, abilities, aptitudes, and educational, socioeconomic background. No child can make intelligent vocational decisions at any level without this information.

38. Present materials and information about what is important in vocational choice and selection, including opportunities to discuss when an occupational choice should be made and what needs to be considered before making a choice.

39. As the children study various assignments in English, history, science, music, art, and other fields, encourage them to identify the occupations of the various authorities or characters in the field they are studying. As they read some of Dicken's works, for instance, many occupations can be identified.

40. Arrange for demonstrations for various types of activities performed in different jobs. Chemists, physicists, typists, and so on, can demonstrate various experiments which can be of intense interest to children. An example: a typist can demonstrate speed typing. Teachers of the various areas can be used here; also, county agents can be used.

41. Present children with an opportunity to visit a state or national employment agency. Such a visit should be made after students have been prepared for such a visit.

42. Use short personality sketches of people studied in various courses--social studies, English, science, mathematics, music, and art--which emphasize their vocation and ask students to identify the personalities through their vocations.

43. Should elementary school children be introduced into jobs in the armed services? Some say "yes" and some say "no." This decision should be made on the local or classroom level. There are many opportunities to learn jobs and job skills in the nation's armed services, but it may be too early to present this material to elementary school youngsters.

44. When the children are at the theme-writing stage, permit them to write papers on such subjects as "Some jobs I think I would like," or "When I grow up I would like to be a _____." This project should get the children thinking about jobs and their relations to them. They should be encouraged to emphasize why they would like a particular job and what aptitudes they think they possess at the present time for such a job.

45. Assign students the task of writing letters to successful people in the community and nation, asking them to tell about their vocation, why they selected it, and the qualities which they think are necessary for success

in the field. They might also be asked to tell what advice they would give to a young person who is interested in the field. The letters can be displayed and then placed on the library shelves. This project will need to be organized carefully.

46. Conduct vocational exhibits in connection with Science Fair contest exhibitions. Exhibits in the science fields may encourage individual creative study and will assist youngsters to further explore their interests and abilities.

47. Study methods and techniques of problem solving with the youngsters through class discussions and group guidance. This job, when undertaken objectively and on an intelligent basis, can be a big step in assisting young people to develop the degree of independence they need to become emotionally and vocationally mature individuals.

48. Have children in any room study the occupation of their fathers (and mothers). They can be encouraged to prepare short talks or write short reports as a class project.

49. Parents can be encouraged to visit the school and share information about their job with children.

50. Contact some businessmen, ministers, policemen, pilots, teachers, sports figures, etc., and assign students to interview them about their jobs and then make reports back to the class. It may be fun for some of the children to publish their interviews in the school newspaper--even though it may be mimeographed.

51. Duplicate number 47 but arrange for the personalities contacted to permit the student to tape record their interview. The recordings can then be played to the class. This probably is a sixth grade project, although it has been tried successfully in the fifth grade. The project will take some practice, but the youngsters will enjoy learning to use a tape recorder. They may need to follow questions which have been worked out in class in their interviews. It will probably create interest to let them decide what they would like to know about the occupations of the individuals to be interviewed.

52. Another topic which can be assigned to students with profit in many classes, either by written exercises or short talks, is "What I would most like to be when I grow up." It can be extended to ask why they have made this particular choice at this time. The last part of the project should encourage children to begin to examine their values.

53. Look for good films and filmstrips which can be shown at various grade levels which may have some vocational significance (note resource section).

54. Encourage children who have an interest in art to make attractive posters; they can be original creations, copied from pictures in magazines or from suggestions made by the teacher or by parents. The posters should be on display on bulletin boards, in various classes, in the library, and in some instances, in windows of stores in the community.

55. Develop projects which show the vocations associated with the various holidays, for example, Christmas--toys made and sold, Christmas cards, the work of the mailman and post office workers in delivering the cards

and gifts to the home. All holidays have special vocational significance.

56. Rural youngsters may need to be presented an opportunity to observe adults at work in jobs which are characteristic of urban communities.

57. Through a "Junior Career Day," present children with an opportunity to become acquainted with individuals in the community engaged in a variety of occupations, including occupations outside the professions. One objective of such a program at the elementary school level should be to promote the development of more wholesome attitudes toward selected nonprofessional occupations and help youngsters realize the importance of these occupations.

58. Safety demonstrations by firemen are always exciting experiences for children and serve a double purpose in that they may be a part of the school's safety program.

59. The school nurse, ambulance drivers, firemen, and interns from hospitals can also be part of a demonstration program showing what all of these people do when on the job, as well as supplying a good safety education program.

60. Encourage teachers of various subject matter fields (art, physical education, history, arithmetic, English, science) to prepare a large chart of the occupations which require skills in their fields and which can be displayed in their classroom or in designated places in the school. In self-contained classrooms, teachers can prepare such charts and arrange to change them at intervals with other teachers who have worked out occupations in special fields. After the fourth grade, the making of the charts can be assigned to students. Some of the projects can be illustrated by children who are artistically inclined.

61. For the teacher: Check each student in the class against a developmental task list for his particular age level and attempt to determine which students may need help in completing the tasks they should be completing before they move on to the next developmental level. The teachers should determine what each student can do and what goal he will need to establish in order to achieve a balanced development. Try to see each task in relationship to his total development, as well as his educational and vocational development.

62. For the teacher: Make a list of the interests of the children in the class, and determine to what extent opportunities are presented in the school to assist them in developing their interests. Outline a plan for assisting those students whose interests are not being cared for through normal classroom procedures.

63. Encourage teachers in the school to study together, with the help of the school counselor, to develop units for various classes which will emphasize occupations at each level so that the program through the elementary school will not only have continuity but also will avoid repetition. This project may mean a reexamination of the present curriculum for the purposes of determining how it can be reorientated to meet the specific occupational needs and interests of children.

64. Teachers should also be encouraged to work out what goals and purposes they should follow in teaching the occupational units included in the curriculum. Expected outcomes of the total program should also be considered as part of this aspect of the program.

65. For the counselor: Work with teachers to identify children who may need individual counseling or the help that can be obtained through group guidance programs. Help should not be confined to children who may need vocational and educational counseling. Helping a student resolve a personal problem of any type may have vocational significance at a later developmental period.

66. Help children study their leisure time activities as a basis for developing an interest in which to participate. They can also be encouraged to undertake new projects. This can be a group project, a class project, or it can be achieved through individual counseling.

67. Encourage the school librarian to display books for each age level which present challenging stories of individuals who are successful in various levels of human endeavor.

68. Develop a unit for parents of elementary school children which will help them understand how important is the education of their children, how the various subjects carried in the elementary school are related to vocational choice, and what their specific role should be in the vocational guidance of their children.

69. Promote conferences or workshops for parents to help them understand the role they are to play in the vocational growth and development of their children.

70. Hold a conference for parents in which they can discuss the use of vacation periods to further the acquaintance of their children with various occupations. Occupations which are not frequently found at home can be visited to the profit of children. An individualized vacation program for parents to point out what to see in various areas of the country might bring children into contact with new occupations.

JUNIOR HIGH SCHOOL

By the very nature of the characteristics of the junior high student, the concept of career education affords both the opportunity and the means actively to involve the student in the learning process. These junior high years are years of searching for the student. Questions, such as, Who am I? Where do I fit into the world? Where am I going? continually arise. Students are faced with considering the many conflicting choices of directions they can take in society at this vital, but confusing, time of their lives.

Thus, exploration becomes the primary goal for career education in the junior high school. The junior high school should provide all students with appropriate opportunities to observe and study in a systematic manner a variety of careers. These explorations by students should build upon the awareness of the world of work that is begun and sequentially developed in the elementary grades. This exploration should also be developed in such a manner that it serves as a bridge to the high school years, where more specialized preparation for employment takes place.

The traditional methods of classifying the broad range of careers in our modern society has tended to confuse and mislead students as they begin to consider their careers at the junior and senior high levels. In popular language, we have tended to classify careers along the lines of assumed income and social status. We speak of employment which is professional, subprofessional or technical, skilled, or nonskilled. We speak of occupations, crafts, and trades. While no one can deny that these patterns of classification have some meaning, the social and economic changes which are accompanying current technological changes in our society are noticeably restructuring not only the traditional income gradations associated with these classifications, but also their social status. A journeyman plumber may make far more than the college graduate. There is, at the same time, an increased concern in society generally, and among students especially, to become involved in a career that provides an opportunity for personal satisfaction.

