



DOCUMENT RESUME

ED 149 014

CE 013 230

**AUTHOR** Kruger, Daniel H.  
**TITLE** Occupational Preparation Programs: Implications for Vocational Education R & D. Occasional Paper No. 31.  
**INSTITUTION** Ohio State Univ., Columbus. National Center for Research in Vocational Education.  
**PUB DATE** Sep 77  
**NOTE** 18p.  
**AVAILABLE FROM** National Center for Research in Vocational Education Publications, Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210 (\$1.90)

**EDRS PRICE** MF-\$0.83 HC-\$1.67 Plus Postage.  
**DESCRIPTORS** Advisory Committees; Community Involvement; Educational Development; \*Educational Research; Evaluation Criteria; Job Training; \*Program Evaluation; Research Methodology; \*Research Needs; \*Social Change; Social Values; \*Vocational Education

**ABSTRACT**

Vocational education as a social intervention process operates on two levels: (1) the micro level at which services are designed to improve the employability of the individual and (2) the macro level where the objective is to heighten the awareness and the sensitivity of the community as to the importance of human resource development for the world of work. The mandated use of advisory committees at the local, state, and national levels is a built-in means of achieving the social participation necessary to an effective social intervention program. Also necessary is social experimentation, the process of testing what works and what doesn't. Vocational educators are conducting such experimentation in many areas, giving rise to need for a research dimension. Specific areas of research need include the interface between the five major delivery systems for employment and training services: vocational education, Vocational Rehabilitation Service, Social Services (WIN), State Employment Service, and Comprehensive Employment and Training Act (CETA) programs. Methodology must be developed which will provide measurements or indicators of both the social and economic effectiveness of all such programs at both the micro and macro levels. Too much concern for economic efficiency (costs/benefits and cost effectiveness) ignores the critical need to develop criteria to show program contributions to social efficiency, i.e., to values relative to the human condition. (The author's answers to questions from the audience of research and development personnel is appended.) (JT)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED149014

Occasional Paper No. 31

**OCCUPATIONAL PREPARATION PROGRAMS:  
IMPLICATIONS FOR VOCATIONAL EDUCATION R & D**

by

**Daniel H. Kruger**  
Professor of Industrial Relations  
School of Labor and Industrial Relations  
Michigan State University

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Joel H. Magis*

TO THE EDUCATIONAL RESOURCES-  
INFORMATION CENTER (ERIC) AND  
THE ERIC SYSTEM CONTRACTORS"

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGI-  
NATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY.

The Center for Vocational Education  
The Ohio State University  
1960 Kenny Road  
Columbus, Ohio 43210

September 1977

CE 013 230

## PREFACE

The Center for Vocational Education welcomed the lecture by Dr. Daniel Kruger, Professor of Industrial Relations, School of Labor and Industrial Relations, Michigan State University, on the topic of "Occupational Preparation Programs: Implications for Vocational Education R & D." Dr. Kruger's extensive and comprehensive background in labor economics and labor relations eminently qualifies him to critically examine the progress and potential of this and other occupational preparation delivery systems.

A native of Norfolk, Virginia, Dr. Kruger received a B.A. in 1949 from the University of Richmond, an M.A. in 1951 and Ph.D. in 1954 from the University of Wisconsin. Dr. Kruger's professional experience ranges from that of an assistant professor of management and director of commerce extension services at the University of Alabama, to professor of industrial relations and associate director in charge of the Manpower Program Service at Michigan State University.

Additionally, Dr. Kruger serves as the executive secretary of the North Central Regional Manpower Advisory Committee, Chairman of the National Urban League Manpower Committee, Member of the Board of Directors for the National Committee on Youth and numerous other areas of professional activity involvement. He served as the executive secretary of Task Force to Study the U.S. Employment Service, U.S. Department of Labor, in 1965. His international experience has included a Fulbright grant to study human resource development in Israel in 1964-65, and a study of the manpower situation in Honduras under the auspices of the Organization of American States in 1968. In 1968, Dr. Kruger received the Citation Award from the International Association of Personnel in Employment Security.

Dr. Kruger is the author of a number of publications in the areas of labor economics and labor relations.

On behalf of The Ohio State University and The Center for Vocational Education, we take pleasure in sharing with you Dr. Kruger's presentation, "Occupational Preparation Programs: Implications for Vocational Education R & D."

