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ABSTRACT

Written to accompany a three-volume set of teaching activities, this guide provides recommendations for staffing, structuring, and equipping a career education program. The introduction discusses the purpose of the guide, career education in Pennsylvania, and several laws pertaining to career education. Chapter I deals with the roles of the administrator, counselor, teachers, department heads, and librarians in the development of career education program. Chapter II presents four approaches to implementing a career education program and discusses their advantages and disadvantages: A total coordinated program involving students at all grade levels; a unit within a major subject; a separate course in career education; and a series of loosely related activities. Chapter III makes suggestions for selecting and evaluating instructional materials, including printed, audiovisual, and assessment materials. In Chapter IV, external resources are discussed, for example: Vocational-technical schools, other district staff, the community, government agencies, and professional consultants. Chapter V covers management considerations such as staff inservice training, scheduling, grading, field trips, and financing. A summary and a bibliography conclude the document. (LMS)

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GETTING STARTED:
A Guide To Writing Your Own Curriculum

The Pennsylvania
Guide for
Instructional Improvement
through
Career Education

Organizational Volume

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C O N T E N T S

<i>Acknowledgments</i>	IV
INTRODUCTION	1
Purpose of the Guide	
Career Education in Pennsylvania	
Laws Pertaining to Career Education	
STAFF ROLES	3
Administrator	
Counselors	
Teachers	
Department Heads	
Librarians	
PROGRAM ALTERNATIVES	7
A Total Coordinated Program	
A Unit Within a Major Subject	
A Separate Course	
A Series of Loosely Related Activities	
MATERIALS	11
Printed Materials	
Texts	
Workbooks	
Periodicals	
Comics	
Materials developed under federal projects	
Audio Visual Materials	
Filmstrips	
Tapes	
Films	
Displays	
Simulation and game kits	
Assessment Materials	
Interest Inventories	
Attitude Scales	
Evaluation Materials	
RESOURCES	18
Vocational-Technical Schools	
Other District Staff	
Developing a Community Resource Guide	
Government Agencies	
Professional Consultants	
MANAGEMENT CONSIDERATIONS	22
Staff In-Service	
Scheduling	
Grading	
Field Trips	
Financing	
SUMMARY	26
BIBLIOGRAPHY	27

INTRODUCTION *Purpose of the Guide*

Although a substantial number of texts, manuals and guidebooks have been written describing what career education is and the types of activities that could be undertaken at various grade levels, there has been virtually nothing published to assist the administrator or supervisor in organizing and implementing such a program. The purpose of this manual is to fill that void by providing recommendations for staffing, structuring and equipping a career education program.

Another purpose of this publication is to complement Getting Started: A Guide to Writing Your Own Curriculum - The Pennsylvania Guide for Instructional Improvement Through Career Education. This is a three-volume set of teaching activities systematically utilizing 67 career education objectives or goals for all subjects, K-12. Both publications will serve to provide a complete picture of a comprehensive career education program. While such a comprehensive program is advocated in these guidelines it is recognized that not all districts may be able to institute a total program immediately, therefore, examples of program alternatives will be presented in the second chapter.

Career Education in Pennsylvania

Pennsylvania began to give serious consideration to the concept of career education in 1971 when the then U.S. Commissioner of Education, Sidney P. Marland, Jr., first articulated the need for such an emphasis in education. The Commonwealth's General Assembly formed a Legislative Committee on Career Education under the chairmanship of Representative Roland Greenfield (D-Philadelphia) and scheduled a series of hearings at various locations around the state. These hearings, held during early 1972, attracted great interest among all segments of the population. Testimony on needs and methodology was provided by parents, students, school staff, college personnel, professional organizations and labor unions.

Following the hearings legislation was swiftly enacted which created a commission for career education consisting of legislators and educators. The purpose of the commission was to study the status of career education in the state and to oversee the Department of Education's efforts to implement such a program among the 505 school districts. The Secretary of Education appointed an Assistant Commissioner for Career Education whose task it was to coordinate the efforts of the various bureaus toward meeting the legislative mandate for increased emphasis upon career education.

In 1973 the Department of Education's Bureau of Instructional Support Services began work on a Career Development Guide. This document, which was to serve as a handbook for local educators attempting to introduce career education programs, was field tested during 1974-75 and revisions were carried out in 1975-76 of which this publication is a part.

Laws Pertaining to Career Education

In 1974 the federal government enacted certain amendments to its Education Act creating a separate Office of Career Education within the U.S. Office of Education. Some \$15 million was authorized over the following three years. Under Title III of the Elementary and Secondary Education Act many districts applied for and received monies for career education on a project basis. Likewise, funds appropriated under Part D of the Vocational Education Act were used to stimulate career education programs. ESEA Title IV, which replaced the former Title III as well as other federal programs, has provided each school district with funds that can be utilized in a career education program for guidance, library and media staff and materials. Title IV-B gives every district a fixed per-pupil sum, while Title IV-C is administered as competitive project grants.

Presently Congress is considering several bills aimed at pouring as much as \$100 million into career education over the next three years. For reference these include House bills 11023 and 12620, and Senate bill 2657.

Later chapters in this document will tie these laws and funding sources into actual program development and activities.

Chapter I

STAFF ROLES Each professional employee of the school district has a distinct contribution to make to the development of a career education program. Likewise, clerical and para-professional staff can be important adjuncts to the careers program, however, since they usually function under the supervision of a professional their roles will not be dealt with separately in this chapter.

Administrator

Both the district and the building administrator play a key role in the planning and implementation of a career education program. The support of the administrators is necessary before preliminary planning can begin.