It is therefore appropriate and important to find a new kind of classification for careers that enables students to see realistically the full range of career opportunities in our society. The main emphasis in this direction has been in a classification system known as the cluster concept. This approach classifies the entire gamut of careers into 15 clusters of related careers (see Fig. 1).

Each cluster in turn is broken into more closely related families of careers, which in turn encompass a host of more clearly related specific career options. In each of the clusters the careers range from manager, scientist, engineer, technician, tradesman, salesman, and serviceman to operator. In the cluster approach, the rural school administrator can add one cluster at a time to the program or work at finding data and resources for all 15 clusters.

There are several unique advantages in employing the cluster approach to career development education:

1. As with any rational classification system, the cluster approach provides an opportunity to review intelligently the full galaxy of careers and to analyze similarities and differences. It also provides an opportunity to look at a group of careers in relationship to the knowledge and technology which underlay their function. This relationship makes it possible to relate the study of careers to academic work, both among traditional disciplines, such as physics, chemistry, psychology, and social science, and within these disciplines, for example, within physics, there is electricity, mechanics, aeronautics, propulsion, and so on.
2. The cluster approach provides an opportunity to begin career preparation in a broad area rather than in a specific vocational field. Thus within the cluster of visual communications there are several families of careers--graphics, writing, product development, fine arts, office practice--within each of these families are an even larger number of more specific career options. Beginning with the study of knowledge, skills, and technologies common to all careers in each cluster, a student can move into increasingly specialized study associated with the specific career which he selects. Furthermore, with this general background the student will be better able to make changes in his specific career later in his life when technological change or personal interest may warrant such a change.
3. The cluster approach provides an opportunity for the schools to broaden extensively their pattern of career development education to serve the career development of all students. While many students may wish to move through a cluster of careers to the level of specialized knowledge and skills appropriate for immediate job entry, other students will benefit from exploring their career interests as a basis for specialization in continued education following high school (A Plan for Career Development, 1969).

In order for the cluster concept to be successful, a great amount of time, staff effort, and planning must go into the development of resource materials for the individual clusters. The administrator should take special note of the section in this handbook which lists the publishers of career education materials. Too, much material can be accumulated by contacting national offices of various manufacturing and industrial associations. The logical location for such a collection of data would be in the media center or library. Information

should be catalogued and filed according to cluster classification. Materials should include pamphlets, magazines, bulletin board materials, tapes, filmstrips, and film sources, as well as textbooks and paperbacks. While individual teachers should be encouraged to develop their own files, a combined effort on the part of the entire staff will result in a resource center of much greater depth and scope. The sharing of materials and sources of information with nearby districts will prove beneficial.

Building upon interest established in the sixth grade, the junior high school student will choose two or three work clusters to explore in greater depth during his junior high school years. Because of the varying interests of the students and because of the limited staff in most rural schools, much of this exploration of clusters will be through individual research and directed study.

The implementation of career education in the junior high school is achieved through three main areas of emphasis:

1. Continued integration within the subject areas to provide the student with opportunities to investigate many of the major careers associated with each of these areas.
2. School clubs and activities outside the area of the regular curriculum which can serve as explorative opportunities concerning careers.
3. Counseling, testing, and educational planning both by the guidance staff and the classroom teacher.

Career education will be most relevant to the junior high student if full interrelation of subject matter can be achieved. This interrelation will require extensive work by the staff in writing new curriculum guides. However, it is strongly recommended that new guides be written to avoid overlapping and repetition of materials by the individual teachers. Too, the objectives and goals set forth in the guides provide criteria for evaluation and accountability.

Students would continue to learn the central concepts and skills currently associated with the separate subject areas, but the various subjects would be coordinated within a curriculum structured around the clusters of the world of work. For example, the unit on the field of energy and propulsion might focus on electricity. While the students are studying this unit, they can explore the practical aspects of electricity through building simple electrical machines and radios. They can also explore the uses of electricity in the home for cooking, house cleaning, and other activities that require electrical appliances. At the same time, they can study the impact of [illegible]

to the variety of occupations which are associated with the field of electricity, ranging from home wiring and television and radio repair to electrical engineering and radiology.

Such units of study should be developed for all the work clusters. The form and content of each unit of study would depend upon decisions made by the curriculum staff as they worked to integrate career education into the regular curriculum. Units of this nature should be planned and taught cooperatively by a team of teachers from several academic areas, and would include laboratory, shop, and classroom experiences now included in separate courses. As the students progress through several clusters of occupations, they should gain both an orientation and a realistic understanding of the range of career opportunities open to them, the knowledge and skills which are required for success in these careers, and the social and personal implications of various careers.

The junior high course of study should provide more intense "hands on" experiences. Individual instruction will become more essential, and teachers will find themselves acting as "managers of learning," rather than as instructors presenting the same lesson to the entire class. The rural school administrator, who many times has a lower teacher-pupil ratio, will find that, generally speaking, this type of learning situation will be more easily adapted to the small school curriculum.

One approach to career education is that implemented during the school year 1967-68 in four West Texas schools--Abilene, Levelland, Petersburg, and Spearman. In implementing this plan, each month was devoted to relating career information to one curriculum department. For example, in one school, September was Science Careers Month, October was Mathematic Careers Month and so forth until by May, each subject area had been highlighted. This approach could be implemented very easily under the cluster concept, with one cluster being emphasized each month (Career Development, 1968).

If such a system is to be implemented, the staff should work together in the planning of the scope and sequence of concepts to be developed, of suggested activities, of resource materials, and so on for each subject.

Folders containing suggested classroom activities and resource materials can be prepared for each teacher's use during the month. Preceding each month, the teachers to be involved should meet together with counselors and the teacher

coordinator to discuss activities and to plan assemblies, school announcements, library displays, bulletin boards, and so on.

Because of the size and number of students enrolled in the rural school, such a program could be organized on a school wide basis or could be emphasized at any of the three levels.

SENIOR HIGH SCHOOL

The high school career education curriculum is built upon the cumulative experiences of the student developed during his elementary and junior high school years--in the same way that other traditional programs such as language arts, science, and mathematics depend upon foundations laid in the lower grades. Indeed, much of the work and many of the concepts used at the high school level are simply more mature and complex extensions of learning activities begun in the junior high school. Opportunities for investigating additional careers and familiar concepts in more depth should be worked into the high school curriculum in much the same way they are included in the junior high school curriculum.

At its ultimate, all secondary students would be enrolled in some type or phase of the career education curriculum. The length of such enrollment would depend upon the student's needs and objectives. All students completing high school should be prepared to exercise two basic options--immediate employment and/or further education. The rural school administrator will find that meeting this objective will require both his and his staff's ingenuity and abilities.

In meeting this objective, the administrator should recognize that regardless of the ultimate career goals of the students, each student should be equipped with a marketable skill that will enable him to enter the labor force should either the need or desire arise for him to do so. Obviously, many students will prefer to have a well-developed, marketable skill upon graduation so that they can immediately obtain well-paying jobs and support themselves. These students will probably wish to commit more time during their high school years to such skill development, and it is the school's responsibility to provide, either through its own organization, an area vocational school, a community college, or through other means, a wide range of skill-development programs. Such a program of studies will, by necessity, require individualized instruction, independent research work on the part of the student, and, in many cases, outside work experiences in conjunction with the regular school day. The work experience program will be explored in greater depth in the section on cooperative programs.

Those students who have not elected to pursue further education immediately after completing high school should be provided an in-depth vocational education program to develop their knowledge and skills in a family of occupations within a job cluster, for example, soil conservation within the agri-business cluster, fashion designing within the marketing and distribution cluster. Basic knowledge

essential to performing in other families of occupations within the job cluster should also be acquired by each student. Relationships of families within the cluster and between clusters should be explored so that students will be continuously aware of what additional opportunities are available.

Those students who desire to undertake advanced preparation, whether it be in a post-secondary technical school, college or university, or business school, should be equipped with the necessary prerequisites to undertake such additional training. Such students must be willing to commit the major amounts of time and energy necessary to develop these prerequisites. Thus, their involvement in the complete career education curriculum will not involve as much emphasis upon precise marketable job skills. It is important to understand, however, that within the entire curriculum there are abundant opportunities to develop marketable skills to one degree or another.