Robert E. Taylor  
Executive Director  
The Center for Vocational Education

## OCCUPATIONAL PREPARATION PROGRAMS: IMPLICATIONS FOR VOCATIONAL EDUCATION R & D

The rationale and justification for vocational education lies in the evolution of what I have called the job economy. Ninety percent of the nation's labor force are employees or job holders. They work for either a public or private employer. Today the job has become the most important economic activity in the lives of most Americans. This was not always true. In an earlier period the labor force comprised farmers and farm hands. Later many of the labor force were self-employed as artisans and shopkeepers. As the country became more industrialized and urbanized, self-employment declined and more and more people became employees in business, industry, and government. The job became of paramount importance in providing the income to underwrite a particular style of living. The job not only provides income, but access to social security benefits, unemployment compensation, workmen's compensation, paid leisure time, educational and training opportunities, and other benefits such as life insurance, hospitalization, and surgical insurance, to mention a few. The job indeed became a valuable piece of property for more and more Americans and provided an impressive array of economic benefits. But, in addition to the economic benefits accruing to employees, there were important sociological and psychological benefits associated with employment such as identification, membership in a group, mental well-being, to mention a few.

As a result of the evolution of the job economy and the impressive growth in the number of wage and salary employees, concerns such as preparing for a job, finding a job, keeping a job, and moving to a better job, changing careers, all involve education and training. Most of the education and training for participation in the world of work is provided through public educational institutions.

Vocational education is a prime example of social intervention. The term social intervention describes a process through and by which societal organizations and agencies intercede or intervene to provide specialized services to individuals. In vocational education, the social intervention process involves an array of services which are designed to improve the individual's employability so that he/she can compete more realistically in the labor market. These services can be characterized as employment and training services, and include counseling, guidance, prevocational training, occupational oriented courses, and placement. They are all related to the individual's participation in the world of work or the labor market.

The federal and state governments both are involved in providing funds and in promulgating guidelines for vocational education. The state educational agencies receive the federal funds on the basis of the statutory required state plan and allocate them along with the funds appropriated by the state legislature for vocational education to local school districts and to postsecondary educational institutions which, for the most part, are community colleges. Local school districts also add financial resources for the development and implementation of vocational educational programs. Funds and staff resources are organized via the vocational education curricula to deliver the array of employment and training services.

It is the utilization of the funds and staff resources through the curriculum and guidelines which constitutes the social interception or social intervention. It is the delivery of services by the staff utilizing available physical resources and the curriculum which is the heart of the social intervention process in vocational education.

The social intervention process operates on two levels: the micro level and the macro level. At the micro level vocational education services are delivered to individuals in a class setting. These services are designed to improve the employability of the individual, and this is one of the central objectives of vocational education. At the macro level the focus is on the individual.

Vocational education also operates at the macro level by heightening the awareness and the sensitivity of the community as to the importance of human resource development for the world of work. This is the second central objective of vocational education.

Heightening awareness and sensitivity of human resource development for the world of work is what career education is all about. Similarly, the vocational educational activities present unique opportunities for the educational institution to communicate with parents and employers as well as to the students as a group on the importance of careers and preparing for the role as productive citizens in the world of work. Vocational education, broadly conceived, must deal with labor market trends and the skill mixes of various occupations. Vocational educators must communicate and interact with employers to get the necessary information to revise existing curricula or to develop new curricula. The vocational education programs can be the vehicle to help educate the community on the three major problems of the labor force confronting the nation: (1) the development of human resources for the world of work; (2) the maintenance of skills of individuals already in the world of work; and (3) the effective utilization of human resources in the world of work. The nation's educational institutions must be concerned with human resources both in their roles as citizens and as workers. The focus of this paper, however, is on human resources as they relate to the world of work.

Educating the community is social intervention at the macro level. Vocational educators, in my view, have given insufficient attention to the macro level of social intervention. This involves the collection and analysis of information for curricula modifications and construction. It further involves the collection, analyses, and dissemination of information to be used in career decisions. The vocational program has a built-in mechanism, mandated by statute, for operating at the macro level, namely, the use of advisory committees.

The mandating of advisory committees in vocational education is an integral part of the social intervention process. An effective social intervention process must involve social participation. The framers of the national legislation providing for vocational education recognized the importance of social participation of the community in the development and implementation of vocational education by mandating occupational advisory committees. "The 1974 Administrative Guide for Vocational-Technical Education of Michigan Department of Education" has a section entitled "Guidelines for Occupational Advisory Committees."<sup>1</sup>

#### Purposes and Functions of Advisory Committees

The committee's purpose is to assist in the determination of the vocational education needs for the district, including the needs of disadvantaged and handicapped youth and adults. Functions of advisory committees may include, but not be limited, to:

1. Occupational surveys. Advisory committees should advise on the types of offerings required to satisfy the preparatory as well as the retraining

---

<sup>1</sup>Administrative Guide for Vocational-Technical Education. Lansing, Mich.: Michigan Department of Education, 1974, pp. M1-2.

and upgrading needs of individuals of the community. An occupational survey can supplement this knowledge. Advisory members can help identify the type of data to be gathered. They can also be instrumental in gaining public support which would result in a favorable community reaction.

