This paper explores the issue of establishing and evaluating objectives for local career education programs. It presents a perspective on the state of the art based on reviews of the literature. Although it is addressed principally to local program developers and managers, the paper is also aimed at state career education coordinators. After a discussion of career education objectives and legislation that have affected both state and local career education programs, the ten learner goals established by the United States Office of Career Education are examined at length. These are (1) competence in basic skills; (2) good work habits; (3) personally meaningful work habits; (4) career decision-making skills; (5) occupational and interpersonal skills; (6) understanding self and educational/vocational opportunities; (7) awareness of continuing and recurrent education; (8) consistence of placement with career decisions; (9) seeking meaning through work and leisure; and (10) awareness of methods of expanding career options. For each goal current status of research and evaluation is discussed and future needs are suggested. Recommendations are made, such as the need for increasing the quality of evaluation designs and measurement instruments. (CT)
MEASURING CAREER EDUCATION OBJECTIVES:
CURRENT STATUS AND FUTURE DIRECTIONS

written by

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1980
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FOREWORD

The Educational Resources Information Center on Adult, Career, and Vocational Education (ERIC/ACVE) is one of sixteen clearing-houses in a nationwide information system that is funded by the National Institute of Education. One of the functions of the Clearinghouse is to interpret the literature that is entered into the ERIC data base. This paper should be of particular interest to administrators and supervisors of career education programs, teacher-educators, researchers, and graduate students.

The profession is indebted to Anita Mitchell for her scholarship in the preparation of this paper. Recognition also is due Carol Aslanian, The College Board; Deborah Bonnet, New Educational Directions; and Linda Pfister, The National Center for Research in Vocational Education, for their critical review of the manuscript prior to its final revision and publication. Robert D. Bhaerman, Assistant Director for Career Education at the ERIC Clearinghouse on Adult, Career and Vocational Education, coordinated the publication's development.

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DESC.: *Community Programs; *Career Education, Career Awareness; Employment Opportunities; Decision Making Skills; Job Placement; Job Skills; Behavioral Objectives; *Program Development; Self Concept; *State Programs; *Program Evaluation; *Educational Objectives; Competence; Basic Skills; Interpersonal Competence

IDEN.: United States; *Office of Career Education
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PURPOSE

The purpose of this paper is to explore the issue of establishing and evaluating objectives for local career education programs. More specifically, it presents a perspective on the state of the art based on review of literature entered into the ERIC data base and additional substantive documents that have not yet found their way into the system. Although it is addressed principally to local program developers and managers, state career education coordinators charged with setting parameters for local use of Career Education Incentive Act funds may find that the information provides some rationale for broadening the scope of their leadership training programs.

Organized around the ten learner goals* set forth in various publications of the Office of Career Education, this information analysis product reveals that some of these goals have received very little attention, either in terms of stated objectives or in terms of evidence that career education programs can contribute to attainment of these goals. At the time of this writing only thirteen career education programs presented to the Joint Dissemination Review Panel (JDRP) have been approved by that body for national dissemination. Since the ten learner goals are at least alluded to in most of the state plans for career education, and since these goals have been discussed and approved by participants in more than 150 miniconferences held by the Office of Career Education (representing education, business, industry, labor, public and private agencies, youth groups, philanthropic organizations, advocacy groups, and the like) it is safe to say that there is general acceptance of their value and importance as foci for career education programs.

It is hoped that this paper, by calling attention to the fact that local career education programs tend to be more goal-specific than comprehensive, may stimulate local program developers and managers to broaden their views of career education, and to provide for a broader range of career development outcomes than most of them currently address.

*NOTE: The ten learner goals listed in early OCE publications were condensed to nine for The Primer of Career Education, (Hoyt, 1978), but later expanded to the ten presented in this paper.
Evaluation efforts are discussed in this paper for two reasons: (1) the reader should not be left with the impression that only the thirteen JDRP-approved career education programs were adequately evaluated, and (2) the reader needs to be alerted to the fact that the cause of career education has been ill-served by inadequate evaluations of programs that probably deserve to be replicated. Where there is sufficient information to judge the adequacy of evaluation of the programs referenced, this information is presented.

CAREER EDUCATION OBJECTIVES

The genesis of career education has been outlined in many publications, but the development of career education objectives has not been well documented. In fact, a recent review of state plans for career education (Southwest Regional Laboratory, 1979) showed that, with the exception of those adopting the definition of career education developed by the Office of Career Education, there was considerable range in the concepts included in the term. In general, career education objectives at the state level tend to be limited in scope. Similar limitations are observed in review of evaluation reports of programs/projects at the local level.