In the early curriculum planning process, each course at the high school level should be designed to provide for the development of marketable skills. At the high school level, students should receive the following kinds of experiences:

1. A "core" curriculum in the occupational cluster of his choice. This core curriculum will build upon the exploratory and entry-level skill development experiences at the junior high level and will provide higher levels of skill development when these skills are common to all the occupations in the cluster. Students preparing for job entry and students preparing for higher education would be enrolled in the cluster curriculum.
2. Basic subject matter areas such as language arts, social studies, mathematics, and science which are related to and which support the cluster core curriculum selected by the student. These basic subjects can be taught in such a way as to prepare many students not only for further formal education, but also for such jobs as tutors and teacher aides, as well as for employment in consumer services where one-to-one interpersonal relationships are important.
3. A choice of electives designed specifically for job preparation and/or a choice of electives designed specifically to prepare for entry into further education in an area of his choice. Elective subjects such as homemaking, industrial arts, distributive education, and vocational agriculture are already designed to provide some employment preparation. Other elective subjects such as band, journalism, drama, and art can also prepare students to enter the labor market as copy boys, entertainers, music librarians, set builders, and clerks. Courses not structured to include provision for marketable skill development should be carefully reexamined and redesigned by the staff.
4. Extracurricular activities, as was mentioned in the junior high section, can help meet explorative objectives and can help carry out preparation objectives in the high school. This area, like the other areas, should be examined and redesigned if necessary in order that

this phase of school life can become a vital part of the overall career education program (Career Education: Description, 1971).

Cooperative Programs

For the rural school administrator who usually finds himself in an area with limited job placement stations for his students, the cooperative program is one solution to his problem. Cooperative programs shall be defined in this handbook as any work experience afforded the student, both in and outside the school facility. Staffing in a small school is one of the most important factors to consider. The person chosen to fulfill the role of teacher-coordinator must command the respect not only of his students but also of the people in the community whose cooperation he must have if the program is to succeed.

It will be the responsibility of the teacher-coordinator to provide the overall coordination of community and school resources. Another high priority responsibility for the teacher-coordinator will be that of trying to ensure that all aspects of the work experience facet of the career education curriculum are designed to meet the needs of the individual student within his district and that the program is not just picked up in toto from another district.

There are alternatives which could utilize available staff. To determine whether special certification is needed for the teacher-coordinator position, the state director of vocational education should be consulted.

If the school system includes a vocational teacher(s), one or more of them may be qualified to provide overall coordination of the cooperative program, since such individuals have the background in vocational education and many have had occupational experience. Also, if there should be a person on the staff who has the necessary qualifications and personal characteristics to fill such a position, most states have provisions for certifying classroom teachers as teacher-coordinators for such programs.

Once again the "shared" concept can be brought into use; two or more schools may share one teacher-coordinator. This approach has been used successfully where two small schools are located in proximity to each other and only a small number of students are involved.

To supplement the regular school staff, people within the local community can be utilized. Many employers, as well as employees, in the local community can be utilized effectively for instructional purposes. Although a person in this capacity cannot devote full time to this work, it is possible that, in

conjunction with the school coordinator, he could serve as a valuable resource person.

One of the key factors in the work related area of the career education curriculum is the availability of local businesses that will make acceptable training stations. These stations should be chosen with care since they will provide on-the-job instruction, and the person with whom the student is working will be instructing and demonstrating those specific skills required within his business and for a particular job. An effort must be made to ensure that the people involved in work stations know exactly what is expected from them in relation to the total educational program of the student learner.

A major obstacle facing the rural school administrator is the fact that, in most cases, his school will be located in small communities with few work stations available. One of the prime responsibilities of the teacher-coordinator is that of locating and approving such stations. The teacher-coordinator should not overlook farms and ranches as training stations. Numerous occupational opportunities can be found in today's large farming enterprises. Many times, nonagricultural occupations such as mechanics and bookkeeping can be found. Other possible work stations are branch banks, fertilizer dealers, implement dealers, stock yards and feed pens, grain elevators, and general merchantile stores. The local county agent, since he is aware of activities in the area of agri-business, can be a source of employment information. Planners should not be misled by the name of the business. Within every modern business, there are opportunities for a wide variety of placement stations.

Well-planned patterns of scheduling employment are crucial in areas with limited placement opportunities (small communities) and are also basic to organizing a cooperative education program; the following options are suggested:

1. Traditional: Involves daily employment for the regular school year.
2. Variations:
    a. One semester of daily part-time employment.
    b. Summer full-time employment.
    c. Scheduled employment during peak economic activity in a given locality (e.g., to coincide with tourist season, harvesting, holidays).
    d. Daily employment accommodating two or more students (morning/afternoon, weekly, quarterly, or other schedule).
    e. Part-time employment, for two or three days.

f. Placement of students in employment when they are ready or when jobs become available (each student, therefore, would have a different schedule for employment).

g. Employment in neighboring communities.

h. Replacement of students who withdraw from jobs when objectives have been achieved.

In those programs which rely on summer employment for student-learners, it may be feasible to enroll them in the regular school program during the school year and provide a cooperative education program during the summer months. A teacher-coordinator could be employed during the summer to provide systematic related instruction and also to coordinate and supervise the on-the-job training phase.

To provide on-the-job experiences for as many students as possible, alternating plans are encouraged. Alternating plans allow for a greater degree of flexibility and provide situations where more than one student-learner can be employed in the same training station (place of employment). Some possibilities are

1. One student-learner might work in the morning and one student-learner might work in the afternoon.

2. On a rotating basis, one student-learner might work in the business for one week while his fellow student-learner is in the related classwork in school (this system could be operated on a daily, weekly, bi-weekly, monthly, quarterly, or other basis). Related classwork would be taught in such areas as the agriculture, commercial, or business departments.

If a particular school is located within a relatively short distance of several small communities, students might be placed for their occupational experience in businesses in each community.

A small community that affords extremely limited training possibilities could transport students to a larger city for on-the-job training. Such a program might be carried out most easily during summer months or during periods of peak employment, since these are the times when employers are seeking additional part-time employees. A plan of this type would mean employing the teacher-coordinator during the summer months and ensuring that transportation for the student-learners is available.

If students are transported to and from work, it might be best to hold the related classroom instruction in a business at or near the site of their employment. Some schools provide instruction on the buses which transport

students (see section on existing programs; Cooperative Vocational Education, 1972).

The needed work experience can also be provided within the school system. Students can be utilized as teacher aides, janitors, grounds keepers, general office help, or cafeteria workers--if such employment would contribute to the students' career development needs. Many times such employment can be subsidized through government programs.

As another alternative, a school (or student body) could own and operate its own business. The business could provide students located in extremely small communities with a unique opportunity to gain valuable business experience and acquire insights into the functions and responsibilities in operating a business, as well as afford an additional source of income for student activities. Also, "dummy" businesses such as general retail stores could be established in conjunction with distributive education classes. The same could hold true in many of the vocational areas. Such a "dummy" business could be a cooperative effort on the part of two or more school districts. A complete store could be duplicated in a mobile unit and scheduled from school to school. Once again resources and personnel could be shared. A number of such "dummy" businesses are already being conducted in Texas, New Mexico, and Arizona schools. A description of such courses can be found in the section discussing established programs.

The decision to make this type of cooperative education a part of the school curriculum is an important step. The following "School Administrator's Checklist" suggests some key considerations in making such a program operational:

I. Steps in implementing cooperative vocational education in the local school
   - A. Review the state requirements for vocational education program operation
   - B. Request help in determining the need for a program from the vocational division of the state department of education
   - C. Determine whether there will be enough interest in the program
     1. Student interest survey
     2. Parent interest survey
     3. School board recommendations
     4. Guidance personnel recommendations
     5. Faculty Recommendations
   - D. Make an occupational survey to determine the number and types of training stations available

1. Local sources of help in gathering data on occupational needs
   a. Advisory committee
   b. Public employment services
   c. Chambers of commerce
   d. Service clubs
   e. Counselors
   f. Surveys conducted as student class projects
2. Regional sources of help in gathering data on occupational needs
   a. Area manpower planning committee
   b. U.S. Census statistics
   c. Labor groups
   d. Research coordinating units
   e. Trade associations
   f. State department of education

E. Determine by answering the following questions whether the cooperative education program will fit into the total school program
   1. Are there sufficient physical facilities, room, and equipment available?
   2. Can instructional materials be made available?
   3. Can the school meet the requirements of the state plan for reimbursement?
   4. Are instructional personnel available?
   5. Is the school near enough to the employment community so that students can reach training stations without undue difficulty?
   6. How many students are now working?
   7. What courses, if any, must be added for effective operation of the program?
   8. How can existing courses be utilized?
   9. Have key individuals among employer and employee organizations been contacted regarding the advisability of setting up the program? Has their cooperation for setting up the program been obtained?