2. **Course content.** Another concern of the committee should be the establishment of practices which will keep instruction practical and functional. Committees should take an active part in helping to develop goal statements and assist in determining performance objectives, since members have the essential, specialized knowledge of the work.
3. **Placement of students.** Committee members can assist in the placement of students by employing graduates and recommending the employment of graduates to other firms in the industry.
4. **Public information.** Public understanding of the educational programs at the school hinges upon the flow of positive information emanating from the school. The advisory committee can bring about understanding of purposes and functions of the educational programs. Advisory committee members often support the school at public hearings, board elections, and in securing favorable legislation. Committee members are invaluable as they support educators in the important area of legislation and appropriation. When citizens know about the achievements and needs of the educational programs, they can intelligently consider financial support of the school.
5. **Equipment selection.** Committee members can offer professional advice concerning the selection of instructional equipment. Their experience in their area of specialization is extremely valuable when equipment specifications are being prepared.
6. **Evaluation of program.** There should be a continuous evaluation of the instructional program. The committee's suggestions for improvement will represent the opinion of the community and will enable the district to maintain a curriculum at a level of instruction practical for the needs of the industry. Instructional materials, equipment, and course outlines should be reviewed periodically by the committee to keep them up-to-date and functional. A report of such evaluation is to be provided annually to the local educational agency.
7. **Community resources.** Committee members can be an excellent source in utilizing and obtaining community resources. They may serve as consultants for classroom teachers and resource persons for classroom instruction.

The American Vocational Association in its 1969 Report on Advisory Committees noted:

Representatives of the fields for which instruction is to be provided must be consulted regarding the skills, instructional materials, equipment, standards for

production work or service provided, and instructional content. All phases of training should be reviewed periodically in order to keep them occupationally oriented and up-to-date.<sup>2</sup>

The Center for Vocational Education has also called attention to the role of the advisory committee.<sup>3</sup>

Advisory committees, if used effectively, represent social participation in action. These committees provide a focal point for theory, policy, and the real world to interact. What does this mean? Theory is defined as the analysis of a set of facts and the relation of these facts to one another. Policy is defined as a guide to action which is another way of stating the importance of wisdom in the management of affairs. The real world can be defined in a number of ways. One definition is what happens to the theory and policy as it related to their practice in actuality. Another definition of the real world is the relevancy between theory and policy to everyday actions and activities. The real world, we are told, is where the action is. The application, theory and policy, however, must be tempered with pragmatism. But the question must be raised—are theory, policy, and the real world compatible? Can there be a good theory which cannot be applied? Can one be practical unless this is a theory or basis for "being practical"? In my view, there is no conflict between good theory, good policy, and the real world. All are essential for the student: Theory involves analysis; policy involves wisdom; and the real world involves knowledge. For survival the schools need to teach students how to develop and use their analytical skills. Secondly, the schools must assist the individuals in translating their analytical conclusions into actions; and, thirdly, the schools must transmit accurate knowledge to the student about "the environment," the real world where the action will take place. The student has to integrate theory, policy, and the real world. Here is where the faculty and the advisory committee join forces. Each possesses something which, if shared, can be beneficial to the student. The faculty members can help the student understand theory and policy, whereas the advisory committees can bring the application of theory and policy to the real world. This is the rationale for establishing advisory committees.

The advisory committee members bring a specialized expertise as do the faculty. Within the workings of the committee, the interrelationships between theory, policy, and the real world are integrated, and the curriculum is established. No curriculum worth its salt is ever finalized. Human beings are constantly extending and expanding the frontiers of knowledge. New technology is introduced with every increasing rapidity. Economic and social forces change "the real world," and legal restrictions set additional parameters.

The curriculum of a given program must evolve within the system of change. In the American context, the system of change is composed of our components which are interrelated and interdependent. The four components are: new knowledge and technology, economic changes, social changes, and legislative changes. All of these components do not affect curriculum at the same time or in the same way. It is the task of the advisory committee to assess continuously the impact of

---

<sup>2</sup>*The Advisory Committee and Vocational Education.* Washington, D.C.: American Vocational Association, 1969, pp. 19-20.

<sup>3</sup>The Center for Vocational Education. *Professional Vocational Teacher Education Module: Maintaining an Occupational Advisory Committee.* Columbus, Ohio: The Ohio State University, 1975. See also *Professional Vocational Teacher Education Module: Organize or Reorganize an Occupational Advisory Committee.* Columbus, Ohio: The Ohio State University, 1975.



these components of the curriculum and to decide how the curriculum can best be modified to take into account these changes. An effective advisory committee should be at the cutting edge of curriculum reform and innovation.