As early as 1971, state departments of education began developing models for career development. By 1972, at least seven states (including Missouri, Wisconsin, Hawaii, and California) had published documents outlining desired student outcomes for career education, career guidance, and/or career development programs. The models had one major common aspect: although the terminology differed from state to state, all identified three components which related to knowledge of self, knowledge of the world of work, and career planning and decision-making skills. Within these components, each model suggested specific learner outcomes; these, too, revealed considerable similarity. As a matter of fact, there was considerable dialogue among the developers of these models and their consultants which did result in consistency of direction. States that had not developed their own models tended to review the existing models, note the similarities, and adopt or adapt them to meet their own needs. Local school districts intent upon joining the career education movement found the models appropriate for local programs.

A review of the literature indicated that the three components of the state models still dominate state and local program objectives, and, therefore, are also the basis for state and local evaluations.

It is interesting to note that as early as 1974, Kenneth B. Hoyt, director of the Office of Career Education (OCE), United States Office of Education, suggested nine goals for career education.
A tenth goal was added during one of Hoyt's mini-conferences with nationally recognized evaluators (Hoyt, 1976). Later OCE monographs and Hoyt papers listed nine goals (two of the original ten combined into one) or ten goals (a new goal added which related to actual job skill acquisition). The ten most recent learner goal statements will serve as organizers of the review of career education and their measurement. According to Hoyt's yet-to-be-published paper (Hoyt, 1980) career education seeks to produce individuals who, when they leave school (at any age or at any level) are:

1. competent in the basic academic skills required for adaptability in our rapidly changing society;
2. equipped with good work habits;
3. equipped with a personally meaningful set of work values that foster in them a desire to work;
4. equipped with career decision-making skills, job hunting skills, and job getting skills;
5. equipped with job-specific occupational skills and interpersonal skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society;
6. equipped with a degree of self understanding and understanding of educational-vocational opportunities sufficient for making sound career decisions;
7. aware of the means available to them for continuing and recurrent education;
8. either placed or actively seeking placement in a paid occupation, in further education, or in a vocation consistent with their current career decisions;
9. actively seeking to find meaning and meaningfulness through work and productive use of leisure time;
10. aware of means available to themselves for changing career options - of societal and personal constraints impinging on career alternatives.

Although none of these learner goals is at variance with the state models that appear to have structured state and local statements of career education objectives, several of them have been virtually ignored by program developers and evaluators. Evaluators must assume part of the responsibility, because...
they were assuming the role recommended in the many "how-to" guides (e.g., Young and Schuh, 1975; Mitchell, 1979) they were involved in the statement of the objectives. As a result of the limited focus, more and more evidence has been gathered of the efficacy of career education in areas such as career awareness, self-knowledge, and decision-making; while relatively less evidence is available in areas such as improvement of basic academic skills and work habits. Little or no evidence is available in such areas as means available for continuing or recurrent education, finding meaning in work and productive use of leisure time, or awareness of means for changing career options. Yet legislatures, business and industry, and the general public (on whom we as educators depend for support of our career education efforts), are most interested in results in those areas for which little evidence of effectiveness has been presented. Since the Office of Career Education, under the leadership of Kenneth B. Hoyt, has provided educators with a set of career education goals that could result in improvement in all of education, it is difficult to understand why the range of objectives in most career education programs remains relatively narrow.

LEGISLATION

Another source of objectives for both state and local career education programs is the career education legislation which includes some mandates and some parameters within which federal fund expenditures must operate. The Educational Amendments of 1974 (PL 93-380) provided funds for the development of state plans for career education. The law mandated that program objectives include provision for meeting the special needs of handicapped and other disadvantaged students and for eliminating the stereotyping of career opportunities by race or by sex. It also included the goal of preparing all students, including handicapped and all other children who are educationally disadvantaged, for full participation in the society in which they are to live and work. The goal of fostering flexibility in attitudes, skills, and knowledge in order to enable persons to cope with accelerated change and obsolescence also was mentioned. PL 95-207 included mandates for the following goals: (1) making education as preparation for work and as a means of relating work values to other life roles (such as family life) a major goal of all who teach and all who learn; (2) promoting equal opportunity in making career choices through the elimination of bias and stereotyping, including bias and stereotyping on the basis of race, sex, age, economic status or handicap; and (3) presenting objectives for increasing career awareness, exploration, decision-making, and planning. PL 95-207 specified that payments
may be made to local educational agencies (LEAs) only for comprehensive programs; it listed thirteen types of activities that can be funded.