II. Steps in establishing cooperative vocational education

A. Install the program
   1. Decide upon the type(s) of program(s) to be installed
   2. Devise a tentative written plan, including philosophy, objectives, policy formation, control, procedures, responsibilities of personnel, organizational structure and general supervision, broad advisory functions, and estimated total cost and budget

3. Describe characteristics of student groups to be served
4. Identify occupations for which training will be given
5. Provide additional space, if necessary
6. Plan the appointment of an advisory committee (the board of education may aid in the appointment of the advisory committee)
7. Continually publicize the progress during the program development stage
8. Inform the faculty of the objectives of the program and proposed operational procedures
9. Inform parents

B. Select and hire a teacher-coordinator
   1. Determine the number of part-time and/or full-time teacher-coordinators required
   2. Inform the teacher-training institutions and the state department of education of staffing needs
   3. Consider state requirements and essential personal characteristics when selecting a teacher-coordinator
      a. Does the candidate have the required professional and technical training for the particular program to be installed?
      b. Does the candidate have a record of work experience other than in education?
      c. Does the candidate have a deep interest in youth?
      d. Does the candidate believe in the program and the need for it in the school and community?
      e. Will the candidate be respected as a teacher and a faculty member by the students and faculty?
      f. Will the candidate be respected by members of the employment community?
      g. Will the candidate be an active participant in school and community affairs?
      h. Is there a teacher available in the system, or will an outside person be hired?

C. Through the counseling services, identify and enroll students who would benefit from and be interested in the program (Cooperative Vocational Education, 1972)

Existing Programs

The following school districts have established career education programs within their districts. Each of the districts, because of their unique needs,

philosophy, and objectives in this area, have approached the problem in a slightly different manner. The individual districts may be contacted for further information.

Texas

Houston Independent School District
Houston, Texas 76101

Skyline Center for Career Development
Dallas Independent School District
Dallas, Texas 75204

Career of the Month Project
Mann Junior High School
Abilene Public Schools
Abilene, Texas 79604

Career of the Month Project
Levelland Public Schools
Levelland, Texas 79336

Career of the Month Project
Petersburg Public Schools
Petersburg, Texas 79250

Career of the Month Project
Spearman Public Schools
Spearman, Texas 79081

New Mexico

Career Education Program K-12
Taos Public Schools
Taos, New Mexico 87571

Pre-Vocational Education and Career Education K-12
Vocational Education Department
Albuquerque Public Schools
Albuquerque, New Mexico 87103

Career Education K-12
Socorro Public Schools
Socorro, New Mexico 87801

Career Awareness Program 1-6
Portales Public Schools
Portales, New Mexico 88130

Pre-Vocational Program 7-9
Espanola Municipal Schools
Espanola, New Mexico 87108

Arizona

Model Cities Exemplary Vocational Education Program
Tucson Public Schools, District No. 1
Tucson, Arizona 85202

Summer Cooperative Occupational Education Project
Cochise County Schools
P.O. Box 1159
Bisbee, Arizona 85603

Center for Career Development
Mesa Public Schools
Mesa, Arizona 85201

Others

Project in Career Education
Ceres Unified School District
Sixth and Lawrence Streets
P.O. Box 307
Ceres, California 95307

EPDA Career Development Project
Sonoma County School District
County Administration Center, Room 111E
2555 Mendocino Avenue
Santa Rosa, California 95401

Sequential Approach to Vocational Education
Washoe County School District
Reno, Nevada 89104

Careers Oriented Relevant Education
Springfield Public Schools
Springfield, Oregon 97477

Career Education 7-9
Clearwater Comprehensive Junior High School
1220 Palmetto Street
Clearwater, Florida 33515

Project in Vocational Education 9-12
Paola Public Schools
Paola, Kansas 66071

Career-Centered Curriculum
Jones County School System
P.O. Box 1247
Laurel, Mississippi 39440

Diversified Occupations Program
Aurora High School
Aurora Public Schools
Aurora, Nebraska 68818

Career-Oriented Curriculum
McKeesport Area School District
Shaw Avenue and Locust Street
McKeesport, Pennsylvania 15132

Parkway Program
Philadelphia Public Schools
Philadelphia, Pennsylvania 19103

Career Education K-14
School District No. 25
Riverton, Wyoming 82501

A number of universities and other organizations are presently engaged in programs or have compiled information in the area of career education. Information is available from the following:

Project LOOM K-8
Department of Industrial Arts Education
Florida State University
Tallahassee, Florida 32306

ABLE Model Program
Box 32
Northern Illinois University
DeKalb, Illinois 60115

ERIC/CRESS
Box 3AP
New Mexico State University
Las Cruces, New Mexico 88003

Strategies for Implementing Career Education: A School-Based Model
Center for Vocational & Technical Education
Ohio State University
Columbus, Ohio 43210

In addition to the above sources of information, a number of state departments of education have developed programs of instruction in the area of career education.

Vocational Education, Opportunities for Alaskans
Alaska Department of Education
Division of Vocational and Adult Education
Juneau, Alaska 99801

A Comprehensive Program for Career Development K-12
Department of Education, Division of Vocational Education
Tallahassee, Florida 32304

Career Development
Office of Instructional Services
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804

Career Exploration
State Department of Education
Department of Vocational and Technical Education
1515 West Sixth Avenue
Stillwater, Oklahoma 74074

Texas Education Agency
201 East Eleventh Street
Austin, Texas 78701

Coordinating Council for Occupational Education
Old Capitol Building
P.O. Box 248
Olympia, Washington 98504

Iowa Department of Public Instruction
Grimes State Office Building
Des Moines, Iowa 50319

Michigan Department of Education
Vocational Education and Career
Development Service
World of Work Unit
Leonard Plaza Building
309 North Washington
Lansing, Michigan 48904

Career Education
Minnesota Department of Education
Vocational Division
Capitol Square
St. Paul, Minnesota 55101

Wisconsin Department of Public
Instruction
Wisconsin Hall
126 Langdon Street
Madison, Wisconsin 53702

Wyoming Department of Education
Capitol Building
Cheyenne, Wyoming 82001

Scope and Functions of the Career Curriculum

OBJECTIVES	Social Effectiveness	Economic Productivity	Personal Self-fulfillment	Moral Responsibility
FUNCTIONS	Elementary	Middle Grades	Senior High School	
	1. Basic skills of learning and social involvement.	1. Continued growth and increased competence in the use of basic skills.	1. Emphasis upon continuous refinement, use, and application of basic skills.	
	2. Examination of essential functions pertaining to life and the individual and social activities of human beings.	2. Examination of a broad range of vocational, avocational, family life, citizenship, and cultural career alternatives.	2. Development of specific knowledge and skills needed for family life, avocational, citizenship, and cultural careers.	
	3. Examination of the basic characteristics of man's life in various societies.	3. Exploration of several potential personal career choices.	3. Exploration and personal testing of vocational career opportunities within a specific cluster or area.	
	4. Exploration of the environment and nature and of how man has learned about them and used them.	4. Developing skills and attitudes toward career choices.	4. Selection of specific career and initial preparation and exploration of post-school preparation potentials.	
	5. Exploration of basic interests and potentialities of each child.	5. Preliminary selection of general areas for future vocational careers.	5. Development of some basic skills.	
		6. Gaining knowledge of personal and educational requirements involved in various careers.		
		7. Examination of man's value and belief systems.		
SCOPE	Producer of Goods & Services	Member of Family life / Participant in Social & Political Life of Society	Participant in Avocational Pursuits	Participant in Regulatory functions of aesthetic, moral, & religious concerns

Note: A Careers Curriculum, 1971.

TEACHER'S GUIDE FOR HELPING STUDENTS DEVELOP CRITERIA FOR MEANINGFUL OCCUPATIONAL RESEARCH

Date_____ Name_____

The specific job code for this research_____.