The administrator's role consists of many facets, the first being leadership. As the person most acquainted with all aspects of the school program the administrator is in the best position to say how career education can most efficiently fit into the educational system. Likewise, in the role of instructional leader the administrator can coordinate the cooperative efforts of the total staff which must be involved if a full-scale effort at career education is to be made. The administrator's expertise in scheduling, facilities and resources available in his building or district is essential to insure that all the planning that takes place is within the capacity of the district.

Staffing is another facet of the administrator's role that applies to career education. The administrator has primary responsibility for hiring staff for new programs. Likewise, the building principal should be the person who is most aware of the competencies of the present staff as they might be utilized in a careers program.

Budget is another major component of an administrator's role. The allocation of funds to the career education program and the review of purchase orders lies within the administrative sphere. Also, if supplemental funds are being sought through project grants the administrator is usually the responsible person to make application and receive funds.

Counselor

One of the most common misconceptions concerning career education is that it is basically a guidance function. This

attitude probably stems from the fact that counselors have expressed a great deal of interest in career development and have always been involved in such components of career education as occupational information, educational planning and job placement. However, the person who views career education as just guidance has a distorted view of the total concept.

The counselor does, however, have a major role to play in both the planning and implementation of career education. The training programs for counselors have probably dealt with more career-related material than those for other educators. Likewise, as has already been pointed out, counselors are experienced in some phases of career development.

Counselors can approach their role in career education from two directions. Any given counselor may perform one or both roles depending upon their local program. First, the counselor may be a resource person contributing to the planning of the careers program and advising the teachers or other staff called upon to conduct the activities. Second, the counselor may actively implement some of the activities.

In the first role the counselor may be a resource to the administrator, advising on the content of the career education program, identifying existing career components in the school program, and recommending materials for purchase to supplement the program. As a resource to the teacher the counselor may provide advice on course activities, materials to be used or other sources of help. The counselor may also be involved in in-service programs for the staff. Finally, the counselor may serve as a resource to students, counseling them through their decision-making or exploratory activities related to further education or career selection.

In their second role as program implementers the counselors may assist the staff by conducting certain portions of a careers course or leading a mini-course of their own. The counselor's role does not include an extensive time commitment to classroom activities since the purpose of differentiated staffing is to have counselors perform one kind of task and teachers another. It may be determined, however, that the counselor is the person best prepared to conduct a session on educational alternatives or interpretation of an interest inventory.

Teachers

The role of the teachers in career education is different, at least in degree, from their role in the traditional

curriculum. Normally the teachers are called upon to deal with students in relation to a body of knowledge concerning which they have been pre-trained. In the career education program, the teacher will probably be less familiar with the content and may require extensive in-service training before and during the program. It is in this latter situation where the teacher must rely upon his or her knowledge of learning theory rather than familiar material.

Most teachers will find little difficulty in relating their subject area to the world of work. Such relatively common knowledge as how to apply for a job or the types of occupations common to the area will be no problem for most to deal with, but the more esoteric career topics such as decision-making theory and self-assessment will have to be thoroughly explained before they can be expected to teach it.

Some teachers may not see career education as their role, missing the universality of the program. Others may feel that their subject matter is of primary importance and that they do not have the time to introduce something new. For these the administrator in charge of implementing career education must either provide a thorough orientation as to priorities or find a way to exclude them from participation in the program. One way to do this is to team teachers so that one may teach a group of students subject content while the other works with career development and then have them switch groups halfway through the year.

Department Heads

In a district which has a strong system of department heads they should be used to provide leadership in developing and implementing the career education program. By involving the department heads in the planning phase of the program, information can be continually relayed back to the teachers and their feedback can be obtained.

If the district is following the suggestion for a totally coordinated program of career education from K-12, then the department heads can be used most effectively in a coordinating role across grade levels. As second echelon instructional leaders they can introduce their teachers to the concepts of and methods for career education. They can also play a role in in-service and supervision.

When developing the several curriculum components of career education the department heads can be given responsibility

for their subject area and for coordinating the staff's work in preparing written curriculum guides.

Librarians

Librarians are discussed separately in this section because of the important role they can play in obtaining, storing and disseminating career materials. In particular this includes books, pamphlets, filmstrips and tapes.

Much of the service a librarian may be able to give to the career education program depends upon the local situation and facilities. In many districts the librarian functions as an instructional media specialist who is responsible for the accumulation, maintenance and delivery of media materials to students and teachers. In this situation the counselor should be able to work closely with the librarian to see that a reasonable quantity of up-to-date career material is put into circulation. Facilities permitting, it may be possible to locate a career resource center within the library where all the career-related materials may be consolidated in one location. Here again, depending upon the layout of the school, such a center may be located in the guidance suite.

Another service that the librarians may perform would be an inter-school loan service so that each building does not need to replicate the resources of each other but can share materials which allows for either a much larger selection of materials or a substantial cost savings.

The ties between counselors and librarians have been strengthened in recent years by two government actions. The first was the reorganization of the Pennsylvania Department of Education to combine pupil personnel services, libraries and media into one bureau. The second was the consolidation of the former NDEA Title III, ESEA Titles II and III into a new Title IV which provides a per-pupil grant to districts for the purchasing of guidance, library and media materials. Since the request for these funds must be written as a unified proposal, the counselors and librarians must of necessity work together.

Undoubtedly there are many other classifications of staff members that could be mentioned but the purpose of this document is to touch only upon those that commonly exist in all school districts and who can be expected to make the major contribution to the career education program.

