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ABSTRACT

The 1975 national seminar was designed to provide in-service education for state vocational directors with a focus on redefining roles and responsibilities in key areas of vocational education. Three position papers for each of the following topics were presented: A Philosophy for Vocational Education, The Governance of Vocational Education at the State and Local Levels, The Role of Vocational Education in Large Cities, The Role of Research in Vocational Education, Standard Characteristics of Vocational Education Programs, and Management Information Systems for Vocational Education. Task force groups of seminar participants produced synthesized versions of the papers for each topic. In addition, progress reports with the following titles are included: Curriculum Development--The Vocational-Technical Education Consortium of the State; Career Education: Its Status Today; The Education Commission of the States Looks at Vocational Study; and Chief State Officers Look at Vocational Education. The seminar agenda and lists of program presenters and participants are appended. (Author/NJ)

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Leadership Training Series No. 45

1975 National Leadership Development Seminar for State Directors of Vocational Education

Issues and Answers
in Vocational Education

Compiled and Edited
by
Daniel E. Koble, Jr.
Mark Newton
Patricia Lewis

VT-103-116

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The Center for Vocational Education
The Ohio State University
1960 Kenny Road
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THE CENTER MISSION STATEMENT

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning and preparation. The Center fulfills its mission by:

- . Generating knowledge through research
- . Developing educational programs and products
- . Evaluating individual program needs and outcomes
- . Installing educational programs and products
- . Operating information systems and services
- . Conducting leadership development and training programs

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FOREWORD

The Center for Vocational Education remains both sensitive and reactive to the need of providing timely and relevant in-service experiences for the leaders of state vocational education agencies. To date, The Center has conducted eight annual leadership seminars for such personnel. We are indeed proud to be able to offer a mechanism whereby both common and unique concerns, issues, ideas, and problems can be addressed and shared by vocational education leaders from across the country.

The thrust of the 1975 National Leadership Development Seminar for State Directors of Vocational Education was directed toward the development of statements designed to synthesize the positions of vocational education leaders relative to six issues. These issues are: a philosophy of vocational education; the governance of vocational education; the role of vocational education in the CETA program; the role of research in vocational education; and standard characteristics of vocational education programs.

In keeping with the charge, the seminar was necessarily production and outcome oriented. Many hours were devoted to intensive discussion, debate, consensus reaching, synthesis, and reaction. These activities were prerequisites to the working position papers which were developed prior to the seminar's conclusion.

The entire seminar was facilitated by a cadre of nationally recognized educational leaders who functioned as both presenters and resource persons. Their major contributions are contained within this report.

Special recognition is due Daniel E. Koble, Jr., Research Specialist, for his efforts in directing the seminar. Additional appreciation is extended to Center staff members, Dallas Ator, Kay Adams, Mark Newton and Patricia Lewis for their assistance prior to and throughout the seminar. The cooperation of the State Directors Planning Committee, officers of The National Association of State Directors of Vocational Education, The Vocational Education Personnel Development Division, BOAE/USOE, Region V, USOE, and The Ohio Division of Vocational Education is gratefully acknowledged.

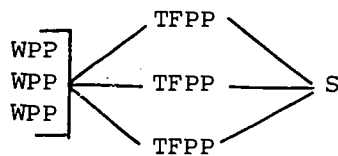
Robert E. Taylor
Director
The Center for Vocational Education

METHODOLOGY

The 1975 National Leadership Development Seminar for State Directors of Vocational Education was designed to provide in-service education for state vocational education agency heads on a nationwide basis. The focus of the seminar was on redefining roles and responsibilities in key areas of vocational education. The selection of topic areas for this year's seminar grew out of the need for formulating national position statements for vocational education on critical issues and to exchange information about current research, development, and new programs in vocational education. It is hoped that the documents which grew out of the 1975 state directors seminar will serve as working guides in the formulation of consensus among all state vocational education units in their emerging philosophies and programs.

Because working position statements on a number of vocational education issues were developed, it seems appropriate to delineate the methodology employed. Three position papers were developed by selected persons and presented to the seminar participants on each of the following topics: a philosophy for vocational education, the governance of vocational education at the state and local levels, the role of vocational education in the CETA program, the role of research in vocational education, and standard characteristics of vocational education programs.

Following the presentation of position papers, the seminar participants grouped themselves into task forces. Three task forces were developed for each of the six topics listed above. It was the responsibility of each task force to synthesize the three position papers related to the topic addressed. These three synthesis papers were further synthesized into one paper by a synthesis team. The methodology, therefore, produced one working position paper per topic. The following diagram depicts the strategy employed.



- WPP = presentation of working position paper
TFPP = task force synthesis of working papers into a single task force position paper
S = synthesis of task force position papers into one position paper

A special task force on vocational education definitions met prior to and during the seminar. This task force developed a strategy for defining vocational education terms as well as the words to be defined. The working definitions are presently under further study and refinement by the task force.

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SECTION ONE:

**A PHILOSOPHY FOR
VOCATIONAL EDUCATION**

A PHILOSOPHY FOR VOCATIONAL EDUCATION

by Charles J. Law, Jr.*

The purpose of this paper is to state "A Philosophy for Vocational Education." I approach this task with reservations, because:

1. the title "A Philosophy for Vocational Education" presupposes the continuation of vocational education as an entity with an evolved philosophy which supports its continuation, and
2. such a limited statement precludes any attempt on my part to lead the reader through what I think is a logical rational process of thinking upon which the validity of my hypothesis rests.

In suggesting "A Philosophy for Vocational Education," some things appear to be evident:

1. Vocational education has no clear, concise, easily definable, philosophical base to which it can lay primary claim.
2. The pseudo-philosophical bases upon which vocational education loosely operates are a conglomerate of beliefs, indiscriminately interwoven, parts of which are mutually exclusive and often contradictory.
3. Typically, even the most serious attempts of vocational educators to deal with philosophical issues have resulted in a discussion of surface philosophical tenets, each of which is supposedly supported by a deeper, more valid philosophical base for vocational education, rather than in a rigorous philosophical discourse which questions the basic reasons for the existence of vocational education.
4. Administrative decisions affecting vocational education are made out of some philosophical base to which the decision-maker subscribes allegiance, but even the decision-maker would have difficulty clearly defining such a base of philosophy. If the decision-maker did define such a philosophical base, the individual would then be hard

*Charles J. Law, Jr., is director of occupational education, North Carolina Department of Public Instruction.

pressed to show a cause/effect relationship between that defined philosophy and even a majority of his or her decisions.

In support of these findings, I have found sufficient evidence in the literature to state further that:

1. if we have a philosophical base broad enough to cover all our actions, it is so diffuse and eclectic as to be almost non-existent, or
2. if we choose to select one of the several versions of our so-called philosophical base, then we immediately begin to operate some facets of our program in direct opposition to the philosophy so stated. Let me clarify, if I may:
 - a. If we have a philosophical base broad enough to encompass the funding of such programs as dissimilar as Career Awareness and three-hour blocks of instruction in Electronics at the 12th grade level, then we must embrace philosophies that reach all the way from Dewey to Bagley.
 - b. If, on the other hand, we fully embrace Prosser, how do we even contemplate support of the concept of Career Education?

Perhaps the philosophic base of vocational education is not so much non-existent as it is schizophrenic.

My philosophy for vocational education is based on the following assumptions:

1. Historically, the major impact of vocational education on the educational system of this country has been an improvement of the education process. Specifically, this has caused a movement away from instruction which majors on the abstract (which few people master easily) to a utilization of the concrete fact (to which most persons easily relate) for the purpose of:
 - a. giving the student a mastery of basic skills, and
 - b. leading the student as far as is possible in the direction of an understanding of the underlying concept (abstraction).
2. The nature of a salable skill has changed and will continue to change with ever-increasing rapidity. In 1917, the most salable skill was the most specific skill. This continued to be true until the intervening variable of skill transferability began to emerge. As technology increases, a person's ability to comprehend all of such technology decreases and, concurrently, such rapidly advancing technology tends to dictate the decline of the need for previously held skills as jobs change. Thus, a person's

ability to adapt to a new job requiring new skills becomes another measure of that person's usefulness to society. True skill salability, then, becomes a function both of the mastery of a specific skill for job entry and the transferability of that skill for career stability. Therefore, the very basic premise of vocational education which has led to its success, i.e., the provision of a salable skill for entry-level employment, may lead to the demise of vocational education if a new definition of salable skills is not derived which includes the intervening variables of transferability of those skills. I further hypothesize, based on recent trends, that by the year 2000 the most salable skills for the individual may be the most theoretical skills.

