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ABSTRACT

The collection of papers contains models of career education programs in work experience, guidance, placement, and curriculum. The first paper, Focusing on the School to Work Transition: Problems and Elements to Be Considered in Developing a Work Experience Program (David H. Hampson), introduces a historical/philosophical perspective of work experiences as well as practical considerations for developing work experience programs. The second paper, A Model of Career Guidance (JoAnn Harris-Bowlsbey), focuses on career guidance and presents a model, currently under development, of a computer-based guidance system, DISCOVER. The third paper, Work Experience and Placement Programs (Grant Venn), presents a model for work experience programs, outlines areas of focus at elementary through postsecondary educational levels, and suggests models for placement programs--one school-based and one community-based. The final paper, Five Easy Pieces of Free Advice on Curriculum Strategies for Career Education from a Relatively Disinterested Curriculist (Decker F. Walker), presents five pieces of advice for curriculum strategy makers involved in developing career education programs. (Author/JR)

MODELS OF CAREER EDUCATION PROGRAMS: WORK EXPERIENCE, CAREER GUIDANCE, PLACEMENT AND CURRICULUM

Papers delivered at the
Career Education National Forum

by

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The Center for Vocational Education
The Ohio State University
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PREFACE

The Career Education National Forum, held at The Center for Vocational Education last March, was a milestone in The Center's growing involvement in the career education movement over the past five years. The Forum was one of the first opportunities for educators, in a national arena, to discuss the issues vital to the continuing development of the career education concept at all levels of the education system. We were pleased at the participation of persons with such diverse educational responsibilities (administrators, teachers, legislators, publishers, and students), as well as such a broad national representation. We can be assured that career education is, certainly, reaching out into the total educational community.

The Forum was a first step, and a solid one. However, it has made us more cognizant of the long road ahead. There is need for greater clarity in definition and policy at the state and local levels, need for the expansion of the research component, and need to translate those policies and data into viable programs which impact upon the students. The Center for Vocational Education will continue its endeavors in research and development of the career education concept.

The Center is indebted to the National Institute of Education, sponsor of the Forum, for its support and advice in Forum planning. We are also indebted to those presenters who shared their time and insights with us all.

"Models of Career Education Programs" is first in a series of three publications prepared as a result of the Forum presentations. The second, 'Planning and Implementing Career Education Programs: Perspectives," is a compilation of papers by federal, state, and local career educators; the third, "Conversations with Developers," contains abstracts of all programs represented at the Forum which focus on the process of curriculum development.

The Ohio State University and The Center is proud to share these papers with you.

Robert E. Taylor, Director
The Center for Vocational Education

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INTRODUCTION

The concept of career education is not a new one on the educational scene. A survey of educational theorists from John Dewey to Franklin Bobbitt would show evidence of serious and constant attention being given to the idea that education is "experience" and is preparation for adult roles. In 1971, Sidney Marland again raised the issue: are schools preparing youth for the world of work? The answer, unfortunately, was "no."

Educators at federal, state and local levels have since expended considerable time, energy, and money addressing the issues involved and developing programs to improve the situation.

Traditionally, educators have responded to the task of program development with attention limited to the institutional context. Curriculum planning, then, consisted of identifying goals and developing strategies for teaching specified skills or concepts to the student. The teaching and the learning occurred in the school during designated hours.

Many curriculum specialists and other educators generally have questioned this narrow scope of educational planning. The broadest definition of curriculum encompasses all planned learning experiences, not only those limited to a certain time and place. Following this definition, the educational planners' sphere broadens to reach beyond classroom walls into the community.

Career education as a concept, and, certainly, as a successfully operationalized program, intends that learning experiences be extended to the community, especially the workplace. The educational planners' responsibility includes not only infusing career education concepts into the classroom, but also making available work experiences and other community resources. The school- and community-based curricula, supported by a comprehensive career guidance and placement system, comprise the total educational experience: conceptual, experiential, and finally, practical.

The following papers, presented at the Career Educational National Forum focus on the four components of the total career education program we've identified.

The emphasis on one of the following areas: curriculum, work experience, career guidance or placement, is primarily intended to focus on the elements and issues central to the particular field—not to imply that they ought to be separated in the operational context. The total career education program should attend to all components.

David Hampson's paper introduces a historical/philosophical perspective of work experience, as well as practical considerations for developing a work experience program.

JoAnn Harris-Bowlsbey focuses on career guidance and presents a model, currently under development at Western Maryland College, of a computer-based guidance system.

Grant Venn presents a model for work experience programs, and outlines areas of focus at elementary through post-secondary educational levels. He also suggests models for placement programs—one school-based and one community-based approach.

The "Five Easy Pieces of Free Advice . . ." by Decker F. Walker are just that—five pieces of advice for curriculum planners involved in developing career education programs. Among the issues Walker addresses are behavioral objectives, evaluation, and community involvement in career education.

FOCUSING ON THE SCHOOL TO WORK TRANSITION: PROBLEMS AND ELEMENTS TO BE CONSIDERED IN DEVELOPING A WORK EXPERIENCE PROGRAM

David H. Hampson
National Institute
of Education

Experience does not go on simply inside a person. It does go on there, for it influences the formation of attitudes of desire and purpose. But this is not the whole of the story. Every genuine experience has an active side which changes in some degree the objective conditions under which experiences are had.

John Dewey
Education and Experience

The Need to Focus on the Transition from School to Work

The transition from school to work, and the means and method of facilitating this transition, has become a source of major discussion in the last few years. It is a discussion that is not without precedent in the history of American education. Franklin proposed his "Public Academy" in 1757 in the belief that industry and frugality, good English, mathematics, and the history of commerce and mechanics were the subject matter that would lead the student to success in business and the professions (Curti, 1959).

Since that time the question of how young people should be prepared for adult life, and particularly the question of preparation for choosing and progressing in a career, shows a long line of historical markers to which the issue has been attached. More recently, a number of blue ribbon panels have surfaced the issue again.

The National Commission on the Reform of Secondary Education (1973) recommended the expansion of career opportunities through reallignment of the secondary schools' curricula to allow taking advantage of career opportunities in communities. They also recommended the provision of alternative paths to high school completion, as well as opportunities for provision of credit for work done outside the classroom. The report of the White House Conference on Youth (1971) recommended a more flexible and job relevant curriculum, increased flexibility in work scheduling and increased employer involvement in the development of cooperative education and work study programs.

Perhaps most influential of the recent national reports has been that of the Panel on Youth of the President's Science Advisory Committee, chaired by James Coleman. The report (1973) called for the alternation of school and work, for work organizations to incorporate youth in order that school and work interact in the work place, and for the Federal government to purchase certain public services that would be operated by youth organizations.

In addition to the reports of these blue ribbon panels, three other factors have combined to focus attention on the preparation of youth for careers. They are (1) high teen-age unemployment figures, (2) high school drop-out rates, and (3) parental perceptions of what schools should be doing for their children.

The first factor is that high teen-age unemployment is a major problem facing those youth leaving school today. According to the *1972 Handbook of Labor Statistics*, (Department of Labor, 1972) the unemployment rates for white males was over 17% at age 17 and over 13% at age 19. For black males it was much higher: 33% unemployment at 17 years of age, and 26% unemployment at 19 years. White females fared better, but only comparatively, with a 13% unemployment rate at age 17, dropping to 10% at age 19. Worst of all were the rates of unemployment noted among non-white females: 39% unemployed at age 17, dropping only slightly to 34% at age 19. (There is every reason to expect that this situation has deteriorated since 1972.)

The second factor is the high teen-age drop-out rate from our nation's schools. As the Interagency Panel on Expanded Work Experience (1974, p.4) noted,

> The drop-out rate ranges from 2.5% for 14 and 15-year-olds to 26% for 20-year-olds. These persons constantly add to the current pool of 52.5 million adults who have less than a 12th grade education, and the 19.5 million adults who possess an eighth grade education or less.

The third factor is that parents want their schools to focus on the school-to-work transition. According to a 1974 National Opinion Research Corporation survey (Hill, 1973) of a random representative sample of parents, over 70% observed that the single most important educational outcome parents wanted was that their children be prepared for meaningful work. This confirmed the earlier findings of the 1972 Gallup poll on education conducted for Phi Delta Kappa (1972).

Thus, the need to focus on the transition from school to work has surfaced forcefully once again. Benjamin Franklin's wheel has come full circle, perhaps not for the first time. Central to this focus, and indeed, a major recommendation of all the groups studying the issue has been the call for "hands on" experiencing of the real world, and specifically, for involvement in a learning

mode with the world of work. Coleman, writing in 1971, issued a call he was later to reiterate in his role as chairman of the President's Science Advisory Committee,

> . . . a much broader conception of learning is necessary: a conception in which the roles, constraints, demands and responsibilities of adulthood in a complex society are central; a conception that includes general strategies to make use of the environment to accomplish one's goals (Coleman, Chapter 4).

The stage appears to be set, therefore, for emphasizing work experience programs as a major education vehicle in facilitating the school-to-work transition of our nation's youth.

Current Status of Work Experience Programs

It is apparent that the surfacing of educational priorities reflects the changing social environment. Social scientists, of which educators are a sub-group, must face the reality that not only are the problems which they are asked to solve constantly changing, but they are expected to come up with solutions under great pressure and with great speed. This constantly leads to the syndrome of "jumping in with both feet." While the lack of timidity is to be applauded, a negative aspect of that action is that we are guilty, at one end of the continuum, of constantly reinventing Benjamin Franklin's wheel, and, at the other, of failing to take adequate note of existing programs and learning from their mistakes.