Emphasis will be placed upon people, things, hierarchies, depending upon which unit the student is working with. (Please underline one of the three choices here.) This job (career, occupation, vocation) appears to belong in the category entitled_____(Occupational Group Arrangement), according to what I have learned from the Dictionary of Occupational Titles (DOT) and other sources. This investigation concerns a job commonly known as_____, though one or more other names may be applied to it by other people. It may also fit into one of the twenty-two broad Worker Traits Arrangements known as_____, according to the DOT.

I. Description of the job (occupation)
   - A. Brief history and development of this work
   - B. Work performed
     1. General nature of the work
     2. Importance of this work and its relation to society (briefly)
     3. Some other facets involved in the work
        - a. Who are those with whom the worker deals on the job?
        - b. How do these factors influence non-job activities?

II. Employment prospects and trends in this field of work
   - A. What needs are there for workers (increasing or decreasing demands)
     1. Immediate job opportunities
        - a. Total numbers needed
        - b. Turnover rate in this occupation (low or high)
     2. Long-term career opportunities (more than 10 years hence)
        - a. Projected total numbers needed
        - b. Stability for individual employment
     3. Flexibility (other related jobs one might adapt to or from)
   - B. Where are these jobs to be found (geographic regions)
     1. Urban areas
     2. Rural areas
   - C. Industries using workers with these skills
     1. Type of industry
     2. Size of industry
     3. Union/nonunion

III. Qualifications profile
- A. Personal factors
  - 1. Age limits
  - 2. Male or female limitations
  - 3. Special tools, clothing, or equipment needed
- B. Formal educational needs
  - 1. General and elective courses
  - 2. Required courses
  - 3. Informal
- C. Specific vocational preparation needed
  - 1. Vocational education in high school or post-high school
  - 2. Apprenticeship training factors
  - 3. In-plant training, organized formally
  - 4. On-the-job training, training under a supervisor
  - 5. Essential related work experiences
- D. Aptitudes required
  - 1. As determined by tests
    - a. General Aptitude Test Battery
    - b. Differential Aptitude Tests
    - c. Others
  - 2. As determined by employer
    - a. Demonstration
    - b. Job performance
- E. Essential interests (describe in detail)
  - 1. Refer to DOT, Volume II, p. 654
  - 2. Refer to interest surveys in the appendix
- F. Temperaments for success on the job
  - 1. DOT, Volume II, p. 654, of use here
  - 2. Consider also the various forms filled out
- G. Physical demands (required activities)
  - 1. Physical requirements in performance of the job
  - 2. Physical capacity (traits) to meet the demands
  - 3. DOT, Volume II, pp. 654-66, has helpful ideas

H. Regulations (not elsewhere specified)
- 1. Government

2. Union
3. Industry

IV. Working conditions (physical environment)
- A. Inside, outside, or both
- B. Extremes of temperature changes
  1. Cold
  2. Heat
- C. Noise and vibration
  1. Constant
  2. Changing
- D. Hazards (risk of bodily injury)
- E. Fumes, odors, toxic conditions, dust, and poor ventilation
- F. Hours (day, swing, nights, weekends, holidays, etc.)

V. Obtaining the job
- A. How it is found (initial contacts)
  1. Hearsay
     a. Friends
     b. Relatives
  2. Classified ads
  3. Employment offices
     a. State
     b. Private
     c. Institutional
     d. Union
  4. Formal notice (as a result of previous applications)
- B Applying for the job
  1. Personal application
     a. By appointment-interview
     b. Waiting in line
  2. Formal application
     a. Letter and/or resume
     b. Filling out application forms

VI. Compensations in this work
- A. Opportunity for service to humanity
  1. Personal satisfactions attained
  2. Admiration and/or respect of others

B. Advancement possibilities
   1. Increased responsibilities
   2. Increased status and/or position

C. Financial rewards
   1. Pay
      a. Present (wage range, minimum/maximum)
      b. Most common wage
      c. Moving into higher pay grade (opportunities)
      d. Differences for sex and/or age groups
      e. Retirement benefits
   2. Security of the job
      a. Steady income
      b. Seasonal characteristics
      c. Tenure-stability

VII. Personal recapitulation and evaluation of this career
   A. Advantages (summarize in some detail)
   B. Disadvantages (summarize in some detail)
   C. Tentative decision regarding this career or occupational cluster

VIII. Reference list

Note: From "Exploring Occupations," 1971.

What the Students Need to Know

1. History of the occupation
2. Importance of the occupation and its relation to society
3. Duties
   a. Definition of occupation
   b. Nature of the work
4. Number of workers engaged in occupations (give source, date, and area covered by figures used)
5. Qualifications
   a. Age
   b. Sex
   c. Special physical, mental, social, and personal qualifications including those obviously necessary for services in all types of work
   d. Special skills essential for performance on the job
   e. Special tools or equipment essential for the performance
   f. Scores on test for employment or selection
   g. Legislation affecting occupation
6. Preparation
   a. General education
   b. Special training, including probable cost of training
   c. Experience
7. Methods of entering
   a. Public employment service
   b. Special employment agencies
   c. Civil Service examinations
   d. Apprenticeship
   e. License, certificate, and so on
   f. Other methods and channels
8. Time required to attain skill
   a. Special apprenticeship or union regulations
   b. Length of period of instruction on the job
   c. Length of time before median and maximum rates of pay are reached
9. Advancement
   a. Lines of promotion: jobs from which and to which workers may be promoted
   b. Opportunity for advancement

10. Related occupations
    a. Occupations to which job may lead
    b. Occupations from which one may transfer
11. Earnings
    a. Beginning wage range
    b. Wage range in which largest number of workers are found
    c. Maximum wage received by most highly skilled
    d. Median and average salary, if available, and difference for sex and age groups
    e. Annual versus life earnings
    f. Regulations
    g. Benefits
    h. Rewards and satisfaction other than monetary
12. Conditions of work
    a. Hours
    b. Regularity of employment
    c. Health and accident hazards
13. Organizations
    a. Employers
    b. Employees
14. Typical places of employment
15. Advantages and disadvantages not otherwise enumerated
16. Supplementary information
    a. Suggested readings: books, pamphlets
    b. Trade and professional journals
    c. Other sources of information
    d. Lists of associations, firms, or individuals who may provide further information

Note: From "Exploring Occupations," 1971.

Career Development Activities

BROAD OBJECTIVE: To present appropriate occupational information about the world of work.

SPECIFIC BEHAVIORAL OBJECTIVE: To demonstrate knowledge of work stations within a school; pupil will explain job responsibilities of at least four workers in their school.

School Workers:
Staff

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 1

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Use teaching pictures to introduce. Visit each worker in his work area. Suggested places are: Principal's office School nurse Librarian Janitor Teachers Cooks	1. Review job of each worker before trip. Divide activity into two or three trips. Discuss value of job of each worker as he is visited. "Why is your job important? What do you do? How does it fit in with other workers in the school? What tools do you use? What do you like best about your job?"	1. Teaching Pictures--Schools and school Helpers, i.e., Cook General aide to these activities: Our Home and Our Schools, Fraser & Hay, American Book Co., 1961. Our School Workers, 1-6, McGraw-Hill.
2. Play game--"Who Am I?"	2. Tell some important thing that is done and let pupils guess what worker it is.	2. Resource people from school staff
3. Stories	3. Select as they relate to the discussion.	3. Books: I Want to be Books, Carla Green: I Want to be a Nurse, I Want to be a Teacher. The True Book of Schools, Elkin. My First Day at School, Hefferman (text and teacher's edition). All About School Helpers, Hoffman, Look-Read-Learn Series. Melmont Publ., Inc., Chicago, Ill. "A Trip Through a School," Rowe, Watts. "I Know a Teacher," Buchheineu, Community Helper Bk.
4. Filmstrips (and records)	4. View and discuss.	
5. Sing song	5. Sing with actions made up for song; improvise verses to fit job under discussion.	
6. Draw and color workers	6. As each job is studied, draw, color, and cut out worker for bulletin board.	4. Filmstrip: Taylor Audio Visual

Teacher Evaluation:
1. Did this activity apply to the suggested subject area? _____ Grade level? _____.
2. Is the criteria for student performance (specific behavioral objective) too high, too low, satisfactory? (Circle one)
3. Please comment on reverse side regarding the following:
   a. What additions or deletions could you suggest in the activity and technique column?
   b. Could you suggest additional resource materials for this activity?