The points listed above could lead one to conclude that by the year 2000 there will be no need for vocational education. That is true unless one's philosophy for vocational education includes a function larger than the ability to transmit the master of a specific salable skill for job entry. Therefore, my philosophy for vocational education is:

Vocational education has two major functions.

- a. The primary function of education process; i.e., the introduction of individuals to "true salable skills" which are at least as conceptual as specific by starting the individual with the concrete and moving him or her toward the abstraction to the degree possible for the individual.
- b. A secondary function is the provision to the individual of a salable skill for job entry which is an objective attained almost as a "spin-off" on the way to reaching the major objective mentioned above.

A PHILOSOPHY FOR VOCATIONAL EDUCATION

by Byrl R. Shoemaker*

A philosophy for vocational education must grow out of and be in harmony with a total philosophy of education for the individual and/or the society in which he lives and works. The importance of the individual within an education program is without question. Socrates made the concern for an individual the all-important factor within his philosophy. Socrates expressed the belief that "a man who truly knows himself will succeed, for he will know precisely what is within his capabilities and the area in which to apply them, whereas the person who does not know himself will continually blunder, even to the point of ruining his life" (1-p 32). While the philosophy of Socrates focused almost exclusively on the worth of the individual, Aristotle and Georg Wilhelm Friedrich Hegel, philosophers who came after Socrates, saw man as a social being who could find his identity or reality only in the State. To Hegel, "the State is an organic whole, in constant process of development, the unfolding of which is self-consciousness (1-p 75). It is suggested that a philosophy for vocational education must recognize both the worth of the individual and the importance of society. Both the competencies and the interests of the individual must be considered, but the opportunities within and needs of society in which the individual will participate must be considered as vocational education programs are established.

It is suggested that an educational program in any nation must be related to the political, social, and economic patterns within that nation. An overall purpose of education in any society can be stated, "The purpose of a public education program is to prepare people, to adjust to and improve the society in which it exists." The educational process, therefore, is constantly affected by the society in which it exists and by the social and economic factors prevailing in that society. Early efforts in education within our nation emphasized the importance of literacy and citizenship training, since a republic depends upon a literate, informed, and concerned citizenry. As our society grew more affluent, more complex, free public education was extended upwards into the high school years. At the time the early high schools were organized the large majority of youth attending high school did so as a preparation for attending college. Job skills, other than the professions, were learned by a pass-on procedure of father to son, through a process of apprenticeship, indenture, or through the pickup process. The changing social and economic order now suggests

*Byrl R. Shoemaker is the State Director of Vocational Education in Ohio.

that the price of the wonderful technological age in which we exist is preparation for work within that society. Only 4.7 percent of the jobs within that society are unskilled and only 12.6 percent of the jobs in that society require a baccalaureate degree (2). The nature of the economy and nature of the work have limited the opportunities for apprenticeship or through learning by the pickup process. It is obvious, therefore, that changes within our technological society require preparation for work, for entrance into the work force and vocational education, therefore, must be a significant part of the educational system in that society.

Studies by the Brookings Institute point up an economic base for vocational education within the curriculum (3). Such studies indicate that while the United States was number one in growth-rate output per man-hour for many years during the growth pattern within our nation, we no longer enjoy that basis for economic superiority. Such research indicates that the United States is dead last among the developed nations of the world in real growth-rate in output per man-hour. Japan is number one, West Germany, number two, and the United States of America, number twenty (4). Additional studies regarding the factors relating to "real growth-rate output per man-hour" indicate that such growth-rate is made up of 15 percent machines, 36 percent knowledge related to production, 42 percent education and 7 percent miscellaneous (3). A synthesis of these factors would show that our competitive capability, therefore, is the education of the people. Vocational education is essentially for and must relate to the productivity of people, not only in competency related to an occupation, but in the attitude towards that occupation and a willingness to produce.

If we look at the learning process itself we will find that the early philosophers in education such as Rousseau, Pestalozzi and Froebel, all saw the need for the inclusion of the experience within education. Psychology of learning provided a research base to prove many of the concepts of the early philosophers. Principles of learning growing out of these psychological studies were stated by Gerald Leighbody as follows (5):

We learn best when we are ready to learn. When we have a strong purpose, a well-fixed reason for learning something, it is easier to receive the instruction and to make progress in learning.

The more often we use what we have learned the better we can perform or understand it.

If the things we have learned are useful and beneficial to us so that we are satisfied with what we have accomplished, the better we retain what we have learned.

Learning something new is made easier if the learning can be built upon something we already know. It is best to start with simple steps which are related to things we can now do or which we already understand, and progress to new and more difficult tasks or ideas.

Learning takes place by doing. Before the learning can become complete we must put into practice what we are attempting to learn.

Prosser's Sixteen Theorems on Vocational Education (6) related to the concepts of the early philosophers, to studies on the psychology of learning, and to the implementation of these principles into educational philosophy by John Dewey, providing a basis for vocational program organization and operation.

Decisions relating to the starting point for vocational education within the educational program for youth and adults must relate to the studies on child development and on occupational choice. Studies in guidance relating to occupational choice indicate that a young person's occupational choice becomes reasonable at age 16 if they are provided education for choice (7). Observations not yet substantiated by research suggest that psychologically youth become goal-oriented at age 16 and any mandatory educational program at that age or beyond must relate to such goals. It is fact that for youth in all states for the majority of youth high school is their last chance for a full-time educational program. It is also clear that a large number of youth want to delay or have their first opportunity for vocational education after they leave high school. Vocational education programs, therefore, must be available for youth 16 years of age and older at both the high school and post-high school levels and throughout the work life of the individual.

Any in-depth review, therefore, of the needs of the individual and/or the society, the technological developments within our nation, the basis for our competition within the world markets, research within education regarding the learning process, and the overall purpose of education within any society would lead planners in the field of education to include preparation for work as one of the significant goals of the educational process. Every set of objectives, including the "seven cardinal principles of education," (8) "the ten imperative needs of youth," (9) developed by a national principals' group or the "developmental needs of youth," (10) as identified by Havighurst, all establish the importance of preparing youth who are not going on to college for employment. Emphasis in education, both at the high school and collegiate level, however, has essentially remained a subject-centered college-preparatory curriculum at the high school level and subject-centered professional curriculum at the collegiate level. Research pointing to the lack of correlation of success of the college preparatory program in relation to success in college raises serious questions about such an approach (11). Only in recent years have significant developments been made in both high school and post-high school and technical education, preparing youth for employment in occupations other than professions. Vocational education is not only an important part of the educational program, the quantity of vocational education must be in keeping with employment patterns locally, state and nationally, in that order.

Vocational education cannot be classified as a unique discipline within the educational system. Rather, it can be identified as a program in which we combine the skills and technical content of various disciplines with the practical requirements of the world of work in order to prepare a young person to succeed technically and socially in the world of work. Vocational education, while not unique as a discipline, is unique as a program and this uniqueness is reflected in facilities and equipment needed for the instructional program, curriculums, instructor qualifications, and student goals. Vocational education does make contributions to the development on the part of the students enrolled of citizenship qualities, work habits and attitudes, safety judgments, understanding of occupational choice and other factors common to many elements of the educational programs, but the unique contribution of vocational education is preparation for work. While the common learnings referred to above are important within the vocational education program, while success of the person within their chosen occupation deals significantly with the development of these competencies, and while vocational education has an excellent laboratory pattern for development of such common learnings, such common learnings can be obtained or gained through participation in other educational programs as well as in vocational education. We might argue that vocational education has the best opportunity to instruct in these common learnings, but if vocational education does not have a uniqueness which is not found in any other educational program, it is questionable as to whether the added costs of vocational education justify the offering of the program for instruction which could be gained in other programs of learning. The uniqueness of vocational education, therefore, is the preparation for work which permeates the vocational programs at both the high school and post-high school level.