Currently, a wide variety of work experience programs exist, providing students with work opportunities, some of which offer high school credit and/or payment for services. These programs are sometimes directly related to the students' educational program, but often are not.

Two examples of federally supported work experience programs are: (1) The Neighborhood Youth Corps, whose specific objective is to keep boys and girls in high school until they graduate by providing them with supplementary income. In fiscal year 1974 this was funded to the level of 88.5 million dollars and had 130,000 participants, and, (2) The Cooperative Vocational Education Program whose specific objective is to provide the student with direct on-the-job contact with employers who are using modern equipment and practices. In fiscal year 1973, 19.5 million dollars

was appropriated under Part B and 14.3 million dollars under Part G of the Vocational Education Act. In that year 508,409 students were enrolled, 339,958 from Part B funds and 168,451 from Part G. (See Appendix for a more complete listing of federally supported work experience programs, Inter-agency Panel on Work Experience, 1974.)

Many fine outcomes are apparent from the range of existing work experience programs. However, as work experience programs appear poised to enter the "main stream" of the educational program, it is incumbent upon us, as educators, to pinpoint weaknesses and repair deficiencies. If we educationally short-change our clients, we will not only undermine the worthwhile concepts of career education and work experience as exciting vehicles for changing our educational system, but we will also undermine our professional standing.

One major problem identified in examining work experience programs is that while large numbers of students are already involved at the high school level in work experiences, either through their school or of their own volition, in only a relatively small percentage of cases are their experiences related to their wider, central, educational studies. While over 76% of the graduating class of 1972 were involved in at least a part-time paid or unpaid work experience in their senior year, only 13.5% of them were engaged in work experiences related to their studies. Over 66% of those students involved felt their schools should have provided more practical work experience. The vast majority of students would prefer that their work experience be related to their educational program (Interagency Panel on Work Experience, 1974).

Another major problem evidenced in examining work experience programs is the quality, type and range of potential work experiences in which students can be involved. This was a major concern raised by the System Development Corporation study *An Assessment of School Supervised Work Education Programs* (Frankel, 1973). In this study they collected data on fifty representative program sites. The study concluded that many students did not get effective job rotation, they did not come in contact with useful role models, they did not have opportunities to try out their own decision-making skills, and all too often were placed in "lower end of the scale" menial tasks.

These two problems must be faced by educators wishing to develop work experience programs. First, the program must be a part of, and skillfully related to, the total educational program, and second, students must be offered a variety of work experience programs to test themselves, develop decision-making skills, and begin to move toward a firm crystalization of career preferences.

Elements to be Considered in Developing a Work Experience Program

Understanding the reasons for focusing on the school to work transition and being aware of existing programs and of some major problems to avoid still leaves us with the question, "where do we go from here?" What elements need to be considered in developing a work experience program? Let me now outline some elements essential to what I consider to be a rounded work experience program. They will not be all-inclusive, sometimes they will overlap, and they are, of course, open to change or rejection. They will, however, hopefully serve as a starting point or heuristic device from which discussions and planning can proceed.

Four major elements are vital to a sound work experience program: (1) the instructional capability, (2) the guidance capability, (3) the community involvement capability, and (4) the staff capability.

Instructional Capability

As mentioned earlier, it is imperative that work experiences be related to, or offered within, a total educational program framework. Work experience must not be an appendage. It must be related to other program needs and offerings of the high school.

Several features of a necessary instructional capability can be noted. First, if the relationship between work experience and the total education program is not to be mere lip service, then one must have a sense of the types of learning experiences available in the work site in order that gaps can be remedied through ancillary learning opportunities offered at a school or learning center site. Similarly, it is vital to know what learning is taking place at the work experience site, in order that these can be used as building blocks for educational gains in other areas of need, e.g., reading, quantitative skills, etc.

It is, therefore, important to analyze each potential work experience site for such opportunities. Without this capability it is going to be difficult, if not impossible, to place work experience within a total educational framework.

A second major feature of the instructional capability is that it must be individualized. Through a systematic process of diagnosis and prescription based on student interests and credit needs, the program must be tailored to each student. Individual learning plans should be negotiated between the student and the instructional staff. A blend of work experiences and other learning opportunities, e.g., existing materials, and resource personnel, must constitute the total program. The curriculum might be defined, therefore, as those areas in which knowledge must be gained to meet the individual needs of the specific student.

Guidance Capability

This element is vital to the work experience program. When I talk of guidance capability I am not talking of something to be tacked on to the program, but of that capability being integrated into the total instructional system. I am not talking of "crisis counseling" (though this is important), but rather of an emphasis on career planning and decision-making. To some extent, all staff involved with the student must be concerned with guidance issues.

The guidance capability must begin to be exercised as soon as the students select themselves into the program. At this stage diagnostic testing and clinical discussions with the students should be used to help them begin to examine their interests, aptitudes, talents and initial program needs. As the students progress through the program, the guidance capability must be exercised to help them check on previous decisions, record and identify changes, and aid them to classify options in the light of emerging values and preferences.

Under the guidance capability I also place the responsibility of placement services. I realize there are arguments for making this a separate element, however, for the purposes of conceptual neatness I have included it here. From my perspective, a major objective of a work-experience program is to help the student crystallize career decisions. Such a decision crystallization, e.g., to move into the work force or go on for further education or training, could well be frustrated without attendance to the question of placement. It will serve no purpose if we help the students reach the correct door but fail to give them the key to open it.

Community Involvement Capability

Community involvement is the cornerstone of a successful work experience program. This may seem obvious, but it is surprising how many educators view the community as a resource,

to be taken from, but not collaborated with. The community serves as the major educational resource in a work experience program. It is not only the content, but also the teacher, and the role model. It is important to collaborate with all aspects of the community: the employer, the trade unions, the civic and the social groups, for the community is the classroom.

Not only is the community the major educational resource used by the work experience program, but it can also serve, and is often willing to serve, in an advisory role to the governance of such programs. A strong community advisory board will not only open doors to new experience sites, but it will also provide the educator with insights and reality-based perceptions of the world of work which can aid program content decisions, work-experience site choice, and the general management needs of such a program.

Staffing Capability

Given the previous elements I have outlined, you might think that it is with trepidation that I approach the question of staffing for such a program. Not so. I believe that American schools are staffed by competent professionals, many of whom, of their own volition, are doing many of the activities I have previously outlined. They are providing guidance information to their students, and they are individualizing many of their programs. I also feel there are many other teachers who would move in these directions should the opportunity be presented.

The requirements for running a work experience program are fairly obvious. Staff must be able to cope with—and thrive upon—a program that is students centered, highly individualized and, in many ways, open-ended. They must be able to work with students in a facilitating role, help plan and change programs as new experiences are undertaken and skills and aptitudes developed and explored. While specialist staff in guidance may be needed, all the staff must be prepared to function, to some degree, in a guidance mode. Finally, staff must be an open-ended resource ready to be drawn upon continually by the student, and able to learn with the student to solve those problems beyond their own knowledge base.

Work experience represents a major emerging educational trend. In instigating such programs it is essential that educators be cognizant of the potential problems, and of those elements which must be considered in designing educationally sound programs. I have outlined those elements which I feel should be included in a work experience program. They should, hopefully, be a starting point for discussion and development.

APPENDIX

Program Title	Appropriated Federal Funds		Participants	
	FY 1973	FY 1975	FY 1973	FY 1975
National Student Volunteer Program	$ 0	$ 250,000 [1]	unknown	500,000
Youth Challenge Program	0	250,000 [1]	0	2,000
Experience-Based Career Education	0	3,600,000 [2]	0	600
Career Intern Program	0	1,000,000 [2]	0	200
Exec. High School Internship Program	0	200,000*	0	2,000
Neighborhood Youth Corps In-School Program	64,083,000	Program De-categorized	111,300	unknown
Apprenticeship Program	8,151,000	10,211,000 [3]	375,000	400,000
Work Experience and Career Exploration Program	2,973,789	0	20,000 [4]	0
Vocational Education Work Study	7,850,000 [5]	0	33,681	39,000
Part G Coop	19,500,000 [6]	0	168,451	196,000
Part B Coop	14,300,000 [6]	0	339,958	475,000

[1] Funds provided for administrative purposes only.

[2] Includes total cost of program development, operation, evaluation and planning.

[3] Provides technical assistance only.

[4] Administration, teacher salaries, and teacher training.

[5] Student assistance program—maximum wage $450/student/academic year.

[6] Teacher coordinators and research at secondary and post-secondary levels.

* NIE proposes to evaluate the program during fiscal year 76—no other cost to federal government.

(Inter-agency Panel on Work Experience, 1974, p. 6)

REFERENCES

Coleman, J. "Education in Modern Society," *Computers, Communities and the Public Interest*, M. Greenberger (ed.), Baltimore: Johns Hopkins University Press, 1971.

Curti, M. *The Social Ideas of American Education*, Paterson, New Jersey: Littlefield, Adams and Company, 1959.

"Fourth Annual Gallop Poll on Public Attitudes Towards Education," Princeton, New Jersey, 1972.

Frankel, S. M. *An Assessment of School-Supervised Work Education Programs: Executive Summary*, System Development Corporation, unpublished report, 1973.

Hill, P. "Public Views on the Objectives of Secondary Education: The Results of a Survey," National Institute of Education, Washington, D.C., November 1973.