In addition to the occupational education advisory committees, there are two other advisory committees which underscore the importance of social participation in an effective social intervention process. The National Advisory Council on Vocational Education and the State Advisory Council on Vocational Education were both mandated by the Vocational Education Act of 1968. Each has an important role to play in the development of vocational education programs which meet the needs of students. The term "students" includes all individuals enrolled in regular or special vocational educational programs including the training programs financed by the Comprehensive Employment and Training Act (CETA).

Both types of advisory committees are assigned important responsibilities. Both are composed of individuals who bring unique qualities to policy formulation. I have had the opportunity to serve as a member of the Michigan Advisory Council on Vocational Education and therefore have first-hand knowledge of the importance of social participation. Citizen input can indeed make a difference if the administrators, at all levels, recognize its value. Of course, social participation is time-consuming and undoubtedly inefficient in an economic sense. However, social participation is part and parcel of a democratic society, and the democratic society was not designed for efficiency but for citizens' involvement in the affairs of government.

In addition to social participation, an effective social intervention process must involve social experimentation. Experimentation is the process of testing what works and what does not work. It involves demonstration projects; it involves research; it involves evaluation. Vocational educational programs are not static. The dynamics of the world of work demand that changes be made in curriculum, in instructional materials, in equipment used in the shops and work rooms, and in pedagogy. Every occupational area in vocational education is subject to changing technology.

The populations of vocational education programs call attention to the need for social experimentation. Vocational programs are designed to meet the differing vocational needs of the following:

1. Students enrolled in secondary and postsecondary schools and who are preparing to enter the world of work.
2. Students who want to advance in a given occupational field.
3. Persons who are disadvantaged in that they come from low income families or because of severe rural isolation.
4. Persons who have special educational handicaps.
5. Native Americans and students whose dominant language is not English.
6. Unemployed workers who are eligible for training under the Comprehensive Employment and Training Act.

In addition to these populations, vocational programs have the obligation to overcome sex stereotyping and sex bias. The Vocational Education Act Amendments of 1968 and 1976 have indeed stimulated social experimentation. There are many examples of experimentations which have affected the kind of programs offered and the delivery of vocational educational services.

In Michigan, for example, area vocational education centers were begun in 1965 to provide vocational educational programs for two or more schools. These area centers provide vocational education to students from school districts which may not have sufficient enrollment or student interest to offer comprehensive vocational programs. In addition, these centers ease the financial burden on many local districts who could not economically meet the demands of vocational education programming. These area centers have indeed improved the quality of vocational educational programs. They are an example of social experimentation.

Many educational institutions are involved in developing school based placement services. The National Advisory Council on Vocational Education in its Third Report noted that employment is an integral part of education, and is essential to the learning experience of many youths.<sup>4</sup> In addition, the council recommended that every secondary school should be an employment agency.<sup>5</sup> Moreover, part-time employment should be a part of the curriculum.<sup>6</sup>

Placement is an effort by the schools to assist the student to learn about the world of work while in school through part-time, full-time internships, work study, cooperative education, or summer employment. It includes placement after graduation either into a job or additional schooling. In other words, placement is not solely job oriented. It is the range of placement services offered by a school for a student pursuing career plans.

At least two states—Florida and Virginia—have a statute mandating school based placement services. In other states the state departments of education are encouraging schools to develop placement services by providing grants to establish such services.

The placement service provides a variety of opportunities for social experimentation. For example, should the placement service be operated out of each high school or by the school district or by several school districts if these districts have a common labor market? The organizational structure provides for social experimentation to determine what works best in a given situation. Searching out the most effective ways to involve employers and school staff is another area for social experimentation. The relationships between the local office of the state employment service and the school based placement services is still another area of experimentation and exploration.

The school based placement services take on new meaning in light of the very high levels of youth unemployment. In 1977 about one-fourth of the nation's unemployment is composed of teenagers; yet they constitute about 10 percent of the nation's labor force.<sup>7</sup> The schools can help students find jobs and in so doing they contribute to lowering the youth unemployment rate.

---

<sup>4</sup> National Advisory Council on Vocational Education, Third Report. Vocational Education Amendments of 1968, Public Law 90-576. Washington, D.C.: National Advisory Council on Vocational Education, 1970, p. 3.

<sup>5</sup> Ibid.; p. 4.

<sup>6</sup> Ibid., p. 4.

<sup>7</sup> *Employment and Training: Report of the President, 1977*. Washington, D.C.: GPO, 1977, pp. 145-6.

Cluster programming is another area of social experimentation.<sup>8</sup> This is a form of vocational education which prepares the individual to enter into gainful employment in a number of occupations which have sufficient commonalities in human requirements and kinds of work. Individuals are prepared for employment in several-related occupations which make up the cluster.