Chapter II

PROGRAM ALTERNATIVES

For the district considering the implementation of some type of career education program, there exist several alternatives. In this chapter we will review four approaches running the gamut from a totally coordinated program to a series of loosely related activities. Undoubtedly, there are many shades and variations of these four patterns which a district could select. Which alternative may finally be chosen by a school system will depend on many factors including resources, facilities, staff attitudes and staff competencies.

A Total Coordinated Program

The most desirable approach to introducing career education into the curriculum would be one that involves students at all grade levels and infiltrates all areas of the instructional program. This allows long range objectives to be established which may be dealt with in a developmental manner. As educators we are aware that for learning to become fixed the individual must be exposed incrementally over a considerable period of time.

The greatest advantage of the total program is that it allows for such incremental, developmental learning. Also, it emphasizes the importance of career education to the students, staff and community rather than making it appear to be an afterthought. A third advantage is that this model involves the entire staff of the district in a cooperative effort that crosses the boundaries of subject area and grade level. In fact career education probably offers one of the best means yet devised to provide for a common involvement of the staff.

Using this alternative, the broader the program becomes, the greater the need for supplemental materials. However, it should be emphasized that this expense can be comparatively minimal and that the sharing of materials among many teachers and students is more cost-effective than dealing with small numbers. Another need is for in-servicing larger numbers of staff members. There is no way that a total program can be integrated into the curriculum without providing all the staff involved with a common understanding of what is to be done and why it is being done. Unless the district is fortunate enough to have staff members who are well versed in career education who can conduct such in-service activities, consultants must be obtained and in either case staff time must be provided for the in-service.

A Unit Within a Major Subject

A second alternative for presenting aspects of career education is to introduce it as a unit within one or more standard subjects. One approach to this is to require each subject area teacher to incorporate a unit into their curriculum concerning the relationship of the subject to careers. For example, the mathematics teacher could explain the types of careers such as engineering and accounting that require particular skill in mathematics. Likewise, the same teacher could use examples from real life situations when teaching specific skills and in class assignments. This same approach could be applied to any subject and has the double virtue of both introducing career concepts and emphasizing the relevance of the subject content to future activities.

Another method of inserting a careers unit within a major subject is to have certain teachers take a portion of their class time to deal with basic career concepts such as self-understanding, career information or decision-making. The amount of time taken from the regular subject matter could vary depending upon how much material the district wishes to cover and whether this is being done at only one grade level or several.

The advantages of this alternative are that use is being made of existing staff who know the students well, and that costs for materials should be minimal. Also, there would be no scheduling problems or need for extra facilities.

The disadvantages of this approach are the fragmentation of the material and, as in the first alternative, the need for in-servicing the staff who are to be involved. This is particularly true if the second approach mentioned above is to be used.

A Separate Course

One of the most efficient ways to get started in career education in a small way is to introduce a separate careers course at one or more grade levels. Care should be taken to insert the careers course at those points in the educational program where it will be most beneficial. For example, one might choose to include a six week study of careers in the sixth grade since this is a time when children are leaving the fantasy stage of career choice and are beginning to consider more realistic alternatives. Likewise, at the eighth grade it might be decided to introduce a one semester careers course since this is the

point at which students generally begin to have some choice in their course selection for the coming year. Also, ninth grade is usually the point at which students are expected to opt for attendance at the area vocational-technical school and a careers unit can be helpful to this decision-making process.

In the case of a short course such as once a week for six weeks, the school counselor may be the person to conduct the sessions. In the case of the longer course which is conducted every day for six weeks or an entire semester, it would be necessary to have a teacher specifically for the careers course.

The advantage to having a separate careers course is that it exposes the students to career development activities at the most critical times in their school program. Also, a limited number of staff can be involved allowing the selection of those teachers who are most interested in and best prepared for implementing a careers course. Having a specific course meeting at regular times also allows for long range planning of activities which is not possible when the material is being inserted periodically into other classes.

The disadvantages of this alternative lie in the need for providing staff and facilities in addition to the existing requirements of the school program, inserting the course into what may be an already crowded master schedule, and providing sufficient materials and equipment for the class.

A Series of Loosely Related Activities

Virtually every school provides some activities for its students that can be subsumed under the heading of career education. Vocational counseling, field trips, guest speakers and interest assessment are examples of career-related activities that most schools already provide.

There are no true advantages to this type of career education. The reason it is tolerated in many schools is obvious, it requires no extra effort to support such a program.

The disadvantages are that such a program lacks the continuity to impress the desired career concepts upon students nor does it show relevance between the activities and future planning. This alternative may represent the starting point for planning a career education program but nothing more.

In planning for a career education program one of the first steps should be to assess those related activities that do

exist in the present school program. Many of these pieces may fit into the final program framework that will be developed. If some career activities are functioning well they should not be eliminated in favor of a totally new approach.

Regardless of which of the four approaches is selected, one of the first activities after the decision to implement career education is made is to prepare the objectives of the program. Whether one is planning for a totally coordinated curriculum or a series of loosely related activities, the only difference in the preparation of objectives is one of degree. Obviously the broader career education's involvement in the school program, the more staff and time must be devoted to the preparation of sound educational objectives and their accompanying activities and evaluation strategies. While the reader is referred to one of the many books that exist on preparing objectives for a more comprehensive treatment of this subject, it should be kept in mind that an objective, either instructional or guidance, that cannot be measured is not an objective. The introduction of career education into the curriculum may provide an excellent opportunity to redo the district's total fund of objectives so that they become more measurable and, therefore, more accountable.

Once staff and program planning considerations have been dealt with the next step will be the selection of materials. The third chapter will review the various kinds of materials available, both printed and audio-visual, and will provide some suggestions for selecting appropriate materials.