Inter-agency Panel on Work Experience to the Special Assistant to the Secretary (HEW) for Inter-agency Affairs. *Expanded Work Experience*, Washington, D.C., October 1974.

Panel on Youth of the President's Science Advisory Committee. *Youth: Transition to Adulthood*, Washington, D.C.: U.S. Government Printing Office, 1973.

Report of the White House Conference on Youth, Washington, D.C.: U.S. Government Printing Office, 1971.

The National Commission on the Reform of Secondary Education. *The Reform of Secondary Education: A Report to the Public and the Profession*, New York: McGraw-Hill Book Company, 1973.

U.S. Department of Labor, Bureau of Labor Statistics. *Handbook of Labor Statistics, 1972*, Washington, D.C.

A MODEL OF CAREER GUIDANCE

JoAnn
Harris-Bowlsbey
Western Maryland College

I have been asked to speak about career guidance as it relates to career education. In order to elaborate upon this theme, I would like to divide my presentation into two parts: first, some personal commitments about definition, need, theoretical basis, components, and delivery of career guidance, second, a brief discussion of a model which my colleagues and I are currently implementing.

Let me begin by proposing a definition of career guidance which is simplistic, although it seems to incorporate the thinking in this area from Frank Parsons to Kenneth Hoyt.

> Career guidance is a systematic program of experiences designed to assist an individual to (a) understand his/her personal interests, abilities, values, and needs; (b) to understand the broad range of options available in the world of work and education; and (c) to make career decisions which interrelate self-information with career information for the maximum satisfaction of the individual.

I view career guidance as a subset of career education which has more limited objectives and functions than those of the total career education movement. Its objectives, in simplest form, are presented in my definition. Its functions will be delineated in greater detail in a later section of this presentation.

The Need for Career Guidance

We are all aware of a drastic need for career guidance in our nation today for both its youth and its adults. Yet, documenting this need with "hard data" is a difficult task. I have recently been reviewing the available literature in regard to need. A search of the ERIC files reveals that there is very little available in this area. One of the most recent and useful documents in this regard is American College Testing Program's Research Report Number 61 entitled, "Nationwide Study of Student Career Development: Summary of Results" (Prediger, Roth, Noeth; November 1973). This study was conducted in order to survey the career development needs and skills of the nation's youth. A nationally representative sample of approximately 32,000 eighth, ninth, and eleventh grade students in 200 schools was tapped. There is a wealth of data available from this study, but for our purposes I would like to simply cite the responses to some specific items in the survey and to give you the overall summary of the investigators. These specific items will give the general tone of student reaction at grade eleven.

Do you need additional help in making career plans?	Yes:	78%
	No:	22%
Overall, how much help with career planning has your school (teachers, counselors, principal, librarian, etc.) given you?	None:	17%
	Little:	32%
	Some:	37%
	A lot:	13%
How do you feel about the help provided by discussion with a counselor about education and job plans after high school?	Help not provided/used:	35%
	Of little help:	21%
	Of some help:	28%
	A lot of help:	15%

In addition to these kinds of responses which summarize student reaction to the assistance which they are receiving, the ACT study also objectively measures what students both do and know about career development concerns. Based upon these data, the investigators conclude, "Considered together, we believe these three vantage points (amount of involvement in career planning activities, knowledge about the world of work, and lack of knowledge about the career planning process) for viewing student career development provide a consistent and dismal picture. If we were speaking of physical development rather than career development, we would describe American youth as hungry, under-nourished, and physically retarded." (p.33)

Career Guidance Assumptions

Both the need for and the content of career guidance can be inferred from our current knowledge of career decision and development theory as expressed by the work of Super, Tiedeman, and Holland. From my study of their work, I base my thinking about career guidance on four assumptions.

The first of these assumptions is that career development is a lifelong process, which can be broken into definable stages (Super, 1953, 1957, 1963) and specific developmental tasks. The earlier stages of this process result in a beginning vocational choice in late adolescence or early adulthood. This choice may change and emerge, forming a unique career pattern for each individual. Vocational development is as much a reality as emotional, physical, or social development and should be considered one component of the normal lifelong development cycle of all human beings. Vocational maturity (Super, 1955, 1957, 1960, 1974; Crites, 1961, 1974; Westbrook, 1970, 1974) is a construct which can be used to assess whether or not a given individual has progressed in this dimension to the extent and at the rate that others of his/her age have. Vocational maturity, therefore, can be considered the yardstick by which to measure vocational development, and the end goal of career guidance. Increasingly, the construct is being dimensionalized and measured.

A second concept of current career development theory is that choice of an occupation is an implementation of self-concept (Super, 1953, 1957, 1963) or self-identity (Tiedeman, 1963). It therefore follows that one cannot make an optimum career choice without optimum self-knowledge. Further, it follows that a change in self-perception or definition may bring about a change in vocational choice. The two processes of self-understanding and career engagement are interpenetrating and interactive. In line with this assumption, reasonably backed by research data, the choice of an occupation serves not only for the making of a living, but also for the making of a life.

A third concept of current career development theory, particularly championed by Tiedeman (1963, 1972) and Miller-Tiedeman (1972) is that career development, though affected by external environmental forces, can be largely controlled by internal, personal initiative. Such control comes by gaining awareness and improvement, if needed, of personal decision-making processes so that the individual takes control of his or her own helm through an ever-evolving understanding of self, motivation, problems faced, consequences which may result from alternative actions, and the internal process of moving from indecision to decisions.

A fourth concept of career decision theory is that good decisions must be based upon usable and meaningful information. The hypothesis is that the greater the amount of information possessed, the greater the probability of good decision. The challenge to career guidance then is to provide meaningful data which can be converted into personal information.

These career development concepts look at vocational choice from a phenomenological point of view, from within the individual rather than from without. Although manpower needs must be met and external forces do play a significant role, the new emphasis is upon assisting the individual to apply all of the personal control which is possible over these factors.

As a program developer in the area of career guidance, I am forced to make some additional assumptions in order to feel worthwhile. These are:

1. that the theoretical bases just cited can be translated into tangible, implementable systems and products;

2. that the concepts inherent in career development (such as planfulness, decision-making, and awareness of present-future relationships) can be taught in a systematic way;

3. that the use of these systems and products will, in fact, result in better career decisions, greater personal and life satisfaction, and greater good to the society.

Career Guidance Components

Having finished with my baseline assumptions, I am now faced with trying to understand the components which make up systematic career guidance treatment. It seems to me that the question has two parts: (1) What is it that the individual needs in order to come to vocational maturity and career satisfaction? (2) What part of that totality should be fenced by the rubric of career guidance?

I have come to view career guidance as a systematic treatment which has seven broad components, each of which could be viewed in mini-dimensions. The first of these is a component which I call the development and clarification of self-concept. This is a set of activities, programs, and experiences designed to assist each individual to have a realistic picture of current interests, strengths, competencies, needs, and values. Further, this component assists the individual to see potential for further development of these factors and assists him/her to get a synthesis of how he/she sees self and how others view him/her. In light of the current theory that choice of occupation is an implementation of self-concept, such self-knowledge seems indispensable as an early step in the career development process.

The second component of my proposed career guidance system is a set of experiences or treatment designed to assist the individual to translate the self-concept into occupational terms. This is the process by which an individual makes a transition from "I am good at math" to "I could possibly do jobs in science, accounting, and computer programming" or from "I relate well to people" to "I could explore occupations in the group of occupations called 'social service'."

The third component is a set of engineered experiences to assist individuals to explore the universe of occupational alternatives in an organized way. This system of organization must be one to which adolescents can relate easily and one which allows the relationship of that which individuals have learned about self to that which is being learned about occupations. These experiences need to be as varied as possible, ranging from reading to computer simulations to work experience. The objective of this component of the career guidance system is to broaden options, but in a meaningful, ordered way.

A fourth component is the deliberate teaching of decision-making. We now know that decision-making skill is a factor of vocational maturity. We also now have some evidence that planful decision-making can be taught. The objectives of this component are dual: to teach and cause the individual to experience planful deciding strategies and to assist the individual to apply this strategy to the narrowing of the available vocational options identified in the third component.

A fifth primary component of a career guidance program is that of providing reality testing of top-priority occupational choices. Our past work-study programs have provided such reality testing for occupations in certain levels. We badly need innovative ways to provide reality testing of tentative occupational choices across the total spectrum of occupational levels and fields. We also need to remember in designing such programs that finding out that an occupation is <u>not</u> for you is just as valid an experience as finding out that it is for you.

A sixth component is a set of planned experiences to assist with choice--choice which is based upon self-knowledge, exploration of alternatives, use of deciding strategies, and reality testing. Individuals need assistance in coming to crystallization, in evaluating the meaning of reality testing, and in putting one occupation in top-priority position while simultaneously keeping other options open.

Now the seventh component, that of assistance with implementation of choice. Guidance programs have in the past specialized in component seven. We've been good at helping students find a college or a scholarship, without considering why or for what end goal. This seventh step must grow

out of the previous six. It is assistance with whatever is necessary for implementation of the vocational choice—job placement, finding on-the-job training, entry into apprenticeship, selection of a military program, or selection of community or four-year college.