Whereas both of these laws related to state plans rather than to local plans, it is obvious that many of the OCE learner goals are reflected in these mandates. This fact provides further support for the use of the OCE learner goals as organizers for this paper. Again, it is interesting to note that, although the learner goals have been disseminated, discussed, and accepted since 1974 and have been reflected in legislation, local school districts tend to limit their objectives to those contained in the original state models. Perhaps this is not so much a function of inertia or of failure to understand the OCE learner goals but, instead, a result of a rather narrow perception of the concept of career education and/or of other difficulties encountered in expanding the scope of local career education programs. As the review presented in the following pages indicates, some of the career education learner goals have long been claimed as the domain of the academic teacher or of guidance counselors. It may be that schools are pursuing programs designed to reach these goals but are not including them in career education programs; thus, these aspects of the program are not being cited in the reports of career education evaluation.
LEARNER GOAL I: COMPETENCE IN BASIC SKILLS

CURRENT STATUS

Learner Goal I, "competence in the basic academic skills required for adaptability in our rapidly changing society," has been incorporated into the objectives of an estimated 5 to 8 percent of the career education programs or projects whose reports have become part of the ERIC data base. In most cases, it was one of a number of objectives rather than the primary objective of the studies. In other words, the projects appear to be based on the hypothesis that "if students increase their awareness of the relevance of academic studies to later success in work, then their performance in the basic skills will improve." In most cases the reports indicated that the "if" did occur, but that the "then" did not. This is possibly due to the fact that the project staff assumed a cause and effect relationship that does not necessarily exist. In other words, knowledge of relevance is not enough. This knowledge must be internalized, and the student must be motivated if improvement in academic performance is to occur. However, it is gratifying to find that there are programs that are attempting to measure the impact of career education on basic skills. Although there is evidence that career education can improve students' career awareness, one can still ask, "What difference does this make in the students' educational/occupational development?" Acquisition of basic academic skills certainly would be one important difference. At least four reviews of the impact of career education on the development of basic academic skills cite some successes in this area. Of thirty-eight studies reviewed by Bhaerman (1977) which reported efforts to affect academic achievement through career education, nineteen presented strong evidence of success, and sixteen presented moderate evidence. Three studies reported by Datta et al. (1977) showed gains in reading and mathematics among career education students. The New Educational Directions' report by Bonnet stated that data on career education's effect on academic skills were inconclusive, although significant gains were reported in some instances. The 1976 report of the National Advisory Council for Career Education (NACCE) on the impact of career education concluded that more hard data were needed to support the contention that career education can aid the development of students' acquisition of fundamental skills.

There are a few outstanding examples, however, of the impact of career education on basic skills. The career education program of the Jefferson County Schools in Louisville, Kentucky, judged by the American Institutes for Research to be one of the ten best evaluated career education activities for which evaluation reports were available for analysis in 1977, showed significant
gains in reading and math among program participants. Community Experiences for Career Education, Inc. (1974) reported that students involved in the Northwest Regional Educational Laboratory experience-based career education program showed statistically significant gains in reading, mathematics, and study skills but no significant gains in language mechanics.

FUTURE NEEDS

In all cases where an increase in academic skills was achieved, specific activities were implemented to effect this achievement. It was not assumed that students would increase their basic skills simply because their skills in other areas (e.g., career awareness, work habits) had improved. This has implications for project developers and managers. Improvement in basic skills is an important goal for career education, but, if it is to be achieved, specific objectives need to be stated and strategies which have proven to be effective should be employed. Certainly there is need for considerably more evidence that career education is effective in increasing academic skills.
LEARNER GOAL II: GOOD WORK HABITS

CURRENT STATUS

Learner Goal II, "equipped with good work habits," was found among the objectives of most projects that expected to show improvement in academic skills and in most experience-based career education (ECE) programs. About 20 percent of the program/project reports reviewed included work habits among their objectives. However, since work habits were defined differently, it may be misleading to aggregate data claiming to prove that career education can improve the work habits of participants. Most of the projects used locally developed instruments to measure gains in this area. In many cases these instruments were nonvalidated questionnaires, opinionnaires, or observational techniques. Standardized instruments were used in only a few cases.

A third-party evaluation of the Exemplary Career Education Comprehensive Program in the Academic and the Vocational and Technical Education Program in Puerto Rico (Colon and Gonzalez, 1975) showed that in addition to improvement in self awareness, awareness of work values, awareness of and knowledge about work and decision-making skills, participants did gain significantly in basic academic/vocational skills and in work habits. Northwest Regional Educational Laboratory (Community Experiences for Career Education, Inc., 1974) reported statistically significant gains in study skills. Herron et al. (1973) reported that students in an experienced-based program improved in work performance, adherence to work schedules, acceptance of responsibility, interest in and enthusiasm for work, judgment, ability to work with others, and ability to learn through work experience.