A sound vocational education program must be concerned with the employability of the student upon completion of the vocational program and with the ability of that student to adjust to changes within that occupation and the social setting of the occupation. The curriculum for vocational education, therefore, must be concerned with and provide instructional experiences relating to the psychomotor, the cognitive, the affective and the perceptive domains as they relate to preparing the student for employability. Since the unique role of vocational education is preparation for employment, the physical facilities and equipment, qualification of the instructional staff, the organization of the curriculum and the recruitment, enrollment and placement of the students must all reflect the unique role of vocational education within the curriculum as well as the commitment of vocational education to the common learnings demanded of every educational program. Vocational programming, therefore, requires a time commitment of sufficient length and intensity to provide instruction in the several domains important to the successful entrance of the student into and their progress within the occupation of their choice.

Vocational education is a part of the career development continuum which includes:

1. education for chance through a significant program of home and family living for both in-school youth and out-of-school youth and adults,
2. education for choice of an occupation through career motivation in Grades K-6, career orientation in Grades 7 and 8, and career exploration in Grades 9 and 10, or age 14 and 15,
3. education for work--vocational education, and
4. education for upgrading and retraining--vocational education.

Vocational education for preparation, retraining and upgrading of youth and adults for the world of work and for useful employment in the home remains the unique function of the vocational programs in the public schools. For vocational programs to be effective, however, there must be education for vocational choice within the classrooms of the total educational system and vocational guidance services from properly trained persons.

Vocational education programs, based upon the principles outlined above, must be provided for all eligible age levels, all ability levels, in all sections of a state and the nation. Programs must be occupationally based and designed to meet the needs of both an individual and the society in which he exists. Vocational education starts with the job and ends with the student successfully employed on the job.

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A PHILOSOPHY FOR VOCATIONAL EDUCATION

by Melvin D. Miller*

What vocational education ought to be must come from the collective experience of persons knowledgeable about vocational education and who have far-sighted perceptions. After all, experience is "king of the hill" as the source for reality and truth, and experience verifies the truth about our world as a place of change.

Will vocational education in the next quarter century be directed by a Smith-Hughes mentality--a mentality perfectly adequate and even far-sighted in the early part of this century--or will vocational education reflect the rate of change and the changes occurring in our society? Vocational education must hold as a goal the ability to change--to direct its own change with purpose and meaning--and to improve the quality of life for all persons.

In seeking these goals, vocational education must join with general education in a mutually supportive posture. The unity of these often separate systems of education is essential to the welfare of both, and more importantly the welfare of the learner. The very nature of education and learning defies a dual delivery system--one which emphasizes thinking and the other doing. Only by providing a single educational system, comprehensive in its administration as well as its learning environment, can we lend intelligibility to all education and at the same time increase the availability of options for the learner.

Career education offers a vehicle for achieving a unified delivery system for education, and vocational educators without forgetting their heritage need to recognize that eighty percent of career education becomes vocational education. Unashamedly, vocational education should provide positive support and leadership for career education and the reforming potential it offers education in the seventies.

The importance of work and a productive role to both the individual and society are concepts which vocational education and career education promote. It is out of the work-productive role that individuals can find achievement and success. Together these contribute to a strengthened self-concept and an improved quality of life. Vocational education should insure that this becomes a reality for learners of all ages in all places.

*Melvin D. Miller is head of vocational-technical education at The University of Tennessee, Knoxville, Tennessee.

If vocational education is to respond to the needs of all learners in all places, greater concern must be evidenced for large population centers. Vocational education must concentrate a sizeable portion of its efforts toward improving the quality of life for all persons in the urban centers of our nation. Unless help is given to solve these human needs, the best efforts to work with middle-class America will be unnoticed as the problems of the cities become the problems of the nation.

Vocational education has embraced the notion of continued learning, yet the assumptions inherent in the life-long concept have not been readily apparent in vocational programs. With the rapidity of societal change, vocational education must prepare individuals who will exercise options for continued learning. At the same time vocational education must insure that these options exist.

Truly, vocational education must be made available to all persons of all ages in each community of our country--those in rural communities, in suburbs, and in the cities; the migrant and the in-places; female and male; the young, the middle-aged and the older person; the advantaged and the disadvantaged; the able and the handicapped; and those of every educational attainment. The purposes as stated in the Vocational Education Act of 1963 and its subsequent amendments must rapidly become guiding purposes for all of vocational education's efforts.

Leadership to successfully achieve these purposes within each of the states should come from one source--state departments of education. It is here that dualistic administrative systems should be unified into a model of mutual supportiveness; it is here that the state's total delivery system for vocational education should be made truly comprehensive; it is here that curricular designs should be identified and promoted to maintain a variety of options for learners throughout each state; it is here that state legislation should be lobbied to capitalize on the interests of legislators to improve the quality of education; it is here that personnel standards should be set to insure the professionalization of vocational educators at all levels; it is here that personnel development needs should be identified to allow teacher educators to respond to the state's needs; and it is here that the quality of comprehensiveness should begin.

Comprehensive vocational education at the local level should grow out of a sound career education program, begin as an exploratory program and be fully evident at the secondary level. The family of related occupations approach is unequalled in its potential for providing comprehensive learning opportunities and availing learners with a multiplicity of options for learning and/or earning. Each of these delivery points must be articulated into a single educational system at the local level which is under local control. The same is true of post-secondary vocational education. A single comprehensive two-year, post-secondary institution under local control but coordinated at the state level creates the greatest number of options for learners. Conversely special vocational area schools and technical institutes narrow learner options. Preparation for work and a productive life role are among vocational education's goals. Achievement of these goals should occur in a setting that reflects the nature of all learning.

Personnel to implement these programs should themselves be prepared where comprehensiveness exists as a model. Separate vocational service area teacher-education programs are not capable of providing the experience base for comprehensiveness that is necessary in our dynamic world. On the other hand, comprehensive teacher education programs should be developers of appropriate leadership personnel to assist the state in the exercise of its leadership role.

Federal, state, and local roles should be maintained in proper perspective. The federal concern should be to exercise national judgment about issues that are not being addressed by the state. The national wisdom then should be reflected in congressional action which calls attention to the priority needs of our entire country. States, particularly through state departments of education, should exercise leadership to implement these priorities and to provide for a total system of comprehensive education. The schools however belong to the people in the local community and it is by local control that citizens of the community may be heard.

When vocational education performs in a mutually supportive manner to other education, reflects true comprehensiveness through a state-wide delivery system, experiences its leadership through state departments of education, responds to national needs and priorities and insures quality personnel prepared to assist all persons toward a quality life, it should be able to perceive direction for its own future.

Practice has been the way of life in vocational education--most frequently without regard for theory. Particularly without theory concerning the nature of learning and education; without theory on the economics of education; without theory on the outcomes of a dualistic educational system; without a theory for curriculum; without a theory on the source for leadership; without a theory on the nature of change; without a theory on how policy should be developed; and without a theory on planned change.

In vocational education, a Smith-Hughes mentality has remained "king of the hill" in the decision-making process. Without completely losing this mentality, there is an ever increasing need to draw upon the far-sighted perceptions of persons knowledgeable about good practice in vocational education and who have the ability to theorize and conceptualize. This is the challenge to vocational education to see that we have theories that provide direction for change in the last quarter of this century. Theorizing needs to become as much a part of our future as practice has been a part of our past.

Vocational education needs a rationale for change. Do we know why we have two hour blocks in some states, three hours in others and only one hour classes in still others? Do we understand the reason for requiring cooperative work experience in some program areas and not in others? Do we know the meaning of an eight-year work experience requirement for vocational teacher certificates in some states and only three years in others? Do we have a sound basis for offering narrowly focused secondary programs in some states and a cluster approach in others? Can we justify supporting comprehensive vocational

offerings in our public schools when we support non-comprehensive and narrowly focused teacher education programs for vocational educators? Can teacher education programs really promote advisory councils and student vocational organizations when they don't pretend to have either? Can we defend curriculum based only on historic task analysis when we know change is demanded of all workers? Can we convincingly argue for a single system of public education when state departments are dualistic? What are the reasons behind our practice? Where is the rationale for the change that will occur in vocational education?