Chapter III

MATERIALS Few educational programs, if any, have attracted as much attention from publishers and manufacturers as has career education. Many publishers recognizing that their existing products could be used by career educators did nothing more than add the word careers to the title of the materials. Others immediately sought to develop a line of career education equipment to take advantage of the growing market.

Many counselors and teachers have also attempted to develop materials for local use such as worksheets, games and even audio-visuals. Some of these local efforts have been supported by project funding such as the former Title III of the Elementary and Secondary Education Act or its replacement, Title IV.

Whether commercially or locally prepared, any materials used for career education should be carefully evaluated for their usefulness and appropriateness. The very quantity of these materials being produced makes it easy for educators to become overwhelmed by related materials. This topic will be dealt with later in the chapter.

Printed Materials

TEXTS are available which can provide a structured program of a semester's or year's length. With such books a teacher or counselor can conduct a class with less planning or training than might otherwise be required. Several varieties of texts are available. Some books are oriented toward guidance topics such as decision-making skills and self-appraisal. Others are subject-oriented such as reading texts which contain stories relevant to jobs, job hunting or working conditions. Some of the weaknesses that are associated with many career texts are that they tend to provide cursory treatment of a great many topics and may require supplementary materials to flesh out the topics being studied. Texts are also relatively expensive, particularly, if a large number of students are to be involved in the program. One way to avoid substantial expenditures for texts is to buy only a few copies, perhaps enough for one class, and then to use them as reference books that can be shared among several classes rather than assigning a book to each student.

WORKBOOKS or worksheets provide flexibility since in many cases the pages can be used selectively without detracting from the meaning of the material. Also, workbooks are usually

about one-third the price of texts. An even more economical product is the workbook with ditto master pages that can be used to produce enough copies of each worksheet for several classes of students at the price of one book. Worksheets are probably the most common type of career material that is prepared locally. Particularly in the case of short units inserted within a regular subject the local staff may find that they can prepare worksheets that fit their needs better than any commercial product.

PERIODICALS related to career education are available for a variety of purposes on a bi-weekly or monthly schedule. The various periodicals serve at least three purposes. Some are directed strictly at the career educator and in newsletter format discuss recent legislation related to career education, provide capsule descriptions of career programs in local districts and list available publications and sample materials that may be ordered. These are generally the most expensive periodicals but may be well worth the cost because of the information they provide on sources of funding and sample materials. The second type are what might be called "reference" periodicals. These are often published by government agencies and contain up-to-date statistics on employment trends, salaries and working conditions. Additionally, they often contain informative articles on specific careers or clusters. These periodicals can be an excellent reference source for student reports or teacher lesson preparation. Unlike the first type, whose content is largely dated and of little value for future reference, these periodicals have long-term usefulness. The third kind of periodical is directed toward the student and can be used to supplement classroom activities. Usually the content revolves around a cluster of careers and contains stories, facts, puzzles and quizzes which relate to the careers under discussion. This third type is generally the least expensive of the three, however, it must be purchased in some quantity if it is to be used in class and will probably be disposed of after use.

COMICS are a high interest method of providing career information to students in grades 5-8. The color, pictures and reading level of these publications tend to make them appropriate for students who exhibit a lack of interest in standard reading materials. One group with whom comic materials have been particularly successful has been the slow learner. Not only is the material attractive to this group but the reading level which is generally about fifth grade is reasonable for the junior high age slow learner. The comics are available in a number of topics dealing with a single occupation, a cluster of careers or some aspect of the decision-making process. These publications are low price and, therefore, can be made available to students in quantity.

MATERIALS DEVELOPED UNDER FEDERAL PROJECTS are another potentially useful resource for the career educator. Many of the projects conducted by local districts or state agencies have developed worksheets, curriculum guides or display materials that may be appropriate to other programs as well. Care should be taken when using another district's material that it is appropriate for your purposes. For example, any material that quotes local employment figures, salaries and training programs would probably be misleading if used in another setting. One of the most positive aspects of these materials is that they are usually free and can be copied without infringing upon copyrights. Sources of information about project developed materials include the annual R.I.S.E. index of all projects funded through the Pennsylvania Department of Education, the E.R.I.C. microfilm collection, the files of the Pennsylvania Department of Education's Division of Pupil Personnel Services and several career education periodicals.

Audio-Visual Materials

FILMSTRIPS have probably been the one media most influenced by the career education movement. Literally hundreds if not thousands of new filmstrips concerning careers have been produced during the last five years. Most are accompanied by taped or recorded scripts and printed manuals which suggest how they may be used most effectively and which also contain sample discussion questions that the teacher or counselor may use to stimulate student participation following the viewing of the program. While one would probably want to limit the number of filmstrips used with an entire class, many of these items lend themselves to individual use. With the availability of compact machines that show a filmstrip and play a tape simultaneously, automatically advancing the pictures and providing earphones to prevent disturbing others, it is now possible for the students to use such media at their convenience. Carrels containing such equipment can be located in the library or guidance office for the student to use undisturbed. Since educators have long realized that presentations that affect the sight and hearing are retained better than those that affect only one sense, the advantage of a filmstrip-tape program is obvious. Cost is one serious consideration when selecting filmstrips since a combination program will run between fifteen and thirty dollars and some sets contain more than a hundred strips. Usually economy will dictate that a set of strips be shared among many classes and even several buildings. Developing a district resource list that will allow for intra-district borrowing of such resources will help to make audio-visual materials more cost effective. Most major publishers also allow the prospective purchaser to preview the filmstrips for 30 days before agreeing to buy.