These are the only studies reviewed that used evaluation instruments, data collection procedures, and statistical analysis designs that lent credibility to the findings in the area of acquisition of work habits. It is unfortunate that so many of the projects reported concentrated on verification of process, with little or no measurement of outcome. Too often proof that a program has been installed is viewed as sufficient rationale for its continuation.

FUTURE NEEDS

If we are to believe the literature that stresses the importance of work habits for successful job entry, maintenance, and advancement, then surely program managers need to focus on the development of this very important objective. Also, we need to
define those work habits that really do make a difference (the "so what" work habits) and to determine the best strategies for helping students achieve them. Measures of attainment of these work habits also need to be examined for their adequacy. The review conducted as background for this document revealed that many, if not most, programs develop their own instruments. In some cases there may be other reasons for this. However, in most cases it is because appropriate/validated instruments do not exist. In few cases have locally developed instruments been subjected to the rigid validation procedures needed to make results of their use credible.
LEARNER GOAL III: PERSONALLY MEANINGFUL WORK HABITS

CURRENT STATUS

Learner Goal III, "equipped with a personally meaningful set of work habits that foster in them a desire to work," has been addressed by only a small proportion of the projects reviewed. The New Educational Directions publication (1977) cited above, in its review of results of 1975-76 career education programs, confirmed that those projects which sought to instill values that foster a desire to work presented generally good evidence of success.

A report by McBain and McKay described the long-term Developmental Career Guidance Project in Pima County, Arizona. This project, judged one of the ten best evaluated career education projects at that time, was approved by the Joint Dissemination and Review Panel (JDRP), thereby making it eligible for national dissemination. McBain and McKay reported that students' attitudes toward school and work improved as a result of participation in the program. Baker and Lish (1978), reporting on another JDRP program, cited statistically significant gains in participants' economic awareness and attitudes toward work (as well as in career awareness and career decision making). Baker and Steinaker (1978), reporting on Project MATCH, also recorded gains in attitudes toward work. Peck (1973) reported improved personal and work-oriented attitudes among students participating in the Career Development Exemplary Project in Washington, D.C. A 1976 program for gifted and talented students (Highline Public Schools, Seattle, Washington) found that participants felt more responsibility for their career futures than did nonparticipants.

FUTURE NEEDS

Although these evaluation reports do support the claim that career education can contribute to improved attitudes toward work, re-examination of the learner goal quoted at the beginning of this chapter revealed a far broader concept than is typically "objectified" or measured. Specific objectives in need of exploration include the following: Students will (1) determine how their interests, aptitudes, abilities, and values affect work values; (2) determine what work means to the individual; (3) determine how to achieve harmonious relationships between work and worker; (4) determine the satisfactions expected or wanted from a job; (5) embrace productivity as a basic psychological need; (6) value work as an outlet for one's inherited and developed talents; (7) be able to derive satisfaction from a
job well done, whether paid or nonpaid or volunteer work; and (8) consider the relationship between the commitment to education and work and the availability and utilization of leisure time.

Unfortunately, most of the reports were vague about the aspects of work values that have been measured in their programs. Refined definitions of work values, commitment to specific values to be developed, and refined instruments for measuring attainment of these values are needed.
LEARNER GOAL IV: CAREER DECISION-MAKING SKILLS

CURRENT STATUS

Learner Goal IV, "equipped with career decision making skills, job hunting skills, and job seeking skills," has met with mixed interest among career educators whose programs/projects were reviewed. Whereas about one-third of them addressed career decision-making skills, few of them (except the EBCE programs) emphasized job hunting and job seeking skills. Again, we find that the terms are ambiguous with each serving as an umbrella for a large number of discrete skills that might become the focus of a program or program component. Also, most project reports used global, ambiguous terms, rather than defining the discrete skills they are trying to develop in project participants. There are some existing instruments in the area, and many of the programs did use these instruments.

The New Educational Directions, Inc., synthesis of career education evaluation findings (1977) supported the claim that career education programs can strengthen career decision-making skills. Baker and Lish's report of the project in Ceres, California (1978) and McBain and McKay's report of the Pima County, Arizona project (1978) both presented evidence of gain in this area as validated by the JDRP approval of their evaluation reports. Baker and Steinaker reported another JDRP-approved program which showed increases in decision-making skills - Project MATCH in Ontario-Montclair, California (1978). Two other JDRP-approved programs in Coloma, Michigan (Kaplan and Downey, 1978) and Akron, Ohio (McBain and Topougis, 1978) also showed gains in career decision-making skills. No learner goal other than understanding of educational-vocational opportunities has accrued as much evidence validated by the JDRP as has the area of career decision-making.