By any reasonable measure one must declare that much of vocational education is offered under a delivery system that separates it from the rest of education. But the very nature of learning defies a dual system of education--one which emphasizes thinking and one which emphasizes doing. Why can't we teach mathematics in a context that shows application? Why must we declare that the future industrial education student should learn written and oral communication from the English teacher? Why isn't the history of agriculture of as much value for the student in agriculture as European history is to the so-called college prep student? Why shouldn't the basic science involved in home economics or agriculture be as valuable as a non-applicative course in biology or general science? Why do we not regard the social-psychology of advertising and sales equal to more theoretical courses in social studies? Are vocational educators fearful of losing identity if they promote a single educational program which emphasizes and capitalizes on complementary diversity?

Vocational education should show a concern for the capacitation of people. Doesn't vocational education provide for the true nature of education's function in developing the individual's desire and capacity to achieve? Doesn't vocational education allow individuals to explore and gain information about life influencing decisions? Can't vocational education create new options for learners? Shouldn't vocational education provide for meaningful expression of individual talent? Can vocational education truly serve the needs of all ages of learners? Will vocational education plan with business and industry to enhance the quality of life for workers?

And how about values or the axiological questions? Where are the values of quality workmanship to be learned? And the meaning of work to the individual and society? And the value of returning a full day's work for a full day's pay? Have vocational educators failed to develop a philosophical posture toward these issues as more and more stress has been placed on the competencies demanded by the job? Should we be placing more emphasis on the human skills and value orientation--without, and I repeat, without forgetting the other?

What vocational education says and more importantly what it does in providing vocational education for people in the large urban centers and the small rural communities speaks to our values. Have we made vocational education available and attractive to the large masses who become the nation's drop-outs and unemployed welfare recipients? Have we seriously attempted to provide minimal vocational programs to learners in small communities? Aren't

these persons--those who lack fundamental employment skills--the ones who leave the rural setting to join the masses in our urban sprawl? And what kind of opportunity are they prepared to respond to? The deplorable fact is that unresolved rural problems next become the problems of the cities. Equally deplorable is the fact that we haven't demonstrated that vocational education is more than the white man's cop out for blacks and other minorities. Vocational educators claim all learners of all ages who want and can benefit from vocational programs as the clientele--the target population, but the meaning of that message or goal has not been communicated nor has it been met.

Are vocational educators up to the task? Can we devise new approaches to work with a multiplicity of diverse needs? Can we help Blacks, Chicanos, native Americans and other disadvantaged minority groups including the poor whites become convinced that vocational education is for them? Are we prepared to organize programs in new ways, with new requirements, and with new curriculum to show our willingness to serve people? Just how adaptive are we? And how flexible?

Answers to these questions and others will depend on the leadership of vocational education--both the present leadership and those who will lead in the future. The hope is that state departments of education will demonstrate the meaning of future-oriented, theory-based leadership for change. It is hoped that this leadership is a shared leadership involving local school districts and university teacher education. For one group to attempt to lead without the others is sheer nonsense. It represents a near diabolical scheme to make vocational education ineffective. Can one agency set the criteria necessary for the full professionalization of vocational education? Does one group know best the curricular design to be implemented in that state? Should one agency have singular and full control over any aspect of vocational programming in any area of the state and/or for any target population? Should any group alone try to capitalize on legislative drive to direct the future of education?

Shared leadership will hasten the implementation of a comprehensive educational plan which causes all of education to be mutually supportive while maintaining a complementary diversity. Shared leadership will provide the avenue for democratically resolving these many issues--both named and unnamed. Shared leadership can challenge the other's theories or lack of theory. And most important, shared leadership can be developed to perceive direction for the planned future of vocational education.

Truly we need a philosophy to guide future decisions in vocational education.

A PHILOSOPHY FOR VOCATIONAL EDUCATION

Working Synthesis Report

Background

An educational program in any nation must be related to the political, social, and economic patterns within that nation. An overall purpose of education in any society is to prepare people, to adjust to and improve the society in which they live. The educational process, therefore, is constantly affected by the society in which it exists and by the social and economic factors prevailing in that society. Early efforts in education within our nation emphasized the importance of literacy and citizenship training, since a republic depends upon a literate, informed and concerned citizenry. As our society grew more affluent and more complex, free public education was extended upward into the high school years. At the time the early high schools were organized the large majority of youth attending high school did so as a preparation for attending college. Work skills, other than the professions, were learned by a pass-on procedure of father to son, through a process of apprenticeship, indenture, or through the pickup process.

Changes within our technological society now require formal preparation for work, for entrance into the work force. Vocational education, therefore, must be a significant part of the educational system in our society.

Position Statement

We believe that a philosophy for vocational education must grow out of and be in harmony with a total philosophy of education for the individual and for the society in which he/she lives and works. The importance of the individual within an educational program is without question. The competencies and interests of the individual must be considered, but the opportunities within and needs of society in which the individual will participate must also be considered as vocational education programs are established.

In taking a position of significance in the educational system, vocational education must recognize and address the rising rate of permanent unemployment, the increasing rate of job change and the continually changing nature of most jobs. Moreover, the quantity of vocational education must be in keeping with employment patterns locally, statewide, and nationally, in that order.

A sound vocational program must be concerned with the employability of students upon completion of vocational programs. But vocational education must also recognize the need of the individual for more than job entry skills alone. Compatible skills of communication, decision-making, learning to learn and personal and occupational responsibility are equally important and equally within the purvey of vocational education. These "true salable skills," and the individual's capacity to transfer them regularly and usefully to his/her work and life needs throughout life, require that vocational education emphasize starting the individual with the concrete and moving her or him toward the more abstract.

The uniqueness of vocational education, then, is in its capacity to not only prepare people for work, but to enable them to develop the human "change and coping skills" which are essential to occupational mobility and personal success over the long term of a working life.

When implementing vocational education programs, the following principles of learning should be followed:

1. Students learn best when they are ready to learn.
2. The more often students use what they have learned the better they can perform or understand.
3. Learnings that are useful and beneficial are better retained.
4. Learning something new can be made easier if the learning can be built upon something already known. It is best to start with simple steps which are related to things students can easily do or already understand, and progress to new and more difficult tasks and ideas.
5. Learning takes place by doing. A certain amount of knowledge gets to the brain only through the use of the hands.

The needs of the individual and the society, the technological developments within our nation, the basis for our competition within the world markets, research within education regarding the learning process, and the overall purposes of education within any society would lead planners in the field of education to include preparation for both paid and non-paid work as one of the significant goals of the educational process.

While vocational education cannot and should not be classified as a unique discipline within the educational system, it can be identified as a program in which the skills and technical content of the several related disciplines are combined with the practical requirements of the world of work in order to prepare a person to succeed occupationally and socially.

summary

vocational education is unique as a program in its requirements for community resource utilization, practical facilities and equipment, curriculum, instructor qualifications, and student career and occupational goals.

vocational education's contribution to the base of common learning is in the application of common learning to the world of work skills of: citizenship, work habits and attitudes, decision-making, safety judgments and understanding of occupational choice.

vocational education starts with people of all ages and ability levels and ends with each person not only successfully employed on the job, but having the capacities to continue to learn, regularly make objective and mostly accurate decisions about herself or himself, and able to transfer all his or her personal and occupational skills to meet the changing job requirements of a constantly changing technological society.

SECTION TWO:
**THE GOVERNANCE OF VOCATIONAL
EDUCATION AT THE STATE
AND LOCAL LEVELS**

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THE GOVERNANCE OF VOCATIONAL EDUCATION

AT STATE AND LOCAL LEVELS

by Roald F. Campbell*

My position on the governance of vocational education grows out of a long interest in educational governance and intergovernmental relations and more recently an affiliation with the Educational Governance Project at The Ohio State University which examined state policy-making for the public schools in several states.¹ While the title of this paper alludes to governance at state and local levels, my focus will be at the state level. The paper is organized in two parts: (1) relevant findings and conclusions growing out of the governance project, and (2) positions or recommendations for the governance of vocational education.