Vocational educators are also experimenting with competency-based education,<sup>9</sup> individualized instruction,<sup>10</sup> and performance objectives.<sup>11</sup>

Vocational education has spawned a number of interesting projects to bridge the gap or to facilitate the transition from school to work. In many of these projects, the initiative came from employers who provided training programs for teachers and guidance counselors from high schools in the area. The objective is to educate teachers and counselors about the realities of the world of work.<sup>12</sup>

Another area for experimentation which is currently unfolding is the relationship between vocational education and the Comprehensive Employment and Training Act (CETA). From 1962, when the Manpower Development and Training Act (MDTA) was enacted, to 1973 when CETA legislation was passed, the vocational education program played a major role. The MDTA and the manpower programs established by the Economic Opportunity Act represented a major development in the nation's vocational education program. With the passage of the Area Redevelopment Act in 1961 and MDTA in 1962, the federal government accepted major responsibility for providing training programs for unemployed workers. Prior to this legislation the vocational education programs focused on youth in a school setting.

The vocational education program in many labor markets throughout the country met the challenge of the MDTA through developing both institutional and less-than-class-size training programs. The vocational education programs were assigned a major role in the legislation. Under CETA, vocational education is not assigned the same role. CETA has established a new set of ground rules for relationships between local prime sponsors and vocational education institutions. Vocational educators wishing to participate in CETA programs must submit proposals and compete with other training institutions in the area. This is a "new" ball game for vocational educators, and they must learn how to work effectively with CETA local prime sponsors.

---

<sup>8</sup>Maley, Donald. *Cluster Concept in Vocational Education*. Chicago: American Technical Society, 1975. Also see Oregon Board of Education. *Career Education The Oregon Way*. Salem, Oregon: Oregon Board of Education.

<sup>9</sup>American Association of Colleges of Teacher Education. *Competency Based Teacher Education Series: A Series of Monographs*. Washington, D.C.: AACTE, 1971-76.

<sup>10</sup>Pucel, David J.; and Knaak, William C. *Individualizing Vocational and Technical Instruction*. Columbus, Ohio: Charles E. Merrill Publishing Co., 1975.

<sup>11</sup>Rickey, Rita C. "Module No. 2—Performance Objectives," *CBE In-Service Package*. Lansing, Michigan: Michigan Department of Education, Vocational Technical Education Services, 1976.

<sup>12</sup>"How GE Unit Gets High School Teachers to Help Promote Factory Jobs to Students," *Wall Street Journal*. June 16, 1977, p. 38.

CETA has become a major delivery system for employment and training services; There are five major deliverers of manpower services. These include: (1) Vocational Education, (2) Vocational Rehabilitation, (3) Social Services (WIN), (4) State Employment Service, and (5) CETA. To use Michigan as an example, the monies available to each of these systems dramatically underscores the role CETA plays.

1. Vocational Education. The state receives \$21 million from the federal government, and the state appropriates an additional \$22 million. Local school districts provide the bulk of support for vocational education in Michigan, currently about \$82 million. Thus, the total amount of dollars for vocational education in 1977 was \$125 million.
2. Vocational Rehabilitation Service. The budget of this agency in 1977 was \$32.9 million.
3. Social Services (WIN). The Department of Social Services had a budget for employment and training activities of \$15 million.
4. State Employment Service. The federal grant to Michigan to operate the State Employment Service was \$21 million. However, in addition, the State Employment Service received \$2.1 million for Food Stamp Administration, \$16.3 million for WIN, and \$10.4 million from CETA for labor market information activities and other activities related to CETA.
5. CETA. The state and local prime sponsors received about \$350 million.

Of course there were other funds available for training and employment. For example, community colleges in 1977 received \$109 million, some of which was for vocational programs.

An important area of social experimentation is how these five major systems can interface more effectively. This will require a set of individual case studies because of the unique characteristics of local prime sponsors. In other words, research studies are needed.

Social experimentation in vocational education has given rise to the need for a research dimension or a research component in the social intervention process. In a dynamic job economy there is not only need for experimentation, but also for research.

As indicated, CETA relationships with vocational education have raised a host of areas for possible research. Below is a partial listing:

1. Attitudes of vocational educators toward CETA local prime sponsors.
2. Local prime sponsors' attitudes toward vocational education.<sup>13</sup>
3. School based placement services and CETA funding.
4. Types of training programs being funded by CETA and the institutions doing the training.

---

<sup>13</sup>National League of Cities. *Impact of CETA on Institutional Vocational Education*. Washington, D.C., 1974. See also an update on *Impact of CETA on Institutional Education*, 1976.