However, parts of this goal, the areas of job hunting and job getting skills, have been given little attention as objectives. Evidence of the effectiveness of career education in developing these skills is sparse. EBCE programs seem most likely to include objectives in this area, but their measures are usually participants' success in getting jobs. Since many factors other than the individuals' job hunting and job getting skills are involved, it is difficult to ascribe success or nonsuccess to the programs. In most cases there is no evidence of success. However, this may be due to lack of receptivity in the work community rather than lack of skill on the part of the job seeker. There are, however, a few programs that did show gains in some facets of job hunting and/or job getting. For example, McBain and McKay (1978) showed gains in employability skills.
among project participants in Pima County, Arizona. A report by the Lincoln (Nebraska) Public Schools (1976) stated that all students included in a placement program were eventually placed in jobs, but the successful placement appeared to be more a function of the support of a community resource system than of development of specific skills by the participants. In fact, recommendations included development of students' knowledges, attitudes, and skills over a period of years in order to make placement services more effective.

If we include planning and goal setting in job hunting and/or job seeking skills, we find a few additional reports of student gains. A report by the Arizona State Department of Education (1975) claimed that the career education programs in Pima and Cochise counties produced more realistic career planning and preparation among program participants. Matthews and O'Tuel (n.d.) reported that middle school children in South Carolina improved their scores significantly in certain areas of career maturity — namely, goal selection.

FUTURE NEEDS

Shortcomings in measurement of Goal IV are similar to those in other areas. The principal problem is failure to define the concepts to be measured. The three terms — career decision-making, job hunting and job getting — are global, each serving as an umbrella for numbers of specific skills. Unless these skills are specified, it is unlikely that gain scores will tell us much about what the students know or are able to do as a result of the program. Most measures of career decision-making, for instance, focus only on gathering information, selecting strategies, and, in some cases, examining values. They contain no items related to such concepts as the job's influence on lifestyle; the job's ability to furnish adequate outlets for one's abilities, interests, personality, and values; willingness to commute long distances or to move close to an available job; an understanding of how jobs serve individuals' purposes and needs; the contributions of successes and failures to career decision-making; or the influence of one's unique characteristics on success in an occupation. These are but a few of the concepts that should be measured if we are to understand how career education has improved participant's career decision-making skills.

Job hunting skills include knowledge of self, knowledge of the characteristics of available jobs, and an ability to put the two together. Job getting skills include ability to complete a work application, ability to write a resume and obtain references, ability to represent oneself well in an interview, knowledge of procedures for making appointments, ability to display good work
habits, and knowledge of appropriate follow-up procedures. None of the studies reviewed included all of the concepts in its investigation. It would appear that there is a lack of definition of the specific skills related to this learner goal.
LEARNER GOAL V: OCCUPATIONAL AND INTERPERSONAL SKILLS

CURRENT STATUS

Learner Goal V, "equipped with job-specific occupational skills and interpersonal skills at a level that allows entry into and attainment of a degree of success in the occupational society," contains two distinct concepts - job specific skills and interpersonal skills. For purposes of this analysis, the two are considered separately.

Some EBC programs focus on development of job-specific skills; however, in most cases, this is on-the-job-training through work experience. Measures of skills gained are generally confined to employer statements about the students' success in acquiring the necessary skills. Colon and Gonzalez (1975), reporting on the Puerto Rico career education project, stated that students did show gains in basic academic/vocational skills, but these were not defined. The instruments were contained in the appendix, but none addressed job-specific skills. A report on Maine's Project GIVE (Maine School Administrative District 15, 1976) indicated that project participants made substantial gains in developing entry-level skills or readiness for further education; however, measures used were not included in the report. It appears that this is a goal area that has received little attention in career education program evaluations. Where it has been included as an objective, measures of attainment are inadequate.

FUTURE NEEDS

The second part of this learner goal, development of interpersonal skills, has received very little attention. It is one of the least popular of objectives if one uses the criterion of numbers of projects claiming to produce gains in this area. Whereas a large majority of projects focus on self-concept, self-awareness, self-esteem and/or self-appraisal, few included objectives in the area of interpersonal skills. Those that do include such objectives rely on the general consensus among employers that interpersonal skills are critical to job success. It is unfortunate that this learner goal seems to be receiving so little attention.