BROAD OBJECTIVE: To show students how areas and perimeters are used in various occupations.

SPECIFIC BEHAVIORAL OBJECTIVE: After calculating five problems which demonstrate a knowledge of areas and perimeters, each student will list at least three occupations in which this knowledge is used.

SUGGESTED SUBJECT AREA Mathematics

SUGGESTED GRADE LEVEL 7

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
By illustrating to students the practical application for areas and perimeters they will become aware of the importance of this knowledge.	1. Ask students to compute textbook problems to prove they understand areas and perimeters. 2. Through discussion, ask students to list as many workers as they can that use this knowledge and tell how they use it. 3. Some examples of the use would be helpful: a. Laying carpet b. Painting a house c. Laying linoleum or tile	Regular textbook Any worker that uses areas and perimeters Stores selling paints, carpets, etc. Essential Mathematics for Skilled Workers, John Wiley & Sons.

Teacher Evaluation:

1. Did this activity apply to the suggested subject area? _____; Grade level? _____.
2. Is the criteria for student performance (specific behavioral objective) too high, too low, satisfactory? (Circle one)
3. Please comment on reverse side regarding the following:
   a. What additions or deletions could you suggest in the activity and technique column?
   b. Could you suggest additional resource materials for this activity?

BROAD OBJECTIVE: To have the students realize the importance of attitudes, personal satisfaction, dignity of work, cooperation with co-workers, and dependability in work.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will be able to show in writing the importance of attitudes, personal satisfactions, the dignity of work, cooperation with co-workers, and dependability in work.

SUGGESTED SUBJECT AREA English Grammar

SUGGESTED GRADE LEVEL 10

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Gaining an understanding of attitudes, personal satisfaction, dignity of work, cooperation with co-workers, and dependability in work through composition.	After studying the paragraph on how to incorporate paragraphs into a composition, give an assignment to write a composition using the students newly gained knowledge of composition in one of the following topics: 1. Attitudes toward work determine success or failure. 2. Your occupation will give you personal satisfaction. 3. Dignity of work. 4. The importance of cooperation with fellow workers and employers. 5. Be dependable in your job. Write the preceding topics on the board and discuss each topic. After discussion have students choose one topic for a composition.	Grammar text Eye Gate instructional material (cassettes and filmstrips) Guidance Department Employment agency personnel

Teacher Evaluation:

1. Did this activity apply to the suggested subject area? _____; Grade level? _____.
2. Is the criteria for student performance (specific behavioral objective) too high, too low, satisfactory? (circle one)
3. Please comment on reverse side regarding the following:
   a. What additions or deletions could you suggest in the activity and technique column?
   b. Could you suggest additional resource materials for this activity?

Bibliography of Materials

The following materials are examples of instructional materials which would be basic to a career education curriculum. That only certain publishers are listed does not imply that they are the sole sources of information. Publisher lists should be consulted for complete enumerations of supplies

I. Occupational Outlook Handbook (1971-72), U.S. Department of Labor, U.S. Government Printing Office, Washington, D.C. 20402

II. Science Research Associates (SRA) Occupational Information Kits
   A. Occupational Exploration Kit
   B. Widening Occupational Roles Kit

III. Chronicle Career Kit

IV. Chronicle Counselor Professional File
   A. Guide to Career Success by Esther Brooke (New York: Harper & Brother)
   B. Career--The Annual Guide to Business Opportunities (2 volumes) by William Douglas (Chicago: Career Inc.)
   C. Careers in Commercial Art by J. I. Biegeleisen (New York: E. P. Dutton & Co.)
   D. Careers for You by Erma Ferrari (New York: Abingdon Press)
   E. Occupations and Careers by Walter Greenbof (Dallas: McGraw-Hill Book Co.)
   F. Your Plans for the Future by Mary and Ervin Detjen (Dallas: McGraw-Hill)
   G. Fitting Yourself for Business by Elizabeth Mae Gibbon (Dallas: Gregg Publishing Division, McGraw-Hill)
   H. Careers and Opportunities in Science by Phillip Pollock (New York: E. P. Dutton & Co.)
   I. Outdoor Jobs for Men by Vocational Guidance Research (New York: Vanguard Press, Inc.)
   J. Jobs That Take You Places by Joseph Leeming (New York: David McKay Co., Inc.)
   K. Career Planning With High School Students by William Reilly (New York: Harper & Brothers)
   L. Never Too Young to Earn by Adrian A. Paradis (New York: David McKay Co.)
   M. Careers for Nurses by Dorothy Deming (New York: McGraw-Hill)
   N. How to Land the Job You Want by Jules Z. Willing (New York: The New American Library)
   O. You and Your Job by Walter Lowen (New York: Collier Books)
   P. Career Guide for Young People by Mary Moore (Ganden City, New York: Doubleday and Co.)

Q. How to Become a Nurse by Lynday Sue Cunningham (New York: Macfadden-Bartell)

R. 101 Top Jobs for High School Graduates by William Kaufman (New York: Banton Books)

V. Careers--Institute for Research Booklets

VI. Books in Counselor's Library

A. Keys to Vocational Decisions by Walter Lifton (Chicago: Singer Research Associates)

B. Occupational Information by Robert Hoppock (New York: McGraw-Hill)

C. Occupational Guidance by Paul Chapman (Atlanta, Georgia: Turner E. Smith and Co.)

D. The Teacher's Role in Career Development by Tennyson, Soldahl, and Mueller. American Personnel and Guidance Associates

E. SRA Booklets--Guidance Activities for Teachers

VII. SRA Guidance Series Booklets

A. What Good is English?

B. Your Personality and Your Job

C. School Subjects and Jobs

D. What Good is Math?

E. College Careers and You

VIII. Dictionary of Occupational Titles, U.S. Department of Labor, U.S. Government Printing Office, Washington, D.C. 20402

Materials Used in Socorro/Magdalena Career Awareness Project

Description	Grade Level	Publishers*
Early Childhood Series: Materials for young children that develop a positive attitude toward themselves, others, and their environment and provide rich opportunities for language development (filmstrips, study prints, books)	K-3	Bowmar's
Learning to Live Together, Part 1 and Part 2: Encourages students to understand and respect other people; teaches that tolerance can lead to more wholesome friendships and that life can be more enjoyable (8 filmstrips)	L-3	Singer (SVE)
The Adventures of the Lollipop Dragon: A series designed to instruct the young about current social attitudes and human values; encourages them to adopt positive conduct patterns, provides basis for meaningful discussions, projects, and activities that lead children to practice acceptable social behavior (6 filmstrips, coloring books)	K-3	Singer (SVE)
Working in U.S. Communities: Emphasizes economics at elementary level in eight different locations in U.S. (8 filmstrips)	K-3	Singer (SVE)
Our Working World Series: World of Work is related to everyday classroom activities, i.e., in the first grade, through individual duty assignments, children can discover the speed and ease with which duties can be performed when each individual has a specific job. Includes Families At Work, Neighbors At Work, and Cities At Work	K-3	Science Research Associates (SRA)
A Flight to Grandmothers: Filmstrip depicting trip on passenger jet	K-3	National Aerospace Council
Tadpole Film Series: Focuses on self-concept with open-ended episodes (filmstrips)	K-3	Denoyer-Geppert
What Will I Be from A to Z? Free colorful booklet lists occupations in rhyme and pictures	K-3	National Dairy Council

*Addresses of publishers given in alphabetical listing on page 89-92.