TAPES are another audio-visual product that has been increasing emphasis in career education programs. The most common type of tape is the recorded interview with a worker in a particular occupation. This makes available to the student firsthand information on working conditions, job entry and training that might otherwise only be obtained through a field trip. Tapes have the advantage of being relatively inexpensive and requiring less costly machinery for their use. A careers class can make an interesting project out of preparing their own tapes. At the very simplest level students can interview their own parents and develop a varied tape library in this manner. At a more sophisticated level the class can select the occupations on which it wants to obtain tapes and assign members to contact and record selected workers in that field.

FILMS have been produced on such topics as job clusters, obtaining a job and training opportunities. The main advantage of a film over a filmstrip is the interest value of live action. The disadvantage lies in the cost. Films are generally out of reach of most school budgets unless they are going to be used constantly with large numbers of students. Fortunately most districts have available to them regional film libraries operated by colleges or intermediate units from which they can borrow films on a scheduled basis. Because of this accessibility the only advantage to buying films for the district is that it will be available upon demand, whereas with a loan service there is always the possibility that the film will not be available when desired.

DISPLAYS can consist of posters, charts, pictures or other types of materials combined for bulletin board displays or stand-up displays. While displays are often assembled from materials gathered from a variety of sources there are available commercial displays which refer to a topic such as environmental careers. Not only do displays perform an informational function but they add considerably to the attractiveness of the classroom.

SIMULATION AND GAME KITS are one of the most innovative resources available to the career educator. The variety of kits is enormous both in size and cost. In size the kit may vary from a game requiring a desk top to set it up to a work simulation kit requiring a large room or mobile unit. While the games are used to practice decision-making skills the simulation kits provide the student with actual experience in job activities. These simulation kits contain tools and equipment related to the job being explored along with instructions for the student to follow and in some instances evaluation forms for scoring pupil performance. While the simplest simulation kits can be used independently with no help from the instructor others may require careful monitoring

by a teacher or paraprofessional. Likewise, the instructions can vary in complexity from printed sheets to tape-filmstrip combinations. The major advantage of simulation and game kits is in the student involvement that they provide. These kits provide an excellent opportunity for students to explore their interests directly rather than by the indirect paper and pencil methods. The disadvantages of simulation kits are largely financial. The more comprehensive sets of work simulation kits may cost \$20,000 and require up to three hours for a single student to complete one job activity. In addition they may require an operator and a separate room. The upkeep for materials must be taken into account, also, at a cost of perhaps one dollar per student for each activity undertaken.

Assessment Materials

Tests and inventories can be very useful in developing units on self-understanding and decision-making. Four kinds of assessment instruments will be discussed in this section: interest inventories, attitude scales, measures of knowledge of career information and aptitude tests.

INTEREST INVENTORIES have been a popular part of most districts' standardized testing programs for many years. They can provide a point of departure for the discussion of careers and particularly for exploring the students' personal characteristics as they relate to career planning. Interest inventories can be purchased with reports that vary a great deal in specificity. Which one is selected may depend upon the grade level of the students. In the upper elementary and junior high school grades the interest inventories that provide profiles in broad occupational clusters, i.e. outdoors, mechanical, social service, may relate best to the type of exploratory activities in the careers program. At the high school level interest measures that provide more specific feedback in terms of occupations may be more appropriate. In making use of interest inventories there are three facts that should be kept in mind: (1) this type of measure generally does not reveal any information that is not already known to the subject, although it does help to quantify subjects' characteristics for comparative purposes, (2) the type of items that are used in interest assessment are so transparent that if the subjects chose they could manipulate the results to fall any way they wished, and (3) interest does not necessarily correlate with ability and may change substantially from year to year. If the career educator remembers these three points and does not expect the interest inventory to tell more than it was designed to, then a great deal of useful information may be gleaned from the use of such instruments.

ATTITUDE SCALES measure the subjects' attitudes toward the concept of work and/or certain occupations. They tend to be

constructed from a series of statements that can be answered true or false. Two uses of the scales are as pre- and post-test which can indicate whether the careers program has produced a positive effect upon the students' attitudes and as a teaching tool from which the instructor can, for example, select those items which a majority of the class answered negatively and use them for discussion topics. One mistake which the user should avoid is considering there to be right or wrong answers to the items of an attitude scale. The answers can only be opinion, based upon the experiences of the subject. Many interesting discussions can result from the reasons the students give for their answers.

KNOWLEDGE TESTS that measure the amount of information students possess concerning job characteristics can be used in much the same manner as attitude scales. The main difference is that the items can be scored right or wrong.

APTITUDE TESTS which measure the amount of career-related knowledge or skill that a subject possesses can be combined with interest inventories to present a much clearer self-image. Aptitude tests usually deal with physical skills such as motor coordination, finger dexterity and spatial relations. Special training is often required to administer and interpret such instruments. Also they can not be used with large groups since they require careful proctoring.

The use of assessment tools in career education can be an asset in personalizing the study of careers. The test results help the students to place themselves within the framework of the world of work and begins to promote realism in their future planning. The students should be made aware that such instruments are merely tools in the decision-making process and cannot make decisions for them.

Evaluation of Materials

Because of the variety of career education materials that are available and the limited funds that most districts have to invest in new programs, evaluation takes on particular importance. The first step in evaluation is to have access to the desired materials. Fortunately most publishers now make samples of their products available for a 30 day trial at no charge. Other companies have sample sets of their materials which can be purchased at small costs. Districts with operating career education programs are usually willing to show their equipment and to share bibliographies of the materials they have found most useful. The Pennsylvania Department of Education maintains a Guidance Resource Center in Harrisburg where visitors can browse through a large collection of career

education materials. As can be seen from these examples, most career materials are available to the educator at little or no cost.