It appears that both parts of Learner Goal V, job-specific skills and interpersonal skills, need more attention in career education programs and projects. The following are some of the concepts that should be included in the development of specific objectives: (1) formal and informal communication skills are basic to success on most jobs; (2) interpersonal skills should reflect awareness of office protocol; (3) ability to get along
with fellow workers and to support their efforts is basic to job success; and (4) job-specific skills include not only motor skills and ideational skills, but also academic skills and attitudinal skills.
LEARNER GOAL VI: UNDERSTAND SELF AND EDUCATIONAL/VOCATIONAL OPPORTUNITIES

CURRENT STATUS

Learner Goal VI, "equipped with a degree of self-understanding and understanding of educational-vocational opportunities sufficient for making sound career decisions," is by far the most popular of the goals addressed by the programs/projects reviewed. Self-concept, self-understanding, self-appraisal, and self-awareness are found among the objectives of a majority of the reports reviewed.

Examples of programs documenting positive gains in self-concept are the following: Project Career Development Centered Curriculum, Coloma, Michigan (Kaplan and Downey, 1978); the Tennessee Exemplary Project in Career Education (Haaby, 1976); the Maine Comprehensive Career Education Project (Ryan, 1977); and projects reviewed in the National Advisory Council for Career Education publication, The Efficacy of Career Education: Improved self-awareness was shown in the evaluation results of four projects approved by the JDRP: Pima County (McBain and McKay, 1978), Akron (McBain and Topoughi, 1978), Ontario-Montclair (Baker and Steinaker, 1978), and Cerea (Baker and Lish, 1978). Akron also showed gains in self-esteem. The Puerto Rico program (Colon and Gonzalez, 1975) and the Westside Area Career Occupations Program, Arizona (Glur, 1976) showed gains in self-awareness.

The literature revealed a plethora of projects claiming gains in the area of awareness of the world of work including work characteristics, skills needed for job entry, training, and the like. New Educational Directions, Inc. (1977) reported that attainment of career awareness objectives was supported in a majority of cases. From this one might conclude that the easiest of the learner goals to achieve through career education programs - as they are now designed and implemented - is increased awareness of the world of work or career awareness. However, analysis of individual program/project reports revealed that career awareness is variously defined. To some, it is as simple as knowing about job families, job levels, and career ladders. To others, it is being able to state the skills needed for various occupations, training requirements, job advancement opportunities, and the like. To others, it is also knowing job trends and/or local job opportunities. Here again is an example of the breadth and possible ambiguity of learner goals, the need to define specific objectives to be achieved, and the importance of selecting or developing instruments to measure those specific objectives.
Career education programs which were approved by JDRP as presenting evidence of gains in the area of career awareness include Ontario-Montclair (Baker and Steinaker, 1978); Pima County (McBain and McKay, 1978); Cores (Baker and Lish, 1978); Coloma (Kaplan and Downey, 1978); Highline Public Schools (1976); Maine's Project GIVE (1976); and South Carolina's middle school program (Matthews and O'Tu, e., n.d.). Greenland, Arkansas: Project CAP, another JDRP approved program (Hamilton and Leffler, 1978), showed statistically significant gains in awareness of adult occupations among project participants.

FUTURE NEEDS

Review of these reports (only a few presented instruments used) leaves one wondering whether the career awareness being taught and measured really constitutes the "understanding of educational-vocational opportunities" which Learner Goal VI addresses. Perhaps there is too much emphasis on acquisition of facts about occupations and not enough emphasis on educational-vocational opportunities, including methods of expanding opportunities. It is important to note what emphasis is placed on concepts such as the following: (1) most persons could perform adequately and achieve satisfaction in a variety of occupations; (2) the unique self - the pattern of personal characteristics is not static but is dynamic and has the inherent power to change with such change being imposed continuously through life experiences; (3) social class roles, sex, ethnicity, and other factors - both reversible and irreversible - affect career development; (4) an individual's self-concept determines how he or she reacts to and influences his or her environment; (5) occupational supply and demand affect career opportunities; (6) there is a relationship between technological advances and occupational demand; (7) economic and political forces create changes in employment opportunities; (8) utilizing the knowledge that occupations exist for society's purposes encourages the individual to become a force in shaping the society in which he or she lives instead of allowing his or her occupational life to be shaped by others; (9) all occupations have some disadvantages; and (10) job specialization can isolate the worker from the total activity and reduce the possibility for workers to see the results of their efforts.