The Wonderful World of Work Series: Twenty-four color filmstrips with records that emphasize the point that work can be both enjoyable and worthwhile...covers many occupations and discusses just what mothers and fathers do	K-6	Denoyer-Geppert
Career Alternatives: Film that treats the career alternative of white collar or blue collar work--is open-ended and stimulates discussion	4-9	King Screen Products
Social Science Laboratory Kits: Deals with dynamics of human relations and provides a lab where pupils explore the causes and effects of human behavior: value inquiry helps pupil understand his own behavior and that of people whose behavior is different from his	4-6	SRA
Community Workers and Helpers, Community and the Home Helpers, Life in Our Community Book 2: High interest reading and special reading (duplicating books and teacher resource materials)	K-3	Paine Publishing
Instructo Community Helpers, Instructo Flannel Board Set, When I Grow Up, I Want to Be, People We Know, Giant Pictures	K-3	Practical Drawing
People and Their Jobs	K-3	Playschool
Police Helpers - Five Helpers (materials for more comprehensive community helpers instructor)	K-3	SVE
Expanding Interest Materials:		
Familiar Birds and Their Young	K-3	SVE
Materials for Brine Shrimp Labs	K-9	McGraw Hill
Investigating Rocks	6-9	Encyclopedia Britannica
Children and the Law	K-3	D. Cook
Learning About Money	K-3	D. Cook
Job Opportunities Now: Information on a variety of careers--stresses jobs that do not require college degrees, emphasizes the necessity of skills, proper work attitudes, and education (6 filmstrips)	7-12	SVE
Babysitting: The Job--The Kids: Consists of two parts of up-to-date information and application for other occupations (2 filmstrips)	7-12	Guidance Associates

A New Look at Home Economics Careers: Outlines the many new fields that are a growth of the science of home economics (filmstrip)	7-12	Guidance Associates
What Will I Be? Surveys the panorama of vocational opportunities and looks into twenty separate career fields...tries to make vocational planning an easier task (4 filmstrips plus 50 review booklets)	7-12	Educational Communication Distribution
Job Experience Kit: Collection of work-simulation experiences in twenty representative occupations, each designed to give students opportunity to solve problems typical of a particular occupation	7-12	SRA
More Unfinished Stories for Use in the Classroom: booklet offering open-ended stories that require thought, decision, and originality to complete	7-12	NEA
Careers in the Office Series: How Essential is Cooperation? What is the Key to Advancement? What is a Tactful Approach? Which Career? Is Preparation Important? (films)	7-12	Encyclopedia Britannica
Eight millimeter film loops on specific careers (carpenters, truck drivers, routemen, automotive body repairmen, beauticians, etc.)	7-12	Encyclopedia Britannica
Jobs and Gender, Preparing for the World of Work, Your First Year in High School, Your Job Interview, and so on: (series of guidance and information filmstrips)	7-12	Guidance Associates
DECA Individual Marketing Project: Fourteen transparencies with instructions for use in Distributive Education problems	9-12	Development Dynamics Corporation
Foundations for Occupational Planning: Captioned filmstrips aid students in evaluating their own characteristics and relating them to world of work (5 filmstrips)	6-9	SVE
Vocational Decisions: Discusses various careers open today with emphasis on consideration of abilities, interest, and training when making vocational decisions (3 filmstrips)	7-12	SVE

Free or Minimal Cost Resources

Description	Source
Materials and information on cardboard carpentry	Educational Materials and Services Division Tri-Wall Containers, Inc. Department EPM, 1 DuPont Street Plainview, New York 13137
Directory of contemporary craftsmen, shops, and craft suppliers in New Mexico	Ms. Virginia Gannon 321 West San Francisco Santa Fe, New Mexico 87501
Environmental Studies Packets 1 and 2 (Planned activities for sensitivity training to environment)	American Geological Institute c/o Sensorsheet, Box 1159, Boulder, Colorado 80302
List of free materials available to secondary school teachers	Educational Service Bureau, Dow Jones and Company, Inc. P.O. Box 300, Princeton, New Jersey 08540
Literature on "Technology for Children" (T4C) programs	Dr. Kenneth Charlesworth, Director, T4C Project 225 State Street, Trenton, New Jersey 08608
Teacher's Guide for Project DEVISE (guide and suggested activities for career awareness program)	Board of Education, Educational Service Unit #12, Times-Herald Building, P.O. Box 538, Alliance, Nebraska 69301 ATTN: Phyllis Beiber, Office Manager
List of approved books and audiovisual materials	New Mexico State Board of Education (should be a copy of these at every school in state)
Monthly packets on career education activities and materials	Careers, Inc, Guidance Publications, P.O. Box 135, Largo, Florida 33540
Information on Dreikur's Behavioral Modification video tapes	Great Plains National Instructional Television Library University of Nebraska, Lincoln, Nebraska 68508
Individual job opportunity guides for specific career areas (free)	Bureau of Employment Security, Labor and Industry Building, Seventh and Forster Street, Harrisburg, Pennsylvania 17121 (Edward J. Finegan, Director, Employment Services)

Description	Source
Unemployment is a Social Problem: Kit (7-12) developed by U.S. Department of Labor. Contains student manuals (34 copies), simplified description of major concerns of unemployment, simulated UI game, filmstrip with illustrated script and recording, 5 transparencies, 7 exploratory materials (35 copies each), and teacher's guide.	One kit per district available free from Employment Security Commission of New Mexico, P.O. Box 1928, Albuquerque, New Mexico 87103
The Smart Guy booklet, comic caricature of young man who quits school (multiple copies available free)	United Electronics Institute, 3631 Cedar Springs Road, Dallas, Texas 75219
Filmstrip: Auto Mechanics and Technicians-No Room for Error	Ford Motor Company (see local office for nearest address)
Filmstrip: Make Your Habits Work for You	B. B. Podendorf, 13 East 53rd Street, New York, New York 10022
Filmstrip: Habits that Hold You Back	D. Valentry, New York Employee Relations, 19 West 34th Street, New York, New York 10001
Filmstrips and Brochures on Retailing and Fashion	J. C. Penney Company (see your nearest office)
Filmstrip: Come Catch a Rainbow	Educational Service Department, Public Relations, Pittsburgh Plate Glass Company, Pittsburgh, Pennsylvania 15222
Filmstrip: Money Management and Your Shopping Dollars	Prudential Plaza, Chicago, Illinois 60601
Color Wheels	Local Paint Stores
Film: The Wilderness Film: Talk to Me and in-class demonstrations	U.S. Bureau of Mines (check local office) Mountain Bell (see local office)
Slide talk and booklets on function and jobs with State Land Office	Mr. Jack Pearce, Director of Public Affairs, State Land Office, P.O. Box 1148, Santa Fe, New Mexico 87501
Film: The Lost Frontier various films and filmstrips	Bureau of Land Management (see local office) U.S. Department of Agriculture Forest Stations
New Mexico Wildlife Magazine	Department of Game and Fish, State Capitol, Santa Fe, New Mexico 87501

Description	Source
Variety of films and filmstrips (including film on Job Corp)	Employment Security Commission (nearest office)
Variety of brochures and information	Bureau of Indian Affairs (nearest office)
Information and guidance for touring legislative complex in Santa Fe	Ms. Michell Jewett, 334 State Capitol Buildi... New Mexico Legislative Complex, Santa Fe, New Me..ico 87501
Films and filmstrips	Los Alamos Scientific Laboratory, Los Alamos, New Mexico 87544
Films and filmstrips	New Mexico State Library, P.O. Box 1629, Santa Fe, New Mexico 87501
Films on mining and copper	Kennecott Copper, R. P. Saffold, Public Relations Director, Chino Mines Division, Hurley, New Mexico 88043
Films, filmstrips, and educational materials	National florist association (see local florist)
Assistance in developing local resource contacts and classroom speakers	Contact local civic and interest groups (Lions Club, Rotary, Chamber of Commerce, American Association of University Women, PTA, PEO, etc.) In Albuquerque, Project REFER of Chamber of Commerce has list of 700 contacts in business and industry who are interested in assisting in career awareness
Information on government functions and local employment (class tours and/or speakers can usually be arranged; most offices have access to educational materials)	Contact local, county, state, and Federal offices located in your city (see yellow pages listing under government)
Military recruiters	See local office

Publishers of Career Education Materials

Allyn and Bacon, Inc., 153 Tremont Street, Boston, Massachusetts 02100.

American Council on Education, Washington, D.C. 20036.

American Guidance Service, Inc., Publishers' Building, Circle Pines, Minnesota 55014.

American Dental Association, Council on Dental Education, 222 East Superior Street, Chicago, Illinois 60626.

American Hospital Association, 840 North Lake Shore Drive, Chicago, Illinois 60626.

American Legion Education and Scholarship Program, Americanism Division, P.O. Box 1055, Indianapolis, Indiana 46206.

American Medical Association, 535 North Dearborne Street, Chicago, Illinois 60610.

American School Counselor Association and National Vocational Guidance Association, Association Films, Inc., 1621 Dragon Street, Dallas, Texas 75207.