5. More appropriate ways of estimating costs of vocational education so as to enable vocational educators to compete for CETA training programs.
6. Vocational educators' involvement in local Manpower Services Council of local prime sponsors.
7. Extent to which State Manpower Services Council reviews and comments on state vocational plans.
8. Impact of CETA on vocational education in terms of additional dollars being obtained for vocational education.
9. How is the 5 percent vocational education supplement being administered and used?
10. What do vocational educators need to know in order to contribute more extensively to manpower programs in general and CETA specifically?
11. Placement experiences of programs conducted by vocational educators under CETA as compared with other training programs funded by CETA.
12. Involvement of vocational educators in special programs financed by CETA, Title III, Indians, Migrants, Unions, etc.

While CETA has provided many areas of possible research, there is still need to focus on research in what may be called the basic program. For example, a great deal of time, effort, and money is spent preparing the state vocational plan. I have the impression that vocational education departments and units view the plan as a chore or an exercise just to receive the federal dollars. What are the uses to which the state plan is put? How do vocational educators in the field view the plan? For what other uses can the plan be utilized? Public hearings are required by law in the development of the plan. I am not aware of any research as to how valuable these public hearings are and, more specifically, how this aspect of social participation can be made more productive. There is a great deal of literature on the importance of advisory committees but little on the views of advisory members toward the value of these committees.

The follow-up studies of vocational students need to be reviewed as to methodology and usefulness. In short, every facet of vocational education needs to be critically researched to confirm what works and to lay the foundation for additional experimentation.

Social intervention programs are designed primarily to improve social efficiency. Social efficiency means that outcomes of a given program are evaluated against social goals and social objectives. Social efficiency means making the society function more effectively. Many of the social programs of the 1960s were analyzed in terms of economic efficiency. Cost benefit analysis and cost effectiveness studies were the "in thing." Pre-earnings/post-earnings comparisons were frequently used to state unequivocally that a manpower program was successful or not successful. Linear regressions or multi-variate regressions were hailed as leading to the promised land of program evaluations. Little attention was given to the programs' contributions to social efficiency, i.e., what do they do for the individuals and the community?

Let me use the poverty programs as a case in point. Various aspects of the poverty programs have been researched in depth, and these studies focused primarily on economic efficiency criteria. The real contribution of the poverty programs were overlooked. These programs provided countless

people with good jobs in staff positions. The first and second generation of "poverty workers" demonstrated their capabilities and were tapped for other jobs in government, universities, and industry and business. Pre-earnings and post-earnings studies did not examine what happened to the staffs of these programs; they only examined the earnings of the participants.

Providing occupational skills to students who are about to enter the world of work or skills to individuals who want to learn more about their trade or job so that they can move up the ladder, contributes to social efficiency. The follow-up studies of vocational students do not tell the whole story. Students may learn something about themselves; their self-image may be enhanced; they may realize that they can be achievers. It may not be possible to ascribe an economic value to every societal activity. These social intervention programs have social values as do any society. Vocational education, for example, reflects the concern of society for the development of human resources as they relate to the world of work. There are many shortcomings in the operation of these programs but the social objective, it could be argued, is desirable in terms of public policy. No modern government can be insensitive to the development of its human resources.

Of course there is need to evaluate these social intervention programs, but heavy reliance on systems analyses and cost benefit analyses ignores a basic tenet of a democratic society. A social intervention program implemented through legislation reflects the will of the people as expressed through their elected representatives. For example, if society wants a vocational education program, and is prepared to support it, and then social scientists through their statistical analyses show that the program is costing more than the benefits, I would still opt for the program. A democratic society was not built for economic efficiency. Most of the evaluative studies, when stripped of all the rhetoric and jargon, are based on economic assumptions and the manipulation of data. A democratic society must reflect values relative to the human condition.

It is interesting to note that since the widespread acceptance of systems analyses and cost benefit studies and cost effectiveness studies, there has been a dearth of new programs. Moreover, there are few new ideas on how to deal with old problems. Even Ph.D. theses in the social sciences have fallen victim to the sterility of statistical analyses. Significance at the .05 level is a useful statistical concept but has little relevancy to the kinds of social problems the nation is seeking to resolve.

Social efficiency means that social intervention programs contribute something constructive both to and for the individual and to and for the society. As noted previously, social intervention programs operate on both the micro and macro levels; similarly, there are two levels of social efficiency—the micro and the macro. The micro level of social efficiency focuses on the individual. This is as it should be. The democratic ideal centers on the individual. Society's mission is to serve humanity. The vocational programs were established and are being expanded to serve the students. These educational experiences do have an impact on the individual. It is too simplistic just to look at placements and on the basis of these data to make the quantum jump to say whether a program is successful or not successful. More meaningful longitudinal studies are needed to measure the impact of a vocational program on the students over time.

The second level of social efficiency is the macro—the impact on the society or on the community. What does society expect of its vocational program? I would hope that society's expectations are much broader than helping the individual student to develop marketable skills. I am not aware of any studies that examine the community's perception of vocational education. There are studies of students' attitudes toward vocational education, and there are studies of employers' attitudes toward vocational education. There is need to study legislators' attitudes toward vocational education as well as parents' attitudes.