The above concepts are suggested, not as bases for individual objectives, but as examples of the kinds of concepts that need to be sampled in order to ensure that students truly develop career awareness. Statistical data to be found in the Dictionary of Occupational Titles or the Occupational Outlook Handbook are of little value to the student if some of these more pertinent concepts are not understood and internalized.
LEARNER GOAL VII: AWARE OF CONTINUING AND RECURRENT EDUCATION

CURRENT STATUS

Learner Goal VII, "aware of means available for continuing and recurrent education," is probably addressed in every guidance program in the nation. However, none of the studies reviewed included an objective specifically addressed to this goal. Labor market statistics attest to the fact that the average worker will need to make many occupational changes during his or her work life and that development of generic skills necessary in a variety of occupations as well as updating and retraining are the only hedges against unemployment or underemployment.

FUTURE NEEDS

There are many training routes to job employment, yet it is doubtful that a majority of secondary students understand the implications of pursuing each of these alternate routes. Individuals need to "break loose" from the traditional restraints where training for the various job levels was locked into specific training routes characterized by a hierarchy of prestige. Time involvement, cost, location, and other aspects of training need to be considered. Forgone wages need to be computed in the costs of training, as there may be months or even years of earning forfeited when one chooses a longer training route. Informal or less formal training routes are available. These include apprenticeships, on-the-job-training, company retraining, home study, correspondence courses, and armed services training. Scholarships and other financial aids are available for both formal and less formal training routes. In addition to time involvement, cost, location, and the like, the choice of a training route should be based on the quality of the training, past success of the training institution, and the employment record of the graduates or completers of the program. These and other concepts need to be considered when developing objectives related to Learner Goal VII.
LEARNER GOAL VIII: PLACEMENT CONSISTENT WITH CAREER DECISIONS

CURRENT STATUS

Learner Goal VIII, "either placed or actively seeking placement in a paid occupation, in further education, or in a vocation consistent with current career decisions," is another learner goal that is seldom addressed in reports of career education programs. Although some experience-based programs have placement as part of their strategies, few make placement a program objective. This is probably appropriate, since placement is dependent not only on the employability skills which can be delivered by the schools, but also on employment opportunities which exist at any given time in the community.

The Lincoln, Nebraska Career Education Project (Lincoln Public Schools, 1976) reported to have placed all of the students who had dropped out of school after the second or third quarters and who requested placement assistance. Placement activities were supported by the community resource system, but the report presented no evidence that the participants developed any skills to support their placement.

FUTURE NEEDS

As is probably the case with Learner Goal VII, Learner Goal VIII is seen as an ongoing goal of counseling and guidance rather than as a specific career education goal. Therefore, it is not included in the objectives of career education programs. In many school districts, a majority of the students will be going on for further education or training beyond high school. Counselors assume the responsibility for making sure that they are ready for entry into the occupation or the training program of their choice. By not defining this guidance function as part of the career education program, school districts may be neglecting to evaluate its attainment. Perhaps many students are not reaching this goal.

Some of the concepts that may be overlooked if this goal is not included in the career education programs are the following: (1) persons "actively seeking placement" are those who have made at least an interim career decision consistent with their characteristics, who have developed and are using effective job seeking and job getting skills, and who are aggressively pursuing all leads; (2) alternative routes to continuing career development include working in a paid occupation, receiving additional education or training, and pursuing a vocation such
as a career in the armed services; and (3) career development is a continuous process that assumes steady progress toward stable and fulfilling employment.
LEARNER GOAL IX: SEEKING MEANING THROUGH WORK AND LEISURE

CURRENT STATUS

Learner Goal IX, "actively seeking to find meaning and meaningfulness through work and productive use of leisure time," is another of the goals that has not found its way into local career education programs. Perhaps program managers interpret this to mean something that happens after students are out of school and on the job - hence, beyond the effects of the local career education program. However, unless students are taught the various meanings of work and productive use of leisure time, it is doubtful that these very important aspects of their lives will occur without months, or perhaps years, of floundering and dissatisfaction.

FUTURE NEEDS

A number of concepts need to be included in a career education program to ensure attainment of this goal. These include the following: (1) finding meaning in work is dependent upon a decision concerning the part work is to play in total life satisfaction; (2) the meaningfulness of work is related to the individual's commitment to the goals of the company/agency/organization; (3) some jobs are not totally fulfilling for the worker, and satisfaction must be sought outside the job; (4) personal fulfillment is dependent upon the opportunity to find adequate outlets for one's abilities, interests, personality, and values; (5) there is a wide range in the degrees and kinds of satisfaction that are derived from work; (6) purpose and commitment play a part in the meanings people attach to work; (7) personal satisfaction in work is related in part to effective involvement in leisure time activities; and (8) leisure time activities include volunteerism, political advocacy, and philanthropic pursuits as well as social and athletic pursuits and personal development activities.
LEARNER GOAL X: AWARE OF METHODS OF EXPANDING CAREER OPTIONS

CURRENT STATUS

Learner Goal X, "aware of means available to themselves for changing career options and of societal and personal constraints impinging on career alternatives," was also found to be lacking in most local or state career education programs. An exception is the Highline Public School's Project EQUALITY (Hamilton and Ross, 1978) in Seattle, Washington. The goal of this project, to expand students' perceptions of occupations open to females and those open to males, addressed one aspect of Goal X. The specific objectives dealt primarily with the acquisition and development of media and materials that enhanced the availability of choice for all students in the elementary school classroom and that reflect the changing definition of "women's work." The project was presented to the JDRP and was approved for dissemination. A pre- and post-test evaluation design used comparable groups of treatment and control students.