Once they have had the opportunity to preview the wealth of materials that are for sale the potential purchaser may feel somewhat confused. There are so many similar products that making a selection may seem difficult. One of the most important criteria is reading level, the district reading teachers can provide a reading level for any item under consideration.

Cost effectiveness is another criterion. One must ask the question whether it is more desirable to buy individual workbooks for each student or a set of spirit masters that may be used selectively to reproduce just the worksheets needed for the class. Another example is the filmstrip libraries which may run \$500. Will the staff use enough of these to justify the expenditure or would it be wiser to buy several specific filmstrips that will definitely receive wide use? Perhaps a workbook can be shared by five classes if the students write their assignments on a separate sheet of paper rather than in the book.

A third consideration is whether the information contained in the resource is current. Such factors as salary and job availability are rapidly changing in our society. Jobs that were common five years ago may have virtually disappeared and hundreds of new occupations, tied to changing emphases in our culture and technology, have appeared. Materials that contain too many specific facts and figures should probably be avoided because of their rapid obsolescence. If such information is desirable it can be filled in from other sources such as the monthly labor market reports or the biennial Occupational Outlook Handbook published by the U.S. Department of Labor.

A final criterion for evaluating career materials is whether it meets the objectives of the program. While it is difficult to prioritize the four criteria, it would seem that this one is certainly the most important. While the other three could to some extent be compensated for, if the materials are not compatible with the objectives of the program then nothing has been accomplished. Looking down over the list of objectives for the program one should be able to say that the material being considered will contribute to the fulfillment of one or more of those objectives.

Next to staff, the selection of materials is probably the most important decision that must be made for implementing a career education program. Efforts should be made to involve everyone connected with the program in the decision-making process.

Chapter IV

RESOURCES

In addition to the resources of the school district there exist many external resources that may often be utilized at little expense to the district. Some of these are more accessible to some districts than others but no district lacks them all. By carefully reviewing these resources the career educator can prevent expensive duplication of service that may already be available.

Vocational-Technical Schools

Virtually every section of the state has access to an area vocational-technical school. These schools, while serving a career education purpose by preparing students for a trade, can also be used as a resource in other career activities.

Field trips to a vocational-technical school can provide students with exposure to a variety of vocations. In addition some vo-techs will give the visiting students an opportunity to experiment with some work simulations either in the shops or in specially designed experience centers. Nor do these activities have to be confined to the potential vo-tech student, the skills and aptitudes that are tested may be relevant across an entire cluster of related careers from the semi-skilled to the professional level.

In addition to the uses that one may make of the vocational-technical school through visitation, such a school may provide a valuable resource for producing low cost career materials. Most vo-techs have a graphic arts program that may be willing to print materials at cost and some have sophisticated film or videotape facilities with which they can produce locally oriented audio-visuals.

The staff of the vo-tech can also be considered as a resource pool that may be tapped for speakers on their specialties.

Other District Staff

Within your own school district there may exist a very useful pool of resource people who can be called upon to serve as speakers or sources of information for the careers program. While they are all involved in the vocation of education many teachers have part-time jobs or hobbies that are entirely different.

Nor should the career of educator be overlooked. One of the simplest ways to introduce the career cluster concept with its spectrum of related occupations at different training and salary levels is by using the field of education. Students can be given the task of developing a list of all the different jobs within the school and then be assigned to interview the various workers and make reports. They should be able to find at least the following careers: principal (management), teacher (public service), bus driver (transportation), cook (food services), secretary (business), custodian (maintenance), nurse (health services), and many more.

Developing a Community Resource Guide

The greatest career resource is the community. It provides opportunities for field trips, speakers, job interviews, student reports and printed career materials. Probably one of the first steps in developing a career education program should be the preparation of a community resource guide.

The content of such a guide should minimally include the title and address of the resource, the name and phone number of the contact person, the type of service that will be provided, (field trips, speakers, work-study arrangements, free brochures in quantity), the frequency with which they are willing to be used, the grade level for which the resource is appropriate, the amount of advance notice required, and the subjects that the person or organization are prepared to deal with.

To develop such a guide first of all requires a list of potential resources. This list can be developed from personal knowledge of the staff, chamber of commerce membership roles and the yellow pages of telephone directories. To each potential resource can be sent a questionnaire requesting the desired information plus a letter describing the objectives of the careers program and the importance of community involvement. Another way to increase the number of resource contacts is to send home to parents a similar survey form.

The more names that can be added to the list the better. It is important that those people and companies generous enough to offer their help not be overwhelmed with requests beyond their capacity to handle them.

Once the resource guide has been assembled, it should be made available to everyone involved in conducting the career program. It will be helpful if one person can oversee the use of the resources, however, to prevent the sort of overkill mentioned in the preceding paragraph.

When community people are being used as speakers it will be beneficial to prepare both speakers and audience for their interaction. The speakers should be made aware of how long they are expected to talk and how much time, if any, will be devoted to questions from the students. They should also be given a written list of the sort of information the class would like to obtain from the discussion. In the case of the students, they should be prepared for the speaker's visit by reviewing common rules of courtesy and by discussion of what information they will want from the resource person. It may be helpful to give each student a list of questions with blanks for them to record the answers as they are provided.

Some system for evaluating the resources should be provided. This evaluation may be done either by the teacher or the students immediately after using the resource. This should eventually allow the career educators to weed out the less useful resources and to maximize the efficient use of community resources.

Government Agencies

State and federal government agencies can be useful to the career educator as sources of information and supplemental funding for projects. Although such agencies do not as a rule have staff to participate directly with students in career activities, they may be able to provide consultants for in-service staff.