Insights from the Governance Project

In the Governance Project we emphasize policy making as a central component of governance. We accepted a systems approach which included four functional stages of policy making as follows: issue definition, proposal formulation, support mobilization, and decision enactment. We also made use of allocative theory which deals with the dynamic relationships among policy actors, formal and informal, and employs such concepts as power, influence, and resources. These frameworks permitted us to examine the policy making process in twelve states, selected chiefly to represent many structural variations in governance, and to develop a number of findings and conclusions, some of which will now be summarized.

As to findings, several seem to have some relevance to the governance of vocational education. These are enumerated and supported briefly below:

1. The educational coalitions noted particularly by Bailey in his 1962 study² have tended to disappear or have lost most of their influence. The obvious reason for this shift is the division within education itself chiefly on the labor-management issue.
2. While education is badly fragmented, the state teachers organization has emerged as the most powerful interest group, in nearly every case exercising more influence than the state school board association

*Roald F. Campbell is emeritus professor of educational administration, The Ohio State University, Columbus, Ohio.

or the state school administrators' association. Teachers organizations have set up political action arms and they employ their resources, chiefly money and votes, with considerable skill.

3. Governors are exerting a growing influence on policy making for education. Nine of the twelve governors made educational issues a part of their campaigns, most often the issue having to do with school finance and tax reform.
4. State boards of education, whether elected or appointed, are relatively marginal actors in the policy making process. For the most part, boards have few relationships with governors and legislators and are largely concerned with legitimating the recommendations of chief state school officers. Since in 44 states these boards also serve as state boards for vocational education, their limited influence is of special note.
5. Chief state school officers, in contrast to state boards, whether selected or appointed, exercise great influence in the state agency arena (state board and state department) and often considerable influence in the legislative arena (governor and legislature). But the influence of the chief in one arena does not predict his influence in the other, again a finding of considerable import for vocational education.
6. It should be noted that in many states half or more of the budget of the state education agency comes from federal sources. Federal programs have permitted much personal growth in state agencies but, for the most part, the recruitment of personnel is chiefly from the rural schools of the state, essentially as it was 30 years ago.

These and other findings of the Governance Project support a number of conclusions which appear to be pertinent here. First, the state through the governor, the legislature, and the state education agency is exercising a greater policy making role in education than ever before. At least two developments foster this situation: the general federal stance to push educational matters back to the state and the rapidly accelerated money demands for education.

Second, the governance of education has been increasingly politicized. As noted above, political actors are involved more extensively. Moreover, the use of political tactics by the state teachers organization has placed the governance of education very much in the political milieu. Increased politicalization of education means that special governance for education has tended to give way to general governance or decreased autonomy for education.

As a third conclusion, the governance of education is more pluralistic than it used to be. More actors, formal and informal, participate in the governance process. Numerous groups, often ignored in the past, insist on being heard. Pluralistic participation means that governance by consensus has given way to governance by confrontation and conflict.

Positions and Recommendations

The positions and recommendations I shall now advocate grow in large part out of the reality pictured above. The first three of these recommendations deal with state structure for education of governance. Structure, I emphasize, may permit but does not guarantee improvement in government. The recommendations follow:

1. I see no reason for changing the structure now found in 44 states of making the state board of education also the state board for vocational education. Three considerations lead me to this position. First, some coordination between vocational and general education seems desirable and one board is in a somewhat better position than two to provide that coordination. Second, I know of no body of evidence that suggests vocational education is better governed in Colorado, Hawaii, Indiana, Oklahoma, Washington, and Wisconsin, where vocational education often has its own board, than in the remaining 44 states. Third, the movement of education from special to general governance would seem to lend support to a board with broad and not narrow jurisdiction.
2. I recommend that the practice, now found in 24 states of having the state board appoint the chief state school officer, be retained in these states and, as changes are made, adopted in the other states. This practice permits the board to hold the chief responsible, a condition not found where the chief is elected or appointed by the governor. Moreover, it is one way of increasing the influence of the state board of education in the governance of education, a change that is needed.
3. In those states, such as Utah, where jurisdiction for vocational education is ambiguous or divided between the board for public education and the board for higher education, I recommend that jurisdiction be clarified. In most cases, I believe jurisdiction should be placed with the board for public education. This is not to suggest that a change need be made in those four states which have achieved a single board for both public and higher education but I do not argue that this practice should be extended.

The six recommendations which follow have to do with process or conditions which should surround the governance of vocational education:

4. The state board of vocational education should be strengthened. I mean that, on the whole, the boards should be more vigorous, better informed, more demanding of their executive officers, and more aggressive as important actors in the policy process. If the state board is indeed the official lay body for education and vocational education in the state, the influence of that body should not be dominated by the chief state school officer or other political actors.

5. Organizations of vocational educators and their friends should recognize the need to work with governors and legislators in policy making for vocational education, as well as with chief state school officers and state boards of education. This position gives recognition to the fact that policy making results from the interactions of many persons, some in official governmental capacities and others as leaders of voluntary groups.
6. In my view, state boards of education and state agencies generally will be in a stronger position when they become less dependent upon federal funding. This means that states should provide a greater portion of the budget for the state education agency, even that portion of the budget allocated to vocational education. As long as all or most vocational support is from federal sources vocational educators will be torn between response to federal or to state direction with most of the cards held by the feds.
7. The state education agency should recognize that it can and must play an important role in mediation between federal and local education agencies. Without help from the state the federal agency, particularly with money in hand, can dominate local agencies. In a federal system domination by one level of government is not desirable and the state has a unique opportunity to prevent such a practice. Some state agency administrators, generally recruited from local school systems, need help in conceptualizing and implementing the state role in governance.
8. Vocational educators should join others of like mind in resisting the establishment of state professional practices boards with statutory power. Such boards propose to transfer legal responsibility for teacher education and teacher certification from the state board of education to a body composed mainly of classroom teachers. Instead of teachers participating in governance they would actually take it over. Moreover, such a plan would fragment still further the governance of education and weaken still more the state board of education.
9. Vocational educators, like other interest groups, need to form coalitions if they are to exert influence with the other policy actors. These coalitions may include some other groups in professional education. They may also include farm and agri-business groups outside of education, perhaps an obvious suggestion to this body. These coalitions should be concerned not only with state policy, but also with relationships between state and federal agencies.

Let me conclude this statement by saying that governance is more than structure, even more than process. In the end, policy decisions are also dependent upon the personal characteristics and styles of those who participate in the process. Some actors give education higher priority, are more diligent in mobilizing the support of others for education, and are more skillful in employing the resources these possess in the political process. Obviously, we need to take whatever steps we can to place such persons in strategic positions.

NOTES

¹See Roald F. Campbell and Tim L. Mazzoni, Jr. (eds.), *State Policy Making for the Public Schools: A Comparative Analysis*, and Roald F. Campbell and Tim L. Mazzoni, Jr., *State Governance Models for the Public Schools*. Educational Governance Project, The Ohio State University, Columbus, Ohio, 1974. Forthcoming *State Policy Making for the Public Schools*, by same authors, McCutchan Publishing Corporation.

²Stephen K. Bailey, *Schoolmen and Politics*. Syracuse: Syracuse University Press, 1962.

GOVERNANCE OF VOCATIONAL EDUCATION

AT THE STATE AND LOCAL LEVELS

by Don K. Gentry*

Position:

"Single State Agency with Full Authority
Vocational Education Administration"

Introduction to Position Statement

The question of administrative governance of vocational education is not new or recent, but has been a continual point of discussion among educators, and more specifically vocational educators, for the past several years at the federal, state, and local levels. The administrative structures for vocational education across the nation at the state level have developed into such complexity, the sole state agency called for in federal legislation for vocational education is virtually indescribable. Many reasons can be given for the creation of this varied system of state structures for the governance of vocational education--the struggle or potential struggle for control of federal funds, differences in general education structures, priorities for education at the state level and politics, just to name a few.