The Delivery of Career Guidance

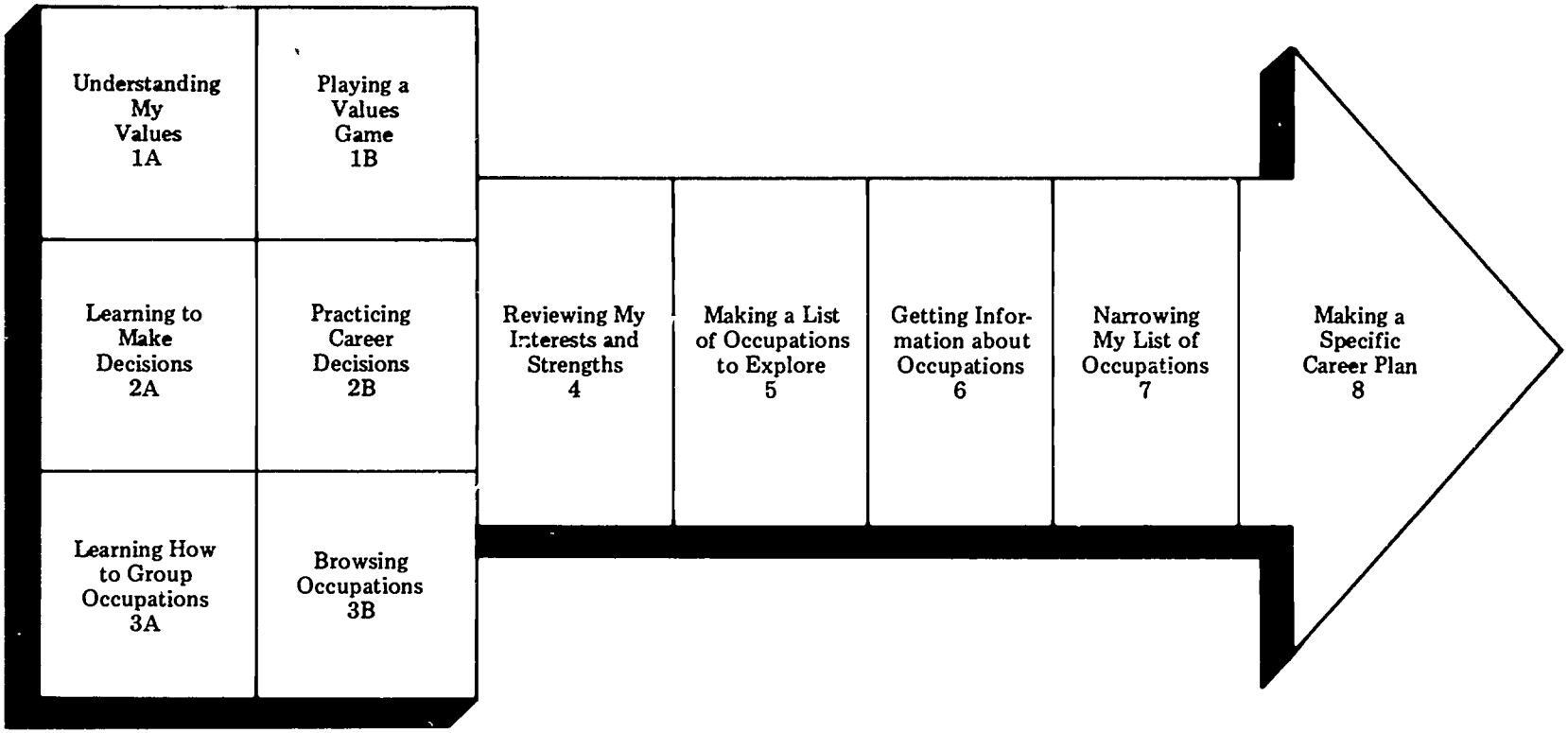
For me, these seven components put a fence around the territory of career guidance. Having homesteaded this territory as "guidance," the question then arises as to how these services, activities, and experiences should be delivered. Within the school setting, I propose that the delivery of career guidance services should be done by counselors, teachers, and media. Counselors might work as interviewers of individual students; as group guidance leaders; as program developers; and/or as coordinators/advisors of teachers for delivery of these components. Teachers might serve a guidance role through the curriculum of regular courses or in specially designed guidance-type courses. Media might be films, videotapes, tape recordings, microfiche, or computers. For me, media most often means computers. As specialists in career education and guidance, we face the necessity of drafting plans for the convergence of these resources in the most cost-effective way. One-to-one counseling costs from $8.00 to $12.00 per contact hour; group guidance or counseling costs $1.00 to $1.50 per contact hour; classroom instruction costs from $.50 to $1.00 per contact hour; individualized computer-based guidance systems cost from $2.00 to $4.00 per contact hour. These kinds of cost differences should cause us to design and test alternative combinations of delivery systems for career guidance.

A Possible Model

With the base of assumptions which I have now laid out for you, a team of five professional colleagues and I have set out to operationalize those seven components in a new computer-based guidance system called DISCOVER. We do not consider our system to be a "stand-alone" system; we believe that it needs to live in an environment of supporting services from counselors and teachers. Further, we believe that our model could be implemented through instructional material or individual and group guidance treatment also, and therefore, presentation of the model has relevance here. (I must protect myself by saying that our work is being done courtesy of the United States Office of Education, Vocational Education Research, and that without another year of support we will not have a finished product.)

We have visualized our system in this arrow-shaped diagram in order to emphasize systematic progression toward career choice and implementation. (See Figure 1.) Let's look at the content and objectives of each of these proposed experiences at the computer terminal.

THE DISCOVER SYSTEM



1A. Understanding My Values

This module contains a number of experiences which lead the user to think about what a value is, to analyze personal values, and to decide upon actions which implement those values. The last part of the module proposes ten to fifteen values related to occupations. The student rates the personal importance of each of these ten to fifteen values and may then ask the computer to search its data file for occupations which can provide the combination and weighting of the values assigned by the user. The summary of work values is retained for later use in the system.

1B. Playing a Value Game

This module is a monopoly-like game designed by the DISCOVER team which may be played by one or two players. In the beginning of the game, the student is introduced to the concept of weighting values. He/she is invited to place relative weight on three possible goals: income, recognition, and happiness. Winning the game consists of reaching the goal which the user has set for himself/herself in each of these categories. The user plays the game by moving forward on a board as determined by the computer in random "throwing of the die." The spaces on which the user lands may provide him/her with an opportunity to make decisions about choice of occupation, educational options, use of leisure time, or life-style. On the other hand, they may subject him/her to some of life's events, such as unexpected setbacks, unexpected opportunties, and payment of necessities such as housing, clothing, and transportation. The user also acquires plan cards which allow him/her to have more control over life than the computer's rolling of the die affords. The way in which decisions are made on the "decide" squares may add points toward the values for which the players are playing the game. The game ends when the player has received the score previously set for himself/herself under the categories of income, recognition, and happiness.

2A. Learning to Make Decisions

This module attempts to teach a planful decision-making process by presenting the process in flowchart form. The system provides a number of exercises designed to illustrate and provide practice in the decision-making steps. The system also illustrates by use of the flowchart, other non-planful strategies (intuitive, impulsive, delaying, agonizing, etc.) and assists the user to identify his/her present style of decision-making.

2B. Practicing Career Decisions

This module makes use of a career decision tree, designed by Donald Super and colleagues, as an organizing principle for understanding how decisions affect occupational choice. Since each of

the 22 branches of the tree represents a group of occupations, the tree structure is used to show the key decisions which lead to entry into a given occupation, to plot a given user's course up the branches of the tree, to simulate the career paths of others, and to allow the user the opportunity to play his/her own life in a variety of ways by making decisions in this low-risk, simulated way.

3A. Learning How to Group Occupations

This module presents the world of work by way of two organizing principles: the data-people-things-ideas division used in the *Dictionary of Occupational Titles*, and Holland's six groups. A number of exercises are presented to give the student practice at using these classification sysems; the student's responses are monitored for the purpose of providing more instruction if needed.

3B. Browsing Occupations

This module makes use of the Holland classification system presented in Module 3A as an organizational structure by which the user can browse the world of work. The module allows him/her to touch any two points of the Holland hexagon and to be presented with a list of occupations which fall in that particular segment of the curricular world of work. The user may select titles from the list and ask for work duties, activities, and setting.

4. Reviewing My Intrests and Strengths

This module is John Holland's *Self-Directed Search* or ACT's *Career Planning Program*, administered on-line. Future system users will have the opportunity to select one of these alternate modules for use. These instruments are self-reports of the user's career-related interests, experiences, and competencies. The data, collected via the items on the instrument, give the user a focus for exploration in the world of work. The results of the instrument are explained to the user.

5. Making a List of Occupations to Explore

This module provides the user with alternate ways to generate a list of personal vocational options (a) by relationship of occupations to personal work values, (b) by use of the results of the *Self-Directed Search* or the *Career Planning Program*, (c) by selecting titles from a list of occupations by the terminal, and/or (d) by combining selected characteristics (such as salary level, place of work, level of training, degree of independence, etc.).

6. Getting Information about Occupations

This module allows the user to get a great deal of information about the occupations on his/her list. In a series of displays, the user may receive information about a job, its duties, benefits and limitations, educational requirements, future outlook, and additional sources of information. The user also has the capability to review his/her own student record (record of grades in related courses, related work or course experience, present rank in class, etc.) against the requirements of the job or of its prerequisite training. The module also allows the capability to compare two occupations by calling in data about both simultaneously. The user leaves this module with a list of occupations in which he/she has serious interest. This list may be a shortened form of the list with which he/she entered the module or may be a new list which has been generated by one of the methods listed above.