FUTURE NEEDS

It is unfortunate that Learner Goal X (added to the original nine during the OCE mini-conference in 1975) has received so little attention. Occupational bias and stereotyping are major concerns; in fact, PL 93-380 and PL 95-207 both mandated positive actions in this area. However, Goal X embraces far more than equity. It implies that students need to know, for example: that personal characteristics, both reversible and irreversible, may limit career options; that failure to develop to one's full potential limits career options; that there are many laws designed to guarantee equal employment opportunities; and that there are individual and agency advocates to ensure that workers' rights are not violated.
SUMMARY

It is interesting to note that the components of the state career education models developed in 1971 and 1972—knowledge of self, knowledge of the world of work, and planning and decision-making skills—are well represented in the objectives of many of the programs whose evaluation reports were reviewed for this paper. However, the broader range of expected outcomes outlined in the OCE learner goals as early as 1974 have been addressed only sporadically. Emphasis has been on self-knowledge/awareness, occupational knowledge/awareness, and decision-making skills. Less focus was made in attempts to foster basic academic skills, good work habits, meaningful work values, interpersonal skills, alternate training routes, placement in education or training, the identification of meaning and meaningfulness in work and leisure activities, and awareness of means for changing career options.

It appears that, despite the encouragement provided by the Career Education Incentive Act (PL 95-207), most career education program/project staffs still tend to view career education quite narrowly instead of seeing it as a catalyst for improvement of education as a whole. Limiting objectives to those related to self-knowledge, knowledge of work, and decision-making skills relegates career education to program rather than to process status. An examination of the ten OCE learner goals shows that a career education program that incorporated all of these would, in fact, be an educational process involving all staff members and all curricular areas in delivery of basic concepts to students. As indicated, some of these goals traditionally have been seen as the domain of guidance. Since guidance must be an integral part of any career education program, the task is to specify the desired learner outcomes as part of the program and to enlist the support of the guidance staff in delivering these outcomes. It is important to accept the full range of goals and work toward their achievement to ensure the comprehensiveness of career education programs.

The ten learner goals used as organizers for this analysis have been validated by the Office of Career Education through a series of mini-conferences during which nearly 1000 individuals, representing educational institutions, parent groups, service organizations, youth groups, business and industry, labor, philanthropic organizations, and many other professional and lay groups were brought together to help define the goals and processes of career education. All agreed that the ten learner goals offer a reasonable and complete range of competencies every student should possess upon exit from school at any level.
FUTURE NEEDS

Aside from the need to plan for more comprehensive objectives, there is the need for increasing the quality of evaluation designs and measurement instruments. The major problems appear to be the failure to define the specific skills subsumed under each objective, to select or develop instruments that measure those specific skills, and to establish comparison standards. This paper suggests some of the skill areas implied in each goal. These are given only as examples of the level of specificity to be applied in stating objectives. Defining the skill that is the desired outcome provides focus for the evaluation and makes it possible to select or develop instruments that will give evidence that a specific skill has or has not been acquired. Selection or development of appropriate instruments to measure precisely stated objectives should no longer be a problem. There are various annotated reviews of available career education instruments, (e.g., McCaslin et al, 1979) as well as easy-to-follow guides for validating locally developed instruments. The importance of a match between the skills to be developed by participation in a program, and the skills sampled by tests cannot be overstated.

The problem of failure to establish comparison standards also can be overcome. Unfortunately, many program developers and evaluators appear to believe that the experimental-control group design is the only one that provides for acceptable comparison standards. However, trend data, historical data, national norms, and other standards can be used effectively.

Despite some excellent guides for evaluators, there is still a tendency to report process only and to assume that, because a process has been implemented, student outcomes also have been achieved. Process evaluation is important, mainly to provide information to decision-makers during the course of a project and to support replication of the program if it proves to be effective. The definition of important objectives in terms of student outcomes, and the design and use of measures of these outcomes, are essential components of career education evaluation.
REFERENCES


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