The state's 29 intermediate unit offices can be one resource. While only a few of these units have an active pupil personnel services component, all of them are involved in in-service programming including the approval of such programs for credit towards permanent certification for staff.

The Pennsylvania Department of Education does have a staff of experienced consultants who can work with the local district in designing a career education program and developing workshops for staff. By means of project funds available from the federal government the Department also produces localized career information (Pennscript) which is available at no cost to every district and operates a guidance resource center in Harrisburg where interested persons may preview a wide variety of career materials and equipment.

The Employment Service is a source of up-to-date information on employment trends and job benefits. They can also provide training to educators in the use of the General Aptitude Test Battery, a useful evaluation tool for the high school student.

Professional Consultants

In developing a career program and in-servicing the staff an administrator may wish to turn to a professional consultant. Nor is there any lack of such specialists available; the career education boom has brought them forth in just as great a quantity as printed materials or audio-visual aids. The problem does not lie in finding consultants but rather in selecting them and then using them.

Unless the administrator or his staff are already acquainted with the consultant a first step may be to contact other educators who are familiar with the person's services. Any consultant should be willing to provide such references.

One criterion that is very important in selecting a consultant is the practical experience with career education that the person has had. Perhaps the person has taught a course in careers for a school district or has directed a career education project funded from federal sources. Seldom would the district want a consultant whose background is purely theoretical, a few good reference books would be much less costly.

The sources of consultants are varied. Many college instructors have served as resource people on career projects. Local district staff who have directed or implemented a careers program may be available. The Pennsylvania Department of Education's Bureaus of Vocational Education and of Instructional Support Services will be aware of districts that are working in career education. The annual report of the state's Project, R.I.S.E. (Research and Information Services for Education) disseminates information on Title III E.S.E.A. projects including the names of contact persons.

Before contacting a consultant the administrator must be certain of the use to which he plans to put the person. When staff in-service is the goal one does not generally want an inspirational or overview type of presentation. Instead, the practical, "how-to-do-it" kind of program will be more useful. The amount of time to be devoted to such consultation must also be considered. An approach that brings the consultant in contact with the staff at critical times throughout the year rather than just in the beginning will allow for more sharing of ideas and response to questions. Seldom can the staff anticipate the problems or need for information that will arise later when the program is operational.

Chapter V

MANAGEMENT CONSIDERATIONS

After the curriculum has been prepared, staff selected and resources identified, there still remain a number of factors to be considered. These factors shall be referred to as management considerations and they include such items as scheduling, grading, financing and staff in-service.

Staff In-Service

Since it is unlikely that a district will have experienced career educators on its staff, the people selected to implement the careers program will need to be in-serviced so that they have a common understanding of the program and of basic career education concepts. This program might best be accomplished during the summer prior to the programs' inauguration and will minimally require 15 hours. If the time is being used to actually write the curriculum it may take twice that long.

Assuming that a curriculum has been prepared, the in-service program should consist of at least the following topics:

(1) the curriculum including a time line for completion of various activities or units; (2) materials that will be used in the program; (3) basic concepts of career education such as clusters, decision-making and self-assessment; and (4) evaluation such as pre- and post-tests. This program may require a variety of talents to conduct. Items one and four may best be handled by local staff such as an administrator or counselor who has worked closely on the planning phase of the program. Item two could involve sales representatives from the companies whose materials are being used. Item three may require a professional consultant or a specialist from the Department of Education.

The first year there should be a continuing emphasis upon in-service with periodic staff programs to evaluate progress, up-grade skills or examine new materials. This will provide an opportunity to raise questions that may not have occurred during the initial in-service activity.

Scheduling

Because of the number of activities that compete for school time, the administrator must establish some priorities in relation to scheduling career education into the curriculum. If careers are to be worked into the regular subjects there

is little problem in scheduling, however, if a careers course is to be inserted then obviously something else must go. It is beyond the scope of this document to suggest priorities. The only recommendation would be that in such a situation the careers course be made available to all students and not just to those sections that most conveniently fit the master schedule. For example, some schools might consider leaving the band and chorus sections out of the careers unit since their schedules are more difficult to maneuver. This approach should be discouraged since every student can benefit from such a program.

Grading

It is strongly recommended that standard grading scales not be applied to a career education course. The importance of the course lies in attitude development, self-assessment and exploration; not in the acquisition of factual information. If some system of grading is absolutely essential then it should be limited to a simplistic approach such as satisfactory and unsatisfactory. Grading becomes very difficult in a course of this type since the amount of cognitive material is limited and much of the content centers around subjective discussions.

Field Trips

Reproducing an actual work situation within the school is difficult at best, although, as mentioned in the previous chapter, one should not overlook school-related occupations. Some experiences can be provided through simulation kits that provide tools, materials, tapes, filmstrips and printed materials related to a variety of job activities. However, one of the best learning situations still involves the field trip. As we are well aware, the more senses that can be stimulated in the learning experience, the better we can expect the retention to be.

If the school is located in an urban area it may be possible to arrange field trips within walking distance, otherwise, transportation becomes an important factor in terms of cost and time. If mass field trips of an entire class are beyond the capacity of the school, one can still benefit by a mini-trip where one or several students are assigned to visit a certain job site and report back to the class. If parents are willing to provide transportation and the school will agree to release the students, this approach can work easily. A single classroom may then cover ten or twenty or thirty

careers. By using cameras and tape recorders the substance of these visits can be shared even more effectively.

Under any circumstance, care must be taken not to overburden any single location with visits. Businesses or industries are unlikely to be enthusiastic when asked to host a class every day for a month. Likewise, few would be prepared to handle 100 students at a time.