The author of this paper strongly believes that the present problem is the lack of coordination, potential inefficient and ineffective vocational education opportunities, and not any of the above rationalizations for not fully implementing the single or sole state agency concept in many states.

I am indebted to all the state directors for their complete cooperation in collecting information on the present systems of administration in the various states.

*Don K. Gentry is state director for vocational education in Indiana.

Summary of State Administrative

Governance Questionnaire

August 1975

53 States and Territories Responded

I. The State Board of Vocational Education is:

A. The State Board of Education - Primarily responsible for elementary and secondary education (34 states)

*Alabama	Maine	North Carolina
Alaska	Maryland	*North Dakota
Arizona	*Michigan	Ohio
Arkansas	*Minnesota	Oregon
California	Mississippi	South Carolina
Connecticut	Missouri	Tennessee
Delaware	Montana	Texas
*Georgia	Nebraska	Vermont
Iowa	Nevada	Virginia
Kansas	*New Hampshire	West Virginia
Kentucky	New Jersey	
Louisiana	New Mexico	

*States reporting post-secondary or community college programs under Board's authority.

B. A Separate State Board for Vocational Education (9 states)

Colorado	Oklahoma	Virgin Islands
Indiana	Puerto Rico	Washington
Illinois	South Dakota	Wisconsin

C. The State Board of Education - For all levels of Education (8 states)

Florida	Pennsylvania	Utah
Idaho	Rhode Island	Wyoming
New York	Trust Territory	

D. The State Board or Commission for Higher Education (2 states)

Hawaii	American Samoa
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II. Functions of State Board of Vocational Education

1. State Plan development responsibility

50 - Yes

1 - No

2 - Did not respond

13. Four (4) are Chief state School Officers
14. Thirty-five (35) are elected from the membership
15. One (1) rotates annually between the State Superintendent and the Commissioner for Higher Education
Three (3) did not respond

Questions 16 and 17 were eliminated.

Staff

18. Thirteen (13) state Boards employ a separate staff for Vocational Education
19. Forty (40) State Staffs are the staffs of the State Department of Public Instruction or Education

Other

21. Fifteen (15) reported separate Junior or Community College Boards
22. Forty-one (41) reported 1202 Commissions different from the State Board
Several reported overlapping membership
23. Forty-six (46) State Directors felt their state's system was the sole state agency concept called for in existing federal legislation
Two (2) reported no
Four (4) did not respond to question

Administrative Governance of Vocational Education
at the State Level

The National State Directors of Vocational Education fully support a single state agency administrative governance structure with full authority for vocational education administration at the state level. The single state agency charged with the administrative authority of vocational education must have state and federal legislated functions which include:

Statewide coordination responsibilities for vocational education

Development of the annual and long-range state plan for vocational development

Responsible for determining state policy and direction for vocational education

Authority over the approval and disapproval of all vocational education programs at all levels of operation

Receipt and distribute all federal funds available for vocational education

Review all state fund budget requests for vocational education purposes and make level recommendations to the State Legislature

Evaluation of vocational education

Improvement of vocational education personnel

Administer or supervise the administration of state staff services to LEAs

The State Board of Vocational Education designated under the above provisions should be broadly and equitably representative of the general public and public and private nonprofit and proprietary institutions and agencies of secondary and post-secondary levels of operation.

The absence of a single state agency with full administration authority and coordination of vocational education results in:

1. Competition, unnecessary duplication of effort, and dissipation of resources among fragmented state agencies

2. Competing priorities within education, and between education and other public agencies, for state and federal funds
3. Lack of complete accountability insisted upon by Congress, legislators, executives, and the general public
4. Lack of continuity or articulation between levels of training
5. Dissatisfaction by the employer and the public with the effectiveness of the product produced by the system
6. Uncoordinated innovative and research activities
7. Incomplete needs assessment programs
8. Potential loss of open-ended educational opportunities to people of all ages
9. Fragmented leadership and direction
10. Insufficient finance resources
11. Continued efforts by various organizations and special interest groups to change the administrative structure

Vocational education for the purpose of this paper includes vocational, occupational, manpower, training or retraining educational programs offered to provide opportunities for students to become prepared for employment.

THE GOVERNANCE OF VOCATIONAL EDUCATION

AT THE STATE AND LOCAL LEVELS

by Charles F. Nichols, Sr.*

First, let me suggest what I consider a definition of "governance." These are the rules and regulations that we live by, work with, and constantly change to meet the new requirements of a fluid society that is served by vocational education. This description of governance could be much more complex, but a major problem in governance is that it is becoming so over-complex that it takes a person with extreme political manipulative skills to devise means within which their educational operation can function. With this in mind, as a director of a large city, with all the variety of populations, problems and politics that are part of our daily professional actions, I believe these things as they relate to governance.

The rules and regulations that we operate with create an overriding problem that we face statewide and to a great extent at the national level. This handicap is what I choose to call the "rural mentality" in governance, which establishes postures for operating vocational programs that make the presumption that every vocational program in every vocational institute or school in the state, or the various states, can be operated under the same rules, regulations and guidelines with the same type of programmatic outcomes.

Our present form of governance establishes a posture which presumes that if a program exists anywhere in a state it is available to anyone in that state and therefore should not be duplicated elsewhere. Our present system of governance presumes the same fiscal situation for all districts and does not take into account the disparities that exist within our large urban areas. These existing rules and regulations do not, in many instances, take note that a far smaller proportion of the tax dollar in the large urban areas goes to education than elsewhere. The case for municipal overburden has long been established, but few appreciate at the governance level what this means when translated into school programs.

Governance which establishes strict definitions at the state and legislative level denies creativity, especially when it suggests classes must run two, three or four hours; or that students in an urban area must subscribe to

*Charles F. Nichols, Sr., is director of vocational, technical, and industrial education for The Minneapolis Public Schools, Minneapolis, Minnesota.

the same types of vocational clubs or youth group activities that their rural counterparts subscribe to. This governance does not accept that to many of our urban students, the gaining of a marketable skill in the nine weeks prior to leaving the school may be the most appropriate vocational program that they have been in. An FHA club would be wholly improper both as a "city kid" activity and as a private cost of free public education for young people who are caught into the tight and competitive complexity of an urban environment.

Governance, as it looks at our students, does not accept the reality that many of our urban young people come from one-family homes that are often dilapidated and over-crowded; that they face the competition of disease, delinquency and crime, and this is not to say that these are not occurrences in our rural areas--but they are not, in those districts, daily confrontations that affect the learning activities and the life styles of our young people.

As a vocational educator and a professional educator, I believe that governance that strictly interprets placement as an area consideration and does not accept that we are now facing here to an extremely mobile population who no longer consider occupational placement within the immediate confines of their educational district a viable solution to their economic problems is shirking its mandate. Our young people are now looking in all directions and any distance for places to market the skills that they have acquired in a vocational program. Governance that establishes artificial restrictions by penalizing the training or preparation institution that provides them with the skills that they need to put in the market place is ill conceived and poorly used.

I mentioned earlier that governance should meet the new requirements of a fluid society. Rules and regulations that mitigate against technical change on a very short term basis to help us cope with the new and emerging occupations are placing an undue handicap on the large urban areas and for that matter, for our rural counterparts. A concern that not only I, but other large city directors, have come to accept as one of our major problems over the next educational decade is the growing acceptance of vocational education outside our urban areas in school districts that are taking advantage of their capability to merge with other districts similar, giving them the fiscal and political capability of using the legislative branches of our governments to establish governance that favors the newly emerging vocational institutions. The attraction of those particular institutes pulls the potential leaders and those that are economically self-sufficient, and prevents the participation of the leadership-capable individual in our large urban centers. When governance establishes two types of school population, populations consisting of followers in our large urban areas, and leaders in the outlying areas, then that governance is operating in an inequitable and self-defeating manner for vocational education.