7. Narrowing My List of Occupations

The user enters this module with the list of occupations from the previous module or with a new one which he/she generates at the beginning of the module by selecting job titles from a list or by searching the data file by a combination of characteristics. The purpose of this module is to assist the user to narrow the list further so that he/she leaves the module with a first-choice occupation in mind and a limited number of others in priority order. This narrowing is assisted by the capability to ask for additional information about any occupations on the list, to compare information about two occupations, and by analyzing the remaining occupations in light of identified work values, desired level of training, and interests/competencies. Finally, the user is asked to remove occupations which are no longer of interest and to put the others in priority order. The user leaves the module with a top-priority selection.

8. Making a Specific Career Plan

The user enters this module with one specific occupation in mind for which he/she wishes to implement a career plan. The module takes the user through four specific steps. The first is choosing the plan of entry into the occupation. For some occupations there may be only one road, such as four-year college; for others, there are several roads, such as on-the-job training, community college technical programs, private vocational schools, or the military. The second step is a look at the courses in high school which may best facilitate this plan. From this point, the user might branch to "Request a Course" which allows him/her to register for the following semester, year, or quarter. The third step is a look at role testing experiences which the student has had in relation to

this occupation, such as part-time jobs or participation in related extra-curricular activities, and the recommendation of others if this experience seems to be inadequate. The fourth step is the choice of a specific place or institution in which to implement the vocational choice or to get the training for it, i.e., the choice of a local company, technical school, community college, continuing education program, college, military program, or apprenticeship. Planning may also involve finding appropriate loan funds, grants, or scholarships. The completion of the fourth step involves very sophisticated searches and interaction with nine large data files. These same data files are used for the counselor-support system. The user may enter this module and go directly to any of these search programs or recall information about any of the schools or programs in the file without going through the complete module.

In this model you will note we have given attention as best we can in a computer-delivered system to the seven components which I listed earlier. Some components definitely need additional support from counselor, teachers, and community.

Proposed Component		DISCOVER Modules
1	(self-concept clarification)	1A, 1B, 4
2	(translation of self-concept to occupational terms)	1A, 1B, 4, 6, 7
3	(broad exploration of occupations)	2B, 3A, 3B, 5
4	(teaching of decision-making skills)	2A, 2B, 7
5	(reality testing of tentative choices)	6, 7, 8
6	(making choices)	7
7	(implementing choice)	8

I have attempted to share with you my opinions and commitments about the definition, theoretical bases, components, and possible delivery of career guidance. Further, I have used my own work as one example of the implementation of these theoretical bases and components.

REFERENCES

Crites, J. O. *The Maturity of Vocational Attitudes in Adolescence*, APGA inquiry Series No. 2, Washington, D.C.: American Personnel and Guidance Association, 1971.

_____. In *Vocational Maturity*, D. E. Super (ed.), Washington, D.C.: National Vocational Guidance Association, 1974.

Miller, A. L. and Tiedeman, D. V. "Decision Making for the 70's: The Cubing of the Tiedeman Paradigm and its Application in Career Education," *Focus on Guidance*, 1972, 5(1), 1-15.

Prediger, D. J.; Roth, J. D.; and Noeth, R. J. *Nationwide Study of Student Career Development. Summary of Results*, ACT Research Report No. 61. Iowa City: American Colleges Testing Program, November 1973.

Super, D. E. "A Theory of Vocational Development," *American Psychologist*, 1953, 8, 185-190.

_____. "The Dimensions and Measurement of Vocational Maturity," *Teachers College Record*, 1955, 57, 151-163.

_____. *The Psychology of Careers*, New York: Harper, 1957.

Super, D. E. and Overstreet, P. L. *The Vocational Maturity of Ninth Grade Boys*, New York: Bureau of Publications, Teachers College, Columbia, 1960.

Super, D. E., et al. *Career Development. Self-Concept Theory*, New York: College Entrance Examination Board, 1963.

Super, D. E. (ed.) *Vocational Maturity*, Washington, D.C.: National Vocational Guidance Association, 1974.

Tiedeman, D. V. and O'Hara, R. P. *Career Development. Choice and Adjustment*, New York: College Entrance Examination Board, 1963.

Westbrook, B. W. *Maturity Test*, Raleigh: North Carolina Department of Psychology and Center for Occupational Education, North Carolina State University, 1970.

_____. In *Vocational Maturity*, D. E. Super (ed.), Washington, D.C.: National Educational Guidance Association, 1974.

WORK EXPERIENCE AND PLACEMENT PROGRAMS

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The changes that have occurred in society and the home have created a situation which has made our youth economic liabilities instead of economic assets. These same changes have caused our youth to become isolated from adults, work, and most activity that makes a difference in the quality of life or the welfare of the community. In short, we have, without intention, created a society where many of our youth have lost worth and dignity and, thus, find few ways by which they can make the transition from youth to adulthood; from dependency to independence; from school to work; or from being unnecessary to becoming necessary.

We have not, as yet, developed a system or an institution which is even held responsible or accountable for providing the means or the process to assist our young to make this transition.

At one time the home, the community, the economy, and the nature of work all made the transition reasonable and simple. Schools were set up to assist in the process. Today, however, the schools more often prolong the youthful state rather than provide the means by which a transition can occur.

Youth. Transition to Adulthood, a recent report by the Panel on Youth of the President's Science Advisory Committee (1974, p. xiii) said:

> As the labor of children has become unnecessary to society, school has been extended for them. With every decade, the length of schooling has increased, until a thoughtful person must ask whether society can conceive of no other way for youth to come into adulthood. If schooling were a complete environment, the answer would properly be that no amount of school is too much, and increased schooling for the young is the best way for the young to spend their increased leisure, and society its increased wealth.
>
> But schooling, as we know it, is not a complete environment giving all the necessary opportunities for becoming adult. School is a certain kind of environment: individualistic, oriented toward a cognitive achievement, imposing dependency on and withholding authority and responsibility from those in the role of students. So long as school was short, and merely a supplement to the main activities of growing up, this mattered little.

Michael Mallory writing in *The National Observer* (October 13, 1973, pp. 1-12) says:

> We have herded our young into a hostile youth culture by keeping them in resentful and babyish dependence at an age when previous generations of Americans were learning responsibility and self-reliance in the real world of work.

James S. Coleman in "How Do the Young Become Adults?" (1972, pp. 226-227) talks of changes in the home, the workforce, and the school. He says,

> . . . the family has gone through two major transitions that sharply limit its training of the young. The first of these occurred when the father went out to work, into a shop or an office, and then began to carry out his major productive activities away from home behind the closed door of an organization. The second occurred when mother went out to work or otherwise stopped carrying out her major activities in the home.
>
> The young remain in the family but the activities from which they could learn have moved out; the activities from which the young could learn remain in the workplaces, but the young themselves have been excluded.

Before turning to the school, let me note a major aspect of the kind of learning that occurred in the home and the workplaces according to Coleman (1972, p. 227).

> It is learning which is variously called 'incidental learning' or 'experiential learning.' It is learning by acting and experiencing the consequences of that action. It is learning through occupying a role with responsibility for actions that affect others.
>
> The transformation of the schools in response to society has had a consequence that is important . . . this is the massive enlargement of the student role of young

persons, to fill the vacuum that the changes in the family and workplace created. Learning takes place not through experience as a responsible action, but through being taught as a student. There are some exceptions, but the general pattern followed is that of the classical school, in which a teacher is the medium through which learning is expected to take place. This replaces action as the medium through which learning had taken place in the family or the workplace.

This separation of schooling and society is documented by a recent survey done by the American College Testing Service which found that 79% of the college and university students in the nation said their greatest problem was in determining what they wanted "to do." But what may be even more indicative for the purpose of this paper is that 71% did not know where to go or how to get help in solving the problem! (For more information, see Prediger, Roth, Noeth, 1973 and/or Hanson, 1974.)

Studies done by the Department of Health, Education and Welfare have identified several youth problems that should be addressed by the schools. These problems seem significant in terms of work experience and transition, and affect career decision-making, the efficiency of career entry and re-entry, and overall job satisfaction.

The problems are:

1. Lack of Necessary Skills

   Basic skills—the tool learning skills of reading and writing. Work-related skills—lack of training and experience.

2. Isolation of Youth from Society

   Inadequate career guidance.
   Inadequate work experience.

3. Alienation of Youth from Society

   Passive and dependent mode of life.
   Lack of responsibility.

4. Structural Rigidities within Society and the Schools

   Flexibility for youth to gain experience.
   Flexibility for adults to continue education.

Attempts, therefore, at the solution of these serious problems and, specifically, those of "work experience" and "transition," have shown three common characteristics according to Willard Wirtz: (National Manpower Institute, Novermber 1975, forthcoming) (1) ". . . they have been directed almost entirely at those problems that show up in starkest form at the passage between school and jobs where the two would have traditionally been expected to meet; (2) their attempts at solution have been positioned within one of these two worlds, education alone; and (3) without exception, they have been limited to what can be done without disturbing the established institutional structure. By and large, the schools, the employment services, the unions, and the business corporations have been encouraged to do only more of the same kind of good that they have always been inclined to do."

The net effect of what has been written, then, can be summed up by saying that society has less need for young people than ever before, and the lack of a productive, useful role for youth in society diminishes his chance to learn by other than traditional schooling. Society has, in effect, used the schools to cover up their lack of concern toward solving the serious problems of growing up and "learning" in a changed technological society.