There is need to demonstrate that vocational education has salvaged countless students by providing them with motivation to stay in school and get their diploma. This has contributed to social efficiency at the macro level.

Vocational educational programs have probably made the community more aware of the need for entrants into the labor market to have a saleable skill, and this has contributed to macro social efficiency.

In evaluating social intervention programs, attention should be given to both social and economic efficiency. It is not an issue of either social or economic efficiency. It is an integration of both economic and social efficiency.

In all social intervention programs, considerable emphasis is being given to accountability. For example, the Education Amendments of 1976 (Public Law 94-482) dealing with vocational education, stress accountability. Increasingly, legislators are holding program administrators accountable for the use of public funds and the outcomes resulting from the expenditures of public funds. Public funds should be spent judiciously; they should not be wasted or absconded. The accountability emphasis however seems to focus primarily on economic efficiency. The concern appears to be on costs/benefits and cost effectiveness. These concepts are important, but there is a critical need to develop criteria to show the contribution social intervention programs can make to social efficiency. Stressing economic efficiency concepts ignores the concept that programs have social values.

My model is the local fire department. The community does not measure the effectiveness of the local fire department by cost per call or cost per fire. The fire department is not evaluated by the number of calls it makes or the number of fires it puts out. There is general agreement that a fire department is a community asset and that it contributes to the social efficiency of the community. There is a need to develop a similar approach with social intervention programs.

It is therefore imperative that a methodology be developed which will provide measurements or indicators of the effectiveness of social intervention programs. The acid test of a social intervention is, do the programs make a significant difference to both the individuals being served and the larger community? In other words, do they contribute to social efficiency?

In summary, vocational education is a social intervention program involving both social participation and social experimentation. It is designed to improve social efficiency as well as economic efficiency at both the micro and macro levels.

## QUESTIONS AND ANSWERS

### 1. How are prime sponsors under CETA selected?

Prime sponsors can be a city, county or a consortium of cities or counties with a population of at least 100,000. A prime sponsor usually covers a certain labor market. For example, in my area the prime sponsor is a consortium which includes Lansing, and East Lansing, as well as the three counties—Ingham, Eaton, and Clinton. The consortium covers the SMSA area which is really the labor market. Currently there are 455 local prime sponsors.

There are several examples in sparsely populated states where the state is the prime sponsor.

If a public jurisdiction does not meet the population criteria or is not a part of a consortium, it will be included in what is called the Balance of State. In Michigan, for example, the major cities or counties are prime sponsors and the state itself is the prime sponsor for the balance of the state which includes the Upper Peninsula and the upper counties of the Lower Peninsula.

### 2. What can be done to bring vocational education and CETA together to provide services?

That is a difficult question. There are many things which can be done to foster more togetherness. Vocational educators have to be more flexible to the needs of prime sponsors. Many of the prime sponsors are interested in open entry courses rather than courses of a fixed duration. They want the participants to be able to enroll and then to exist when the participant feels he or she is ready to search for work.

Vocational educators must have better data on their costs. Vocational education must compete with other training institutions usually through an RFP (Request for Proposal). If the costs of a given vocational program are too far out of line with other bidders, vocational education will lose out to other institutions. It is my impression that there is a need for easy-to-follow materials on how to cast out a vocational education course.

Thirdly, vocational education must become more knowledgeable about how major manpower delivery systems operate. Basically there are five major delivery systems—vocational education, CETA, vocational rehabilitation, employment and training services of the Welfare Department including WIN (Work Incentive), and the state employment service. In addition, vocational education must know how the labor market operates. In short vocational educators must become manpower experts.

Fourthly, vocational educators must develop their political clout. For example, employers should be national allies of vocational educators, and they should be mobilized to support vocational programs being funded by CETA prime sponsors.

There is a need to change the image of vocational education to a more positive one. There are those in the community who have negative attitudes about and toward vocational education. Vocational educators must try to change these negative attitudes.



Those are some of my thoughts on how vocational education and CETA can work together more effectively.

3. Elaborate on Title III in regard to special populations and problems of prime sponsors.

Title III of CETA deals with special populations and special groups. Through Title III the Department of Labor Employment and Training Administration are able to finance special programs for targeted groups, e.g., Indians, older workers, and summer youth programs. In addition, Title III funds are used to finance national contracts and to provide funds to the Urban League, OIC, and SER, three large and national community based organizations.

We need to remember that CETA is a political piece of legislation and under Title III the Employment and Training Administration can finance programs to a large number of groups and, in the process, obtain their support.

Title III funds do not go to the local prime sponsors except for funds for summer youth programs. Local prime sponsors have no control over Title III funds; yet programs financed by their funds are operating in their respective areas. The Title III programs are generally outside the planning process of local prime sponsors.