Rules and regulations that establish related training on a funding basis apart from the technical training, with the mistaken attitude that a person should acquire this preparation on his or her own, apart from the technical

training, is grossly in error and makes for inadequate vocational programs. Many of our urban students, even more so than our rural or suburban counterparts, need more basic related technical skills for industrial placement and training; not because of their latent incapability or lack of background, but because of the constraints that have been placed on the urban schools in their early years. They, therefore, have not had the opportunity to gain those skills that will place them in a competitive position for industrial placement and preparation.

Governance has neglected severely, both in states and nation, the acceptance of the fact that our urban populations embrace a substantially larger percentage of our minority population than our rural and suburban counterparts. Rules and regulations that do not help us recruit from both ends of the bell curve in building our minority populations are not only counterproductive but their cost effectiveness is open to question. If we are going to develop within our technology and within our industry, leaders and leadership from the minority community, we must attract into our vocational institutes the raw material that will help generate this aggressive and constructive group of future technologists.

GOVERNANCE OF VOCATIONAL EDUCATION

AT THE STATE AND LOCAL LEVEL

Working Synthesis Report

Current Status

The question of administrative governance of vocational education is not new or recent, but has been a continual point of discussion among educators, and more specifically vocational educators, for the past several years at the federal, state, and local levels. The administrative structures for vocational education across the nation at the state level have developed into such complexity that the sole state agency called for in federal legislation for vocational education is virtually indescribable. Many reasons can be given for the creation of this varied system of state structures for the governance of vocational education--the struggle or potential struggle for control of federal funds, differences in general education structures, priorities for education at the state level and politics, just to name a few.

Statement of Problem

Traditionally states have created education boards to govern education according to levels of education and/or types of educational institutions. The governance of vocational education is a critical issue because vocational education is part of all levels of education and of educational institutions. Therefore, unless there is central governance of vocational education we strongly believe that there will be lack of coordination and potentially inefficient and ineffective vocational education opportunities.

Proposed Position Statement

The National Association of State Directors of Vocational Education fully supports a single agency administrative governance structure with full authority for vocational education administration at the state level.*

Vocational education includes all educational programs for youth and adults which prepare or retrain them for work.

*One task force did not hold this position. They recommended that a single, separate state agency administrative structure specifically for vocational education be installed in all states.

The State Board of Vocational Education designated under the above provisions should be broadly and equitably representative of the general public and other related representation incident to the Board's purpose and responsibilities.

Recommended Functions

This single state agency charged with the administrative authority of vocational education must have state and federal legislated functions which include:

1. Statewide responsibility for the administration of vocational education
2. Development of annual and long-range plans for vocational education
3. Responsibility for determining state policy and direction for vocational education including rules, regulations, and guidelines
4. Authority for the approval and disapproval of all vocational education programs at all levels of operation, including federal and state funds administered by other state and federal agencies for vocational education programs
5. Receipt and distribution of all federal and state funds available for vocational education.
6. Review of all state fund budget requests for vocational education purposes and the making of recommendations to the state legislature
7. Evaluation of vocational education especially the determination of the criteria by which vocational education will be evaluated
8. Responsibility for vocational certification and personnel development
9. Administration and supervision of state staff services to LEAs and institutions
10. Provision of technical assistance to all levels of vocational education

Rationale

The creation of a single state agency with full authority for the administration and coordination of vocational education will facilitate:

1. Elimination of unnecessary competition, duplication of effort, and dissipation of resources among fragmented state agencies

2. The establishment of statewide priorities within education, and other public agencies for vocational education funds
3. The establishment of responsibility and accountability for vocational education to Congress, legislators, executives, and the general public
4. Improved continuity and articulation between levels of vocational education to assure that the best interest of the students are maximized
5. A more productive delivery system for vocational education to better serve the student, the public, and the employer
6. Coordinated innovation and research activities
7. Comprehensive needs assessment programs
8. Open-ended vocational education opportunities to people of all ages
9. Coordinated leadership and direction
10. Efficient, effective, and economical uses of resources
11. The ability of local education agencies and institutions to have direct input of their interests and concerns to the decision making body

SECTION THREE:

**THE ROLE OF VOCATIONAL
EDUCATION IN THE CETA PROGRAM**

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THE ROLE OF VOCATIONAL
EDUCATION IN THE CETA PROGRAM

by Ann Donovan*

To relate the role of vocational education to the Comprehensive Employment and Training Act, one must review the purpose of this act. The first sentence of the legislation provides us with the Congressional intent: "It is the purpose of this act to provide job training and employment opportunities for economically disadvantaged, unemployed, and underemployed persons and to assure that training and other services lead to maximum employment opportunities and enhance self-sufficiency by establishing a flexible and decentralized system of federal, state, and local programs."¹ In the language contained in the Vocational Education Act of 1963, a strain of similarity to the Comprehensive Employment and Training Act (CETA) can be detected. It states, "that persons of all ages . . . will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of action or anticipate opportunities for gainful employment and which is suited to their needs, interests, and ability to benefit from such training."² The point to be made is that both pieces of legislation, while retaining their specific and autonomous mandates, share mutual concerns and establish a complimentary package of special manpower services to indigenous citizens of each state.

It is for this reason vocational education must be a vital partner in the arena of manpower development and a mechanism for the delivery of services. Vocational education has the potential for assisting CETA in solving our structural unemployment problems. Vocational education has an opportunity for a much greater involvement in the provision of training and services.

During a decade of Manpower Development and Training Act (MDTA) involvement, most state vocational education departments settled into an efficient and systemized structure for delivering manpower services to the unemployed and underemployed. From state to state, manpower educational systems enjoyed a high degree of commonality. The enactment of CETA established a "flexible and decentralized system of federal, state and local programs."³ Structural similarities became almost nonexistent and the providing of training and services to the economically disadvantaged caused major policy changes in

*Ann Donovan is director of the CETA Coordination Unit, U.S. Office of Education, Bureau of Occupational Adult Education.

state's administration and management. State vocational education departments had to relinquish their strong relationship to a categorical policy which emanated from the federal government and had to begin to deal directly with independent units of local government, prime sponsors.

A new element has surfaced in the administration and management of vocational education programs: "CETA has established for the first time in this country a system under which vocational training programs are administered by local agents (prime sponsors)."⁴ Therefore, programs reflect differences and states are dissimilar in their approach to CETA.

The country is currently struggling with a serious problem of cyclical unemployment, and in the midst of such a phenomenon we cannot forsake training and services for our future manpower force. In many places, the labor market is demanding skilled workers and the supply remains flat while the pool of unskilled workers continues to grow. Vocational education has the capacity to meet demands and has proved itself over the years to be a successful system for delivering workers to the market place. However, if we are to keep pace as a delivery mechanism with high credentials, we must continue to pursue our professionalism as skills trainers, vocational administrators, and counselors. We must faithfully meet local needs and more especially those of the economically disadvantaged women and men of our society who aspire to employment as a means of self-sufficiency. Such concerns call for vocational educators to be technically expert in their discipline, flexible enough to be deeply involved in related programs such as CETA and adult education, and closely associated with business and industry as cooperators and collaborators. Using their skills expeditiously, vocational educators can effect a partnership with prime sponsor administrators of the CETA program and provide a coordinated approach to manpower training and services, elected officials and their prime sponsorships must be aware of vocational education's potential for delivery and resources. The onus, therefore, is on vocational educators to market their products at the local prime sponsor's bargaining table. We cannot sell our institutions, but we can market our accomplishments and successes. This manpower business created by CETA is highly competitive and one can expect serious scrutiny of program effectiveness and results.

The Comprehensive Employment and Training Act provides for direct involvement of state boards for vocational education (or their equivalent) under Section 112 of the Act through the non-financial agreements with prime sponsors for vocational training and services. The involvement of vocational education, however, does not end with the 5% governor's set-aside. Throughout the states, local vocational educators have involved themselves in the bulk of programs under Title I. There is easily over \$100,000,000 worth of CETA dollars potentially available to public vocational education agencies for the provision of services to CETA clients.

It, therefore, can be said that we are not idle spectators watching as the prime sponsors play out their role--but rather vital participants delivering human and technical resources that lead to maximum employment opportunities for the economically disadvantaged.