Since work would appear to be with us for some time, at least as defined in the new statement of the Office of Education, the degree to which the two societies of education and work will be drawn together will come only as it is understood that it will benefit society, adults, and employers as much as it does the young and education. This is an understanding that has as much basis in political reality as it does in learning theory and humanistic philosophy. This overlong presentation of "why" work experience and placement programs is fundamental to an understanding of the model that will follow.

This model is developed by enlarging the concept of "work experience" in the lives of our young as it relates to their "educational experience." Up to this time, work experience has often been seen as simply training to improve an individual's present competency, or a narrow and superficial exposure to a related interest area. Both are meaningful, but they don't begin to encompass the potential of experiential learning in an occupational area.

Changes in both the nature of work and in the adult life of our society require that basic changes be made in the relationship between schools and society. The present structure, organization, and schedules for both the school and the workplace make them unfit to prepare our youth both for work and for the transition from youth to adulthood, or, more precisely, from school to work.

The following model is based on the foregoing concepts of school and society and the problems facing our youth. Certain premises must not be stated upon which operational programs may be suggested. The premises are as follows:

1. All youth need work experience as part of the education for an adult role.
2. Specific planned transition assistance from school to work must be available whenever the youth opts to get work experience or to enter the work force full-time.
3. Experiential learning is necessary in order to test the knowledge and understanding gained in school and, thus, must occur earlier and more often.
4. Education cannot provide experiential learning in the schools, nor can it shift the responsibility to someone else or isolate it from learning in the schools.
5. The community, and particularly employers, must participate in the planning, implementation and evaluation of work experience and job placement.
6. Greater flexibility must be achieved in all educational programs.
7. Knowledge and skills now taught in the school can be better taught if students gain work experience and get assistance to enter the work world so their knowledge and skills are used.
8. Support and action for such programs must come from the power structure within education and the community; it cannot be accomplished by the specialists who must carry out the program.
9. An entry job is a means not a goal—the goal is continued human learning and development and work that is worthwhile to the individual.
10. During their maturation years, our young need relationships with adults in our society other than parents, teachers and "controllers" that now limit their experiences to home, school, and youth activities.

A Work Experience Learning Program

There are essentially four kinds of work experience:

1. Orientation and Awareness—an experience primarily to learn about work, the various kinds of careers and, essentially, how adults function in the work world.
2. Exploration—a work experience which allows the student to try out and explore various kinds of broad occupational areas and to learn of the knowledge, skills and competencies required in the occupation.

3. Employability Learning—work experience in which one learns the various skills that all work requires and begins to experience the reality of rewards and penalties for responsible action. Where possible a relationship to career educational goals is desirable.

4. Job-Skill Development—a higher order of work experience requiring the specific application of knowledge and skills in jobs where one gains additional knowledge and skills in a specific job area. In all cases this should be related to career and educational plans, or, perhaps, a culmination of both schooling and work experience.

Work experience programs currently in operation are cooperative education, work study, field experience, internships, apprentice training, career awareness, practice teaching, on-the-job training, community learning, alternative schooling, volunteer activiteis as well as many others.

Elementary

In the model presented here all young children would be exposed to work orientation and awareness through activities taking place in the early school years and fused with the study in the classroom. In addition, bringing adult workers into the classes, and making visits to work places would be carried on. Individual activities, such as spending a day with a parent at work, simulating and studying work roles, and actually doing work as volunteers in the school or in the community would be an integral part of the program. In some cases, in the upper grades, students would earn academic credit for contracted experiential learning in the community and school, especially in the area of tutoring and teaching other people.

While not generally recognized as work experience, such orientation and awareness is fundamental to the further development of work experience at the mature youth levels.

Middle and Junior High School

During these years, programs which provide increasingly responsible work roles should be developed both in the school and in the community. Tutoring and volunteer work in lower grades or for agencies in the community should be carried on. Exploration into occupational areas for periods of a few hours to several weeks should begin. Much of this activity could be done on the weekends and during summer breaks for educational credit and for wages. It appears that in another decade the need for youth workers will increase due to the population redistribution among age groups.

Schools should, through placement programs, begin to provide exploration and employability-skill work-experience opportunities in the work force of the community.. This will require a new respect for the learning activity by both educators and parents.

If recognition and reward have been provided at the elementary and junior high level, students will be glad to consider several options at the high school and college levels.

High School and Post-secondary

Work experience of the following kind must be available:

1. Job-skill development—for students who have elected a vocational school program and for students who plan no formal continuation.

2. Employability-skill development for students who lack these skills in order to get into a specific job skill program.

3. Volunteer programs for educational credit in areas of tutoring, community service, teacher and staff aides, and other work related to career plans or services to community and people.

4. Internships in a work place, with an adult who can teach about his career and job. The opportunity to earn educational credit should be available. Internships should last up to 13 weeks.

5. School manufacturing programs—in these careers the school establishes, alone, or in cooperation with the local business, a specific production unit which produces and sells a product built to the specifications of the buyer.

6. Employer-based learning—a student may spend the major part of his time at work or on a job and return to school for specific assignments for academic learning under contract.

In all cases the learning would take place under the direction of an adult other than the classroom teacher and, generally, in an environment outside the school setting.

All these activities would need to be coordinated in the community by an agency which would be the focal point for community contact in order to prevent duplication, conflict and ineffectiveness. An Education-Work Council, or some new unit not directly responsible to school or employer, has been suggested.

I am recommending that all work experience be coordinated in the school systems or community by the job placement office located in the schools.

Job Placement Programs

Under this model the job placement center would have responsibility for the following:

1. Coordinating all work experience programs in the school and community.

2. Providing service to secure entry level employment for all youth in the community between ages 16-22.

3. Doing the necessary work to carry out transition from school to college or other post-secondary formal education.

4. Following up the graduates or school leavers to determine the successes and failures of the program.

5. Providing periodic evaluation of work experience and placement programs operating in the community, and preparing feedback to the schools, agencies and employers.

6. Servicing the individual placement offices in each of the high schools and other schools offering work experience and entry job placement.

7. Providing continuous and effective job development activities to secure the desired experience stations and entry jobs.

8. Holding to the purpose of the program that work experience and job placement is for learning first and for all youth.

9. Providing staff development, development assistance, and necessary training for staff and students working in various placement offices of the community.

10. Coordinating activities with the employment service and other agencies and institutions providing similar services in the community.

11. Providing pertinent data on employment trends and career information to the schools.

Under this model each high school and post-secondary school would have a placement office that would be available to the youth in that school and community in order to provide services daily.

All programs would operate all year long, 6 days a week, and would be open 8:00 a.m. to 8:00 p.m. every day.

Process, procedures, and follow-up would be coordinated from the central office. Of course, size of the community would determine final organization and structure.

Community Education Work Council

An advisory council which would advise the Director of Job Placement and all institutions involved regarding the needs, procedures, and changes necessary to be effective would need to be developed. This council should include a community cross-section, and should especially involve those persons whose responsibility in the community was well-recognized. Such a group would be essential for experiential learning to gain due respect in the academic and adult world.

REFERENCES

Coleman, J. 'How Do the Young Become Adults?" *Phi Delta Kappan*, 1972, 54.

Hanson, G. R. "Assessing the Career Interest of College Youth: Summary of Research and Application," ACT Research Report No. 67, Iowa City: American Colleges Testing Program, December, 1974.

Mallory, M. T. "U.S. School: Just an Aging Vat?" *The National Observer*, 1973, 12 (41).

National Manpower Institute. *Education and Work, A New Prospect*, November 1974, forthcoming.

Panel on Youth of the President's Science Advisory Committee. *Youth: Transition to Adulthood*, Washington, D.C.: U.S. Government Printing Office, 1973.

Prediger, D. J., Roth, J. D., Noeth, R. J. *Nationwide Study of Student Career Development: Summary of Results*, ACT Research Report No. 61, Iowa City: American Colleges Testing Program, November 1973.

FIVE EASY PIECES OF FREE ADVICE ON CURRICULUM STRATEGIES FOR CAREER EDUCATION FROM A RELATIVELY DISINTERESTED CURRICULIST

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Unlike most of the others on the program of the first ever Career Education National Forum, I am not an expert on career education. I have read most of the writing about career education, pro and con. I have even co-authored a report "Purposes and Priorities of Career Education" which attempts to synthesize the statements of aims and purposes that appeared in the career education literature before June of 1974 (Walker, Schwab, and Eisner, 1974). But a reading knowledge is a particularly poor basis for offering advice concerning a movement as skeptical of purely literary pursuits as the career education movement is.

My expertise lies in the study of the curriculum, of how it is developed, maintained, changed, and evaluated. I have been particularly interested in those sudden, sweeping reform movements of which career education is probably the most prominent current example. What I propose to do today is to draw some lessons from the experience of recent curriculum reform movements. These lessons deal with curriculum strategies, with large policies, not with matters of technique concerning curriculum development. My remarks are addressed to you as career education policy makers, not as designers or developers. I hope career educators will understand that advice drawn from such a limited and specialized base of experience as this must be treated as tentative, to be examined further in light of other matters, rather than as a categorical imperative.

Before turning to the advice, I should say a few more words about my attitude toward career education, which I characterized in the title as "relatively disinterested." I am quite sympathetic with the ideals of the career education movement. I support, for example, the following ideals expressed quite frequently in the career education literature:

- a healthy, productive, efficient economy
- an economy whose benefits are equitably distributed
- an economy which provides opportunity for material advancement to all
- a socioeconomic system which all Americans could support and feel a sense of belongingness toward, a contrasted with the present economy which alienated vast numbers
- a society in which individuals have a sense of potency and control over the material conditions of their lives, and a sense of comprehension, rather than mystification, about the things they use in their daily lives.