The number of field trips for any given group of students must of course be limited. Even to cover each of the 15 U.S.O.E. career clusters would be difficult in a year. When selecting field trip sites, advantage should be taken of locations that provide a wide spectrum of career examples. For example, an army base may contain jobs from the communication, transportation, business, manufacturing and construction clusters all within one reasonable compact location. Likewise, a shopping mall may contain examples of the business, marketing, public service, personal service and hospitality clusters.

Regardless of how many or how few field trips may be included in the career education program, their importance lies in how they are used to supplement the curriculum. The spinoffs for class discussion that can come from a field trip are legion. A few examples of such topics are job entry requirements, training programs, employee satisfaction, working conditions and unionization. If the follow-up to the field trip is handled properly the students should find that they have learned a great deal more than was immediately evident from the trip.

Finances

Estimating the cost of a career education program is impossible without knowing the answers to all the questions that have been raised in this document. Obviously a total coordinated program is much more expensive than a single course at one grade level. Also the amount of ingenuity the staff may show in developing their own materials as opposed to buying commercially will affect costs. The number of field trips, in-service arrangements and staffing are also major cost considerations.

A number of external funding sources exist such as the National Institute of Education, the state's Bureau of Vocational Education and the U.S.O.E.'s Career Education Demonstration Funds. Although amounting to millions of dollars, these funds are

awarded on a competitive basis requiring some competence in "grantsmanship." One newly available source of funds is Title IV of the Elementary and Secondary Education Act which provides each district in Pennsylvania with a per-pupil grant of money to be used for guidance, library or media projects. Since career education touches upon all three of these areas it should be no problem to justify the expenditure of all or a portion of these funds toward components of a career education program.

Beyond these and similar sources the district will probably have to rely upon their own resources to finance career education, here again we come down to the establishment of priorities.

SUMMARY In summary, it is strongly recommended that career education be developed as a coordinated program of activities across grades K-12. Career education should be considered as both cognitive and affective in nature and, therefore, not a guidance function but a cooperative venture of the district staff. Every administrative, instructional and supportive staff member should be clearly aware of their role in the program.

Career education should be organized so that students are exposed to maximally realistic career development experiences via field trips, speakers, audio-visuals, etc. This will require adequate budget, staff and materials. Full use should be made of community resources both in terms of persons and facilities, rather than molding the program to the restrictions of the classroom.

If necessary, professional consultative help should be sought in the planning of the program and in-servicing the staff. Government agencies, professional organizations and private consulting firms can be utilized for this purpose.

The selection of materials may very well constitute the major financial consideration when implementing career education since use will generally be made of existing staff and facilities. Care should be taken in selecting materials that are appropriate for the students and which meet the objectives of the program as well as being cost effective.

The program administrator should familiarize himself with the sources of funding at both the federal and state level that exist to supplement local effort. Such monies will help to alleviate the initial burden of installing career education.

In many ways career education is not new and every district can, undoubtedly, point to examples of career-related activities presently being conducted in its classes. However, career education does not really begin to function until instructional and supportive activities are coordinated to reach certain goals in a developmental manner. At the least, the concepts of self-assessment, career information and decision-making must be incorporated in the plan. Then, and only then, can career education perform its mission of better preparing a student for the future.

BIBLIOGRAPHY

Bibliography On Career Education. Sidney C. High, Jr., and Linda Hall. U.S. Department of Health, Education, and Welfare.

Career Decision-Making. Appalachia Educational Laboratory, Inc., Charleston, West Virginia, 1972.

Career Education. U.S. Department of Health, Education, and Welfare, Washington, D.C. 20202.

Career Education: A Handbook For Implementation. U.S. Department of Health, Education, and Welfare, Washington, D.C. 20202.

Career Education: An Annotated Bibliography For Teacher and Curriculum Developers. American Institute for Research, Box 113, Palo Alto, California 94302, January 1973.

Career Education and The Elementary School Teacher. Kenneth Hoyt, Nancy Pinson, Darryl Larramore, Garth Magnum. Olympus Publishing Company, 937 East Ninth Street - South, Salt Lake City, Utah 84105.

Career Education Handbook For Rural School Administrators. Educational Resources Information Center, Clearinghouse on Rural Education and Small School, New Mexico State University, 1973.

Career Education In-Service Guide. Louise J. Keller, General Learning Corporation, Morristown, New Jersey 07960, 1972.

Career Education - What It Is and How To Do It. Kenneth Hoyt Rupert Evans, Garth Magnum. Olympus Publishing Company, 937 East Ninth Street - South, Salt Lake City, Utah 84105, 1972.

Career Guidance: A Handbook Of Methods. Charles E. Merrill Publishing Company, 1300 Alum Creek Drive, Columbus, Ohio 43216.

Career Guidance In Secondary Education. College Entrance Examination Board, Princeton, New Jersey, 1972.

Senior High Learning Resources For Career Education - Winter '73. New Jersey Occupational Resources Center, Bldg. 871, RMC, Plainfield Avenue, Edison, New Jersey 08817.

Essays On Career Education. Northwest Regional Educational Laboratory, 710 SW Second Avenue, Portland, Oregon 97204.

Publications Catalog. The Center For Vocational Education, Ohio State University, January 1976, Columbus, Ohio 43210.

Review and Synthesis Of Foundation For Career Education. Herr, Edwin L., U.S. Government Printing Office, Washington, D.C., 1972.

Vocational Guidance and Career Development Of The Schools: Towards A Systems Approach. Herr, Edwin L. and Cramer, Stanley H. Houghton - Mifflin Company, New York, 1972.