Associated Master Barbers and Beauticians of America, 537 South Dearborne Street, Chicago, Illinois 60600.

Association Films, Inc., 1621 Dragon Street, Dallas, Texas 75207.

Avon Cosmetics, Inc., 83rd and College, Kansas City, Missouri 64141.

Telephone Company, State Office.

Bellman Publishing Company, P.O. Box 172, Cambridge, Massachusetts 12138.

Better Business Bureau of Oklahoma City, Inc., Commerce Exchange Building, Oklahoma City, Oklahoma 73102.

B'nai B'rith Vocational Service, 1640 Rhode Island Avenue, N.W., Washington, D.C. 20036.

Bruce Publishing Company, 400 North Broadway, Milwaukee, Wisconsin 53201.

Careers, Largo, Florida 33540.

Catholic Hospital Association. St. Louis, Missouri 63104.

Center for Vocational and Technical Education, Ohio State University, Columbus, Ohio 43212.

Chamber of Commerce of the United States, Washington, D.C. 20006.

Chronical Guidance Publications, Inc., Moravia, New York 13118.

Combined Book Exhibit, Inc., Briarcliff Manor, New York, New York 10510.

Coronet Films, Coronet Building, Chicago, Illinois 60611.

Croner Publications, Queens Village, New York, New York 10003.

Day Company, John, 62 West 45th Street, New York, New York 10036.

Delmar Publishing, Inc., Mountain View, Albany, New York 12205.

Doubleday and Company, Inc., 277 Park Avenue, New York, New York 10017.

Drake, Frederick, J. and Company, 7312 North Ridgeway Avenue, Skokie, Illinois 60607.

Educational Resources, Inc., Division of Educational Design, Inc., P.O. Box 103, 11 Church Street, South Orange, New Jersey 07079.

Encyclopedia Britannica Films, Inc., 1150 Wilmette Avenue, Wilmette, Illinois 60607.

Engineers' Council for Professional Development, 29 West 39th Street, New York 17, New York 10006.

Fairview Audio-Visual Company, P.O. Box 142, Tulsa, Oklahoma 74112.

Federal Bureau of Investigation, State Office.

Ferguson, J. G., Publishing Company, 6 North Michigan Avenue, Chicago, Illinois 60602.

Follet Educational Corporation, 1010 West Washington Boulevard, Chicago, Illinois 60607.

Gale Research Company, 424 Book Tower, Detroit, Michigan 48200.

General Motors Corporation, Allison Division, 219 East Atkinson Plaza, Oklahoma City, Oklahoma 73110.

Good Housekeeping Bulletin Service, 57th Street at 8th Avenue, New York, New York 10019.

Grosset and Dunalp, Inc., 51 Madison Avenue, New York, New York 10010.

Guidance Associates, P.O. Box 5, Pleasantville, New York 10570.

Harper and Brothers, 49 East 33rd Street, New York, New York 10016.

Household Finance Corporation, 406 West Main Street, Oklahoma City, Oklahoma 73100.

Internal Revenue Service, State Office.

Kansas State Department of Education, 120 East Tenth, Topeka, Kansas 66612.

Lippincott, J. P. and Company, 227 South 6th Street, Philadelphia, Pennsylvania 19105.

Little, Brown and Company, 34 Beacon Street, Boston, Massachusetts 02106.

McGraw-Hill Films, 327 South 41st Street, New York, New York 10036.

McGraw-Hill Book Company, Webster Division, 330 West 42nd Street, New York, New York 10036

Milady Publishing Company, 3839 White Plains Road, Bronx, New York 10400.

National Audio-Visual Association, Inc., 3150 Spring Street, Fairfax, Virginia 22030.

National Association and Council of Business Schools, 601 13th Street, N.W., Washington, D.C. 20003.

National Association for Practical Nurse Education, Inc., 654 Madison Avenue, New York 21, New York 10003.

National Business Education Association, 1201 16th Street, N.W., Washington, D.C. 20036.

National Catholic Welfare Council, 1312 Massachusetts Avenue, N.W., Washington, D.C. 20023.

National Consumer Finance Association, 1000 16th Street, N.W., Washington, D.C. 20036.

National Council of Technical Schools, 1507 M Street, N.W., Washington, D.C. 20023.

National Council on Hotel and Restaurant Education, P.O. Box 7727, Benjamin Franklin Station, Washington, D.C. 20036.

National Dairy Council, 111 North Canal Street, Chicago, Illinois 60606.

National Education Association, 1201 16th Street, N.W., Washington, D.C. 20036.

National Health Council, 1740 Broadway, New York, New York 10010.

National Vocational Guidance Association, 1605 New Hampshire Avenue, N.W., Washington, D.C. 20009.

New American Library, The, 501 Madison Avenue, New York, New York 10022.

New Holland Machine Company, New Holland, Pennsylvania 17557.

New Jersey State Department of Education, Trenton, New Jersey 08600.

New York Federal Reserve Bank, P.O. Box 10045, New York, New York 10049.

New York Life Insurance Company, Career Information Service, 51 Madison Avenue, New York, New York 10010.

North Carolina Department of Public Instruction, Division of Vocational Education, Raleigh, North Carolina 27600.

OCCU-Press, 489 Fifth Avenue, New York, New York 10017.

Potomac Press, Arlington, Virginia 22200.

Psychological Corporation, The, 304 East 45th Street, New York, New York 10017.

Public Affairs Pamphlets, 22 East 38th Street, New York, New York 10016.

Science Research Associates, Inc., 259 East Eric Street, Chicago, Illinois 60611.

Simon and Schuster, Inc., Rockefeller Center, 630 Fifth Avenue, New York, New York 10020.

Society for Visual Education, Inc., Division General, 1345 Diversey Parkway, Chicago, Illinois 60614.

Southwestern Publishing Company, 5101 Madison Road, Cincinnati, Ohio 45227.

Small Business Administration, Washington, D.C.

Steck-Vaughn Printing Company, P.O. Box 2028, Austin, Texas 78767.

Sterling Educational Films, 241 East 34th Street, New York, New York 10016.

Sterling Publishing Company, 419 Park Avenue, South, New York, New York 10016.

Strange, Les, Associates, 3376 Washtenaw Avenue, Ann Arbor, Michigan 48103.

Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402.

United Business Schools Association, 1101 17th Street, N.W., Washington, D.C. 20036.

United States Air Force, Film Library Center, 8900 South Broadway, St. Louis, Missouri 63100.

United States Department of Agriculture, Division of Home Economics, Federal Extension Service, Washington, D.C. 20251.

United States Department of Commerce, Washington, D.C. 20210.

United States Department of Health, Education, and Welfare, Washington, D.C. 20203.

United States Department of Labor, Bureau of Labor Statistics, United States Government Printing Office, Washington, D.C. 20402.

United States Department of Labor, Manpower Administration, United States Government Printing Office, Washington, D.C. 20402.

United States Department of Labor, Women's Bureau, Washington, D.C.

United States Government Printing Office, Division of Public Documents, Washington, D.C. 20402.

United States Office of Education, Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402.

United States Office of Education and the National Industrial Conferences Board, Washington, D.C. 20402.

Veterans' Administration Contact Office, Federal Courthouse Building, State Offices.

Walch, J. Weston, Portland, Maine 04104.

Wisconsin Department of Public Instruction, Madison, Wisconsin.

For a complete list of publishers, consult such indexes as Educators Purchasing Master (EPM), Fisher Publishing Company, Inc., 3 West Princeton Avenue, Englewood, Colorado 80110.

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Bottoms, Gene. "Career Development Education K Through Post-Secondary and Adult Education." Mimeograph. Atlanta: Division of Vocational Education, Georgia State Department of Education. n.d. 50 pp. ED 062 580 MF $0.65 HC $3.29.

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Burchill, George W. "Work-Experience Programs for Secondary Youth." Paper presented at the National Conference on Exemplary Programs and Projects--1968 Amendments to the Vocational Education Act. Atlanta, Georgia, 12-14 March 1969. MF available in VT-ERIC Set ED 045 836.

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_____ and Vetter, Louise. Career Guidance: An Overview of Alternative Approaches. Columbus: The Center for Vocational and Technical Education, The Ohio State University, August 1971. 21 pp. ED 057 183 MF $0.65 HC $3.29.

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