Our review of the career education literature revealed many worthy ideals in addition to these five, and I find it very easy to support nearly all of them. What keeps me from becoming a wholehearted supporter of career education, though, are the possibilities for betrayal of these ideals in practice.

I first encountered career education as the announced education policy of a national administration I did not support, and whose motives I mistrusted. As I saw it, this administration had made a habit of disguising policies, otherwise unacceptable to the American public, in a cloak of deceptive rhetoric. John Mitchell's repressive and illegal tactics as attorney general were called "law and order." The illegal invasion of neutral Cambodia was termed "protective reaction." Systematic inattention to the problems of the disadvantaged was called "benign neglect." Spiro Agnew had been speaking out against colleges for lowering their standards in affirmative action and open enrollment programs. Under the circumstances, I could not help being suspicious of "career education." Was this not likely to be a nefarious scheme for denying sons and daughters of the disadvantaged access to positions of real leadership in the society? The sons and daughters of those wealthy enough to afford a private school, or to live in a wealthy neighborhood that resisted career education could continue to prepare for college and, then, for one of the higher professions—medicine, law, engineering, and the like—after which they would occupy the executive and decision-making positions in the society, while the sons and daughters of the disadvantaged would have ceilings placed upon their eventual accomplishments at an early age by pursuing an educational program that did not qualify them for these leadership positions. The danger remains that career education could be used for

this purpose and in this way, in spite of the dreams of its supporters. The possibility of such a betrayal of the stated ideals of career education is one factor which keeps me from wholehearted participation in the movement. And my lack of participation keeps me from having a stake in it. Thus, my self-declared status as a relatively disinterested person. Perhaps the objectivity generally thought to rest in the disinterested individual will help me to give advice worth somewhat more than free advice is acknowledged as being worth. I hope so.

The five pieces of advice I bring today are:

1. Develop materials that make it easy for interested individuals (schools, teachers, school systems . . .) to take the first step toward adoption of career education; do everything in your power to ensure that this first step will be successful.

2. Develop the means to evaluate the outcomes of career education programs, means that reflect the ideals of the career education movement, but that are not tied to any particular career education program.

3. Don't fall into the behavioral objectives trap: state your objectives as clearly as possible, but do not sacrifice significance in the process.

4. Don't put all of your policy eggs in one institutional basket, the public school: use all major educational agencies, including especially, community agencies, the mass media, business and industry, and the family.

5. Don't try to avoid or cover up the many conflicts and dilemmas that surround the world of work in our society: career education programs must face these difficulties squarely.

I will explain and discuss each of these briefly.

1. Develop materials that make it easy for interested individuals (schools, teachers, school systems . . .) to the first step toward adoption of career education; do everything in your power to ensure that this first step will be successful.

This piece of advice seems obvious, but it is, apparently, seldom taken to heart. Normally, curriculum developers prepare a complete package of materials designed for an entire year-long course or even a K-6 or K-12 sequence. This was, for example, uniformly the pattern in the post-Sputnik course improvement projects (Grobman, 1970). For a teacher (or school or district) to adopt such a set of materials means replacing that much of what they had been doing up to now. This is a huge step if the teacher (or school or district) has never used the materials before. Adoption under these circumstances means that the adopter is willing to gamble considerable money, risk the welfare of the youngsters, and endure the inevitable disruptions attendant on deviations from the familiar.

Naturally, many are unwilling to take the gamble, shoulder the risk, or endure the disruptions. In my judgment, it would be unreasonable to expect them to do so unless they had somehow attained a very great commitment to the idea and become completely confident of the viability of the program.

Curriculum developers should also produce sampler units which can be tried out cheaply for a few weeks and which are designed to maximize chances of success. Such units should give the potential adopter an accurate idea of the distinctive features of the new program and a good feel for what it would be like to adopt the full program. The sampler unit should include materials for the youngsters, for the teacher, for the principal and, perhaps, for other administrative officers as well, and for laypeople, especially the board of education. These materials should explain and illustrate what is involved in the complete career education program by reference to parts of the sampler. They should explain to the principal what sorts of changes in, for example, the organizational arrangements of his or her school would be required if various types of career education programs were adopted in full. They should answer for laypeople the questions most commonly asked about career education and provide responses to the most common fears and anxieties people have about it. Naturally, these materials should be scrupulously honest and completely frank—you don't want to produce disgruntled customers whose inappropriate expectations formed from the samplers are not met by the programs they adopt later.

2. Develop the means to evaluate the outcomes of career education programs, means that reflect the ideals of the career education movement, but that are not tied to any particular career education program.

The pioneers of curriculum reform movements are understandably chary of evaluation. Few of us welcome skeptics poking around our enthusiasms. Also, evaluation seems to be a no-win situation for the reformer: if the results are positive, they only confirm what the reformer already "knew"; if they are negative, the self-inflicted blow to the movement is greater than any opponent could have delivered.

But effective means for evaluating students' progress toward the goals of the movement is essential to the long-term survival of a curriculum element. All of us are familiar with some topic that has clung to its place in the textbooks in large part because it is easy to evaluate whether students have learned it or not. We all acknowledge the power of the test to determine what youngsters will study and teachers will teach. We usually view this as a purely negative effect. But it has a positive side, too. If a way can be found to evaluate whether youngsters have learned something important, these measures will help to sustain this element in the curriculum.

A recent example of this effect in action can be found in reactions against the new math. The new math attempted to reach new goals—increased skill at problem solving, improved comprehension of the enterprise of mathematics, better understanding of certain more modern mathematical topics such as sets. New texts were prepared which emphasized these new goals in addition to the traditional emphasis on computation skills (addition, subtraction, multiplication, division).

Recently, critics have pointed out that scores on tests of computation have dropped for youngsters taking the new math in comparison with youngsters studying from the old math. The drops were not precipitous, but they were measurable. As a result, in many places, the new math is being replaced. Here we see the power of the test.

But we can also see it in another way in the same example. Those who have gone to the trouble to compare the scores of youngsters studying the new math with those studying traditional math on problem solving tests have discovered that the new math programs show substantial superiority on these goals. (For details see Walker and Schaffarzick, 1974.) Sophisticated math educators have already begun to revise new math programs to eliminate some of the less important new topics in order to expand the attention given to computation without sacrificing more than is absolutely necessary on the problem solving. The other new goals of the new math are being sacrificed; they might have been saved had their proponents had hard evidence of their accomplishment.

Another function of evaluation devices in a curriculum is the maintenance of quality in the program. Temptations to cut corners and take the easy way are always threatening any curriculum. One with as many different forms as career education is particularly vulnerable to the easy variant that seems to work just as well as the more difficult one; in curricula as in currency, the bad drives out the good. Without some means for checking up on the quality of the results produced by various career education programs, the easy, superficial programs will almost certainly displace more valuable programs that are harder to implement.

Finally, evaluation devices give supporters of the new program the confidence to act vigorously on its behalf. Nothing takes the steam out of an enthusiast like persistent, chronic, nagging doubts about the effectiveness of the program they support.

Standardized tests are probably not the best technology for evaluating the outcomes of career education programs. They rely so heavily upon skill in reading, and the knowledge they test is, therefore, necessarily so purely verbal, that they are inadequate to measure most of the larger goals of the career education movement. Other, less traditional measurement must be explored. There are,

doubtless, many measures that may be adapted to the task. Performance tests, such as are in frequent use in laboratory and practical courses, suggest themselves. The possibility of extensive use of expert judges and judging procedures, as is done in evaluating science fair projects and school art products, should not be lightly discarded. The sort of single item measurement of practical knowledge and skill undertaken in the National Assessment of Education Process (Finley and Berdie, 1970) should be considered.

Also, it should be possible to adapt techniques from various of the social and behavioral sciences to the problem of constructing measures of career education goals. The sort of field experiment social psychologists do seems to me to be widely adaptable to determining progress toward some of the "abstract" ideals of career education. Progress toward the ideal of a sense of potency and control over the conditions of one's life, for example, might be measured by setting up some sort of harmless, but annoying, obstacle within the school and observing to see how much time elapses before the students take action, what action they take, who initiates it and carries it out, and so on. (See Bickman and Henchy, 1972, for examples of actual social psychological field experiments.)

The technology and the expertise exists to develop measures of students' progress toward the ideals of the career education movement, though it will take more than a routine test construction effort. I urge career educators to get to work on the task immediately and intensively.

3. Don't fall into behavioral objectives trap: state your objectives as clearly as possible, but do not sacrifice significance in the process.

The demand for specific, measurable objectives stated in terms of the behavior that is to be counted as meeting the objective seems to have been almost universally accepted as the minimum standard for curriculum development projects. Anything less than this is considered hopelessly vague and, therefore, useless both in development and in evaluation. This position is based upon the premise that precision of statement is the essential characteristic of a meaningful, usable objective. But there is another characteristic equally important: the significance or importance of the objective. We are no better off with a list of precisely stated insignificant objectives than with an obviously important list stated vaguely. In fact, we are worse off because it should be possible to move toward clarity from vague statements that at least deal with the matters important to us, whereas precisely stated trivia are totally useless.