4. Describe the concepts and attitudes of social efficiency versus economic efficiency. Inputs and outputs?

Economic efficiency focuses on cost-benefit analyses and cost effectiveness. The central thrust of economic efficiency is the relationship of dollars spent and the outcomes of the programs in terms of economic improvement in participants' earnings. Social efficiency is concerned with assisting the individual to become a more effective citizen and making the society function just a little better. Vocational programs have a social dimension as well as an economic dimension, but most of the attention is focused on the economic aspect, i.e., costs and economic benefits. Social efficiency would look at self-development, self-image, and what happens to students over a longer time frame.

Social efficiency examines institutions, how they operate, and the role they play in society. Heightening the awareness and sensitivity of the community to the importance of effective human resource development and utilization is an integral aspect of social efficiency. Encouraging employer involvement in human resource development is related to social efficiency.

Social efficiency is concerned with minimizing the dropout rates. It is concerned with how the society operates. It relates to educating the community. It seeks to make the process involved in the delivery of services more sensitized and more effective.

5. How do you see articulating these concepts to the legislature, the community, in the same way that is done with economic efficiency.

There is need to spell out more cogently the objectives of the social programs. In other words, each social program should have a set of objectives or goals. For example, what are the goals and objectives of vocational education? The usual answer is to develop marketable skills, but I would raise additional questions such as why do we want to assist the student in developing

such skills, who will be involved in the process, what benefits will accrue to the legislator, the schools, the students, the employer, the students' parents?

I am not aware of anyone doing a cost benefit analysis of the university. There is a long history that having universities are socially desirable. I would like to educate legislators and taxpayers that other programs which contribute to social efficiency are likewise desirable in their own right.

6. What do you really mean by social efficiency? Can you give an example?

Social efficiency relates to making individuals and the community function more effectively within the societal framework. Students learning to read, write, and do arithmetic is an example of social efficiency both in terms of the individual (micro) and the community (macro). A vocational educational program which helps the student develop marketable skills and which enhances his or her self-image is another example of social efficiency. The individual benefits as does the community.

The emphasis on economic efficiency misses the point about what a democratic society is all about. The purpose of this society is to name its citizens. Of course economic efficiency must be considered but if everything is to be evaluated in terms of economic efficiency, social values will disappear.

7. What are the implications of zero-based budgeting?

I cannot answer that question effectively.

8. Regarding the requirements of impact data, are the same demands being placed on CETA?

Yes and no. Local prime sponsors in their plans which serve as the basis of funding by the Department of Labor are required to identify what is called the universe of need. In addition they must identify the number of enrollees or participants they will serve during the year. Periodic reports are prepared showing how many individuals are being served and the progress being made as to how the goals established in the plan are being met.

Data on participants give an indication of the impact of the programs. Congress, the Department of Labor, and prime sponsors need these kind of data to make judgments as to what the manpower effort is accomplishing.

The data on participants are mostly demographic data and tell very little about the unique characteristics of these individuals in terms of the manpower services which they require to improve their employability. There are three broad categories of participants in CETA programs. One group just wants to know where the jobs are, and if no jobs are available they could qualify for a public service job. A second category is those participants who need some kind of manpower service such as counseling, guidance, and training. The third category is those who need the whole array of manpower services if their employability is to be enhanced. We have no way of identifying these three categories and what happens to each group.

Given the need to demonstrate the effectiveness of these programs, there is a tendency to cream the better applicants. Creaming does make the local prime sponsor look good but does little for the participants who are very disadvantaged.

9. CETA is an excellent vehicle for collaboration among industry, business, labor, government, and educational institutions. Do you agree with this, and what has happened?

I certainly do agree with your observation. It does provide the vehicle for all kinds of collaboration, but the key to whether such collaboration does, in fact, take place relates to the skill of the local CETA director and his or her staff. The local director can indeed take the initiative if he or she has the necessary skills and the creativity to pull it off. In a population of 455 directors, one finds a wide range, from very competent to very incompetent. There are success stories and there are failures. The key ingredient is the quality of administration, and there is a need for improvement in the skills of CETA staffs if the kind of collaboration you mentioned actually takes place.

10. How can you divide social efficiency and fiscal funding?

Fiscal funding is essential to social efficiency. Without the funds, there would be no programs designed to improve social efficiency. What I propose is that social efficiency objectives be included when budgets for programs are being submitted to the legislature. We need to educate legislators that programs have social objectives as well as costs. Obviously there has to be a balancing of economic costs with social costs, but I want to emphasize that all aspects of a given program cannot be evaluated solely in terms of economic criteria. We are concerned with making the individuals served by these programs operate more effectively as members of the society and making the society function just a little better.