The demand for precision of statement frequently conflicts with the demand for significance. Although there is no logically necessary contradiction between the two criteria, more important matters tend to cover a wide variety of circumstances and behavior in a single term, such as "a sense

of potency and control of one's environment." It is the generality of such a term that makes it important to us. It expresses in a few words something we can recognize and value in its many manifestations, although, of course, what exact behavior will count as manifesting it will vary with the individual and the situation. If, in any effort to "make" such a phrase concrete, we replace it with a series of individual behaviors in individual situations, we introduce an unbridgeable gap into our thinking. We can never be sure that the execution of the given specific behavior in the given specific situation (in itself generally a trivial act) really signifies attainment of the general aim. This is the behavioral objectives trap.

Illustrations of it abound. Teachers say that effective communication is important. Ability to spell the 1000 most common words in English is selected as one measurable indicator. Ability to correctly draw the letters of the English alphabet in cursive style is also selected, together with ability to diagram simple, compound, and complex English sentences. But the line of reasoning which would connect these measurable (we should say "easily measurable") outcomes with what was originally wanted—effective communication—is weak. Is it really plausible that youngsters who can do these specific things can communicate effectively? If these specifics contribute substantially to effective communication (and I suppose they do), then it should be possible to construct the line of reasoning that connects them with the largest goal. This chain of reasoning would constitute a sort of "theory of the outcome." And it is this theory that would invest the otherwise trivial specifics with importance as indicators of progress toward the larger outcome.

The proper strategy, then, in seeking measurable outcomes would be to search for chains of outcomes ranging from the specific to the general with the connections made by means of a "theory of the outcome." Measurements could then be made at various points along the chain.

"But," a critic might object, "the general outcomes are not measurable; that is why we were forced to look for the specific indicators in the first place." To which the proper reply is, "General objectives are measurable: only their measurement requires more inference, more judgment than the measurement of more specific outcomes."

All measurement requires some inference, some judgment. Even measurement of the length of a solid, rigid object with a meter stick requires a comparison of the marks on the stick with the beginning and ending points of the object. These are judgments, but of a very elementary sort, requiring few inferences. On the other hand, the judgment of an experienced metallurgist that metals to be made into an alloy are now in the proper condition to be mixed is a complex judgment that requires

a great many inferences that the metallurgist has become expert in making. The metallurgist's judgment is capable, in principle, of being reduced to measurement. In many cases they have been. When they are, simultaneous measurements of several low-inference quantities are required; these must then be combined to form the overall judgment that the metals are ready to be alloyed. The metallurgist, on the other hand, seems to be making a single complex judgment. And it is the metallurgist's judgment and skill that were used to devise the multiple measures and to verify that they are the right ones, so the expert's high-inference judgments are in no way inferior to the multiple low-inference measurements that were derived from them.

The proper attitude toward measurement is to recognize that all measurement involves inference and judgment, that movement from high-inference to low-inference measures should be possible in principle as a check upon both, but that low-inference measures are not to be regarded as philosophically or logically superior. Once this has been recognized, it will be readily seen that precision is not the same thing as clarity. To demand precision in the statement of objectives is to approach clarity through the reduction of high-inference judgments to low-inference ones. To show what a general outcome means in terms of specific sets of more precise and, therefore, clearer constituent outcomes does indeed add to our understanding of it, and, therefore, clarifies it. But these constituents do not replace the general outcome, do not eliminate the need for it, any more than an analysis of a sente into its grammatical parts eliminates the need for a sentence, or the analysis of a building into its components eliminates the need for the deisgn which relates them. Clarity requires not only precise specification of the constituent elements, but also of the pattern by which they are related to one another in order to form the more general outcome. Frequently, greater clarity is achieved in statements of objectives by a small improvement in our understanding of the connections among specifics making up the general outcome, than by much greater improvements in the precision with which the specifics are stated.

I hope you will use these ideas to defend the career education movement from those who would, unknowingly, force it into the behavioral objectives trap.

4. Don't put all you policy eggs in one institutional basket—the public school: use all major educational agencies, including, especially, community agencies, the mass media, business and industry, and the family.

I shall not have much to say about this piece of advice, for I know from my reading that career educators are more aware than possibly any other group of educators of the existence and importance of nonformal educational agencies. The funding of experience-based (formerly employer-based)

and the community-based experimental programs, as well as school-based ones, is a pioneering step in education policy for this country. And yet, I don't think this awareness by career educators of the need for exploring alternative institutional forms has led to much systematic thinking about how education might proceed in other institutions. As a result, I fear current efforts in this direction have not been very successful.

The problems is not how to get career education content into this or that television program or how to influence a specific community or a specific set of families in particular ways. It is how to fit career education into these institutions in a way that will be self-sustaining and self-renewing. Career education needs to move from being the subject of a local affairs program on school reform toward the formation of agencies that will formulate spot announcements to be presented as a public service telling employers, parents, youngsters, community agencies, etc. how they can move ahead on the goals of career education. It needs to move from the subject of features or news in the newspaper to a regular feature dealing with new developments in the world of work. There is a financial page in every newspaper. There is a help-wanted section in every newspaper. Might it not be appropriate to sponsor an experiment to have some newspapers set up a careers page? Is it too far-fetched to imagine the principle of free prenatal care, advice and training for prospective parents being extended to include, as the youngsters grow older, free clinics for parents dealing with career development needs of their youngsters and how parents and community agencies can address these needs?

Perhaps efforts in these directions are underway. If so, this piece of advice should be interpreted as an endorsement of what you are already doing. If, as I suspect, current efforts are not directed at finding ways to institutionalize career education within the many educative agencies available in our society, then this advice should be interpreted as urging the redirection of current efforts. [The recent issue of *Teachers College Record* (Volume 76, No. 2, December 1974), devoted to the family as educator, offers some helpful hints for career educators who want to explore this educative agency.]

5. Don't try to avoid or cover up the many conflicts and dilemmas that surround the world of work in our society: career education programs must face these difficulties squarely.

Because work is so important in our individual lives, and so closely related to the social basis of power and wealth, it is the object of never-ending struggles and is also a battleground on which other struggles are fought. We tend to suppress the existence of these struggles in schools. For example, Hess (1972) found in his content analysis of social studies texts at the third and ninth grades that the

appearance of social conflict was relatively infrequent. When conflict did appear, the frequency of mention was inversely related to the intensity of the problem. For example, less than 1% of the 17,000 paragraphs they analyzed gave any impression that race and ethnic relations in this country involved conflict or stress. This systematic evasion, no doubt, contributes to the impression youngsters have that school is "irrelevant," that it fails to deal with the "real world." If career education fails to deal with the conflicts and dilemmas that bedevel work in our age, it will certainly be seen as irrelevant, too.

Consider a few prominent examples of these conflicts.

- The tensions between democracy and capitalism: According to democratic ideals, every person has the same voice as every other person—one vote. But in a capitalistic economy those with more money to spend or invest have more say in determining the shape of the economy.

- The tension between private gain and public welfare: When these two do not come together, the American system runs into conflict and confusion. Are individuals who sacrifice private gain for the public welfare to be compensated for their "loss," as is done when private property is appropriated for public purposes, or are they expected to contribute to the general good as part of their responsibilities as citizens, as in the military draft? What is to be done with those who sacrifice the public good for their private gain? Are they criminals or simply aggressive entrepreneurs?

- The tensions between individual desires for life patterns and goals and socially imposed demands and rewards for performance and achievement: The most unmathematically inclined and unsystematic individual is required, in our society, to manage complex financial affairs—a checkbook, a monthly budget of income and bills scattered over the year, etc. No corresponding universal demand for imaginative virtuosity is made. However comprehensible this situation may be from the viewpoint of a complex industrial society, it is a serious difficulty for a young person whose personal inclinations and aptitudes do not coincide with the social demands.

These examples are just the ice crystal on the tip of the iceberg of conflicts youngsters must encounter in coming to terms with the world of work. Career education cannot and should not try to solve these. They must be worked out by and through our entire civilization. But career education

should confront these dilemmas, acknowledge their existence, allow and encourage youngsters to talk about them and to try to work out creative ways of coming to terms with them. To bypass such fundamental issues is to insure that career education will be perceived as trivial and irrelevant by youngsters experiencing the pain of personal confrontation with them.

I would like to close by repeating the caveat with which I began. These pieces of advice make sense to me in light of my knowledge of curriculum reform movements and my more superficial acquaintance with career education. I am hearteneed in my supposition that they may be sensible from other points of view as well as by the extent to which several of them are echoed by other speakers at this forum. But we could all be falling into the same error, so it behooves you to give this free advice your most searching examination before accepting or rejecting it.

REFERENCES

Beckman, L. & Henchy, T. *Beyond the Laboratory: Field Research in Social Psychology.* New York: McGraw Hill, 1972.

Finley, J. & Berdie, F. *The National Assessment Approach to Exercise Development.* An Arbor, Michigan: National Assessment of Educational Progress, 1970.

Grobman, H. *Developmental Curriculum Projects: Decision Points and Processes.* Itasca, Illinois: F. E. Peacock, 1970.

Hess, R. *An Analysis of Social Conflict in Social Studies Textbooks, Final Report.* Washington, D.C.: National Center for Educational Research and Development, 1972.

Walker, D. & Schaffarzick, J. Comparing Curricula, *Review of Educational Research*, 1974, 42, 83-111.

Walker, D., Schwab, J., & Eisner, E. *Purposes and Priorities of Career Education, Final Report.* Washington, D.C.: National Institute of Education, 1974.