Vocational education's role in CETA has been mandated in yet another way and that is through the State Manpower Services Council. Many state directors of vocational education are actively involved in the proceedings of this council as they are often the representatives for the state board for vocational education. The importance of representation on this council cannot be overemphasized.

In its role of direction and leadership, vocational education performs a valuable service by seeking out new and innovative approaches to assisting CETA clientele, flagging duplicative programs, thus, eliminating the possibility of a dual system of manpower development, and, finally, through developing statewide training and technical assistance programs for CETA staff that will relate and impact directly on the CETA system.

Dr. Terrell Bell, the U.S. Commissioner of Education, has, in a memorandum to the heads of all the Bureaus of the Office of Education summed up quite well our feelings in regard to education's role in the CETA legislation. "The execution of our responsibilities under CETA has great implication for the entire educational community. Therefore, I place high priority on our . . . support functions under CETA and in assuring that the maximum education resources are available to this new program."⁵

NOTES

¹Public Law 93-203, Comprehensive Employment and Training Act of 1973, Section 2.

²Vocational Education Act of 1963, Section 101.

³Public Law 93-203, Comprehensive Employment and Training Act of 1973, Section 2.

⁴*Conditions and Possibilities*, "Proceedings of Conferences on the Comprehensive Employment Training Act," Conference on CETA, A National Advisory Council on Vocational Education - Funded Project Conducted in Cooperation with the National Association for Industry - Education Cooperation and the National League of Cities - U.S. Conference of Mayors, May 1975, page 42.

⁵"Office of Education Action to Implement DHEW Comprehensive Employment and Training Act Policy," a memo by the Commissioner of Education to Deputy Commissioners, December 10, 1974.

VOCATIONAL EDUCATION AND CETA: CAN THEY WORK TOGETHER?

by Charles Radcliffe and Nathaniel Semple*

Ever since the enactment of the Manpower Development and Training Act in 1962, and the Vocational Education Amendments shortly thereafter, a readily perceivable tension has grown between what many believe are essentially similar structural manpower policies. At the same time, there has been a growing desire, among some policy makers, to merge the two. While we agree that there exists some similarities between MDTA-CETA and Vocational Education, we feel that the history of both acts reveal many more dissimilarities, and that more would be gained by meshing the two, not merging. Allowing both to continue their own way without some effort to coordinate would be, we feel counterproductive in the long run.

First, we should accept the premise that the public education system retain the responsibility for publicly-financed vocational education programs--including those essentially manpower training and retraining programs for adults. Vocational education is, today, incomparably stronger than in 1962 when we found vocational education frozen into a mold set nearly fifty years earlier. At that time, sixty-three percent of 4 million enrollments were in on-the-farm agriculture and home economics. The federal funding (\$51.4 million of a total of \$284 million) was confined to narrow categories of training which excluded such thriving sources of employment as office occupations and agri-business occupations. Technical and health occupations were virtually ignored. Without belaboring the point, we would like to quote a brief passage from the Report of the Committee on Education and Labor accompanying H. R. 4955--the Vocational Education Act of 1963 as follows:

Today's labor market is characterized by the paradox of persistent unemployment occurring simultaneously with rising demand for skilled manpower. The specter of technological unemployment has done much to attract attention to anarchonisms in our educational system . . . our vocational education programs, developed in another era because they were deemed essential to economic progress, fall far short today of meeting the greatly stepped-up needs of these times.¹

*Charles Radcliffe and Nathaniel Semple are members of The Committee on Education and Labor, Congress of the United States.

¹House of Representatives, 88th Congress, 1st Session, Report Number 393.

The House Report documented this thesis in some detail. Actually, the Congressional findings were in large part based upon and firmly buttressed by those of an advisory panel convened in 1961 by the Secretary of HEW at the direction of President Kennedy to study the National Vocational Education Acts and to make recommendations for their improvement. The Panel, representative of education, labor, industry, agriculture and the general public, was chaired by Dr. Benjamin Willis, then Superintendent of Schools in Chicago. It made its report, "Education for a Changing World of Work," in November of 1962, and we feel that its recommendations afford a sweeping assessment of education and training needs and the changes required in vocational education to even begin to meet them.

The House Committee Report summarized those recommendations as follows:

The Panel recommended that vocational education must (1) offer training opportunities to the 21 million noncollege graduates who will enter the labor market in the 1960's; (2) provide training or retraining for the millions of workers whose skills and technical knowledge must be updated as well as those whose jobs will disappear due to increasing efficiency, automation or economic changes; (3) meet the critical need for highly skilled craftsmen and technicians through education during and after the high school years; (4) expand vocational and technical programs consistent with employment possibilities and national economic needs; (5) make educational opportunities equally available to all regardless to race, sex, scholastic aptitude or place of residence.

The Panel further recommended that the local-state-federal partnership increase support of vocational and technical education for (1) high school students preparing to enter the labor market or become homemakers; (2) youth with special needs who have academic, socioeconomic or other handicaps that prevent them from succeeding in the usual high school vocational education programs; (3) youths or adults who have completed or left high school and are full-time students preparing to enter the labor market; (4) youth and adults unemployed or at work who need training or retraining to achieve employment stability; (5) adequate services and facilities to assure quality in all vocational and technical education programs.

The narrow focus of vocational education in 1962 was perhaps the major factor in the passage of MDTA designed then to fill the so-called "gaps." However, since 1963, vocational education has made great strides.

By fiscal 1974 total financial support for vocational programs under the 1963 Act, as amended, has grown to \$3,500,000,000 and secondary, and post-secondary and adult enrollments totalled over 13.5 million. Thirty percent of these were in agriculture and non-occupational home economics, but it should be noted that the great majority of those enrollments were in secondary

programs and that the agricultural component has been expanded to include related businesses. Over a half million students were enrolled in curriculums in the health occupations and nearly 400,000 in technical occupations; special programs served over 1.6 million disadvantaged persons and 234,000 handicapped. Significantly, in terms of capability to serve an adult population, adult enrollments exceeded 3.5 million--close to the number of total vocational enrollments in 1963. Whatever the shortcomings measured by existing needs, vocational education has made phenomenal progress in the past decade, and more progress in more ways than can be suggested by raw financial and enrollment data. The quality of instruction in most areas has improved dramatically.

In fact, vocational education has developed to the point where we believe that despite the lack of responsiveness to the disadvantaged adult population, it very likely has the capability of carrying out the entire training aspect of our manpower programs, including arrangements for on-the-job training.

However, since its inception thirteen years ago, MDTA-CETA has developed its own administrative modes and political constituencies, far different from those of public vocational education and of necessity, outside the public education system. These constituencies have been the disadvantaged, minorities, and other community groups who, for the most part, have distrusted vocational education and developed allegiances chiefly through the Economic Opportunity Act.

With the advent of CETA, these groups have made a stronger and largely successful effort to co-opt the training role for the disadvantaged. In 1971, among MDTA participants, there were 140,000 first-time enrollments in institutional training programs of which 25 percent, or approximately 33,800, were in 80 multi-course vocational skill centers and an undetermined, but probably substantial, number in various other public vocational programs. This was the high point of vocational education's involvement in MDTA-CETA. In just a few years, the situation has undergone a dramatic change and in August of this year, there were but 10,500 in 48 skill centers operated under the aegis of vocational education.

We view this trend with alarm--for it clearly foretells a parting of the ways between vocational education and CETA that would have made the early days look like a marriage.

Part of the blame, if we are to level blame, can be ascribed to the failure of Congress to clearly devise a mechanism that makes it advantageous for both vocational education and CETA to work together. Section 112 of CETA has been, we feel, a failure. Indeed, in practice, this provision has widened the schism. And the options now under consideration in the House Subcommittee on Elementary, Secondary and Vocational Education include the coordination of local vocational and CETA advisory councils, do not seem promising.

But Congress does not work in a vacuum. If vocational education does not desire to work with CETA, or proscribe a mutually constructive means to do so, it is doubtful whether the Education and Labor Committee will force the issue. At the same time, the Committee will undoubtedly move forward in efforts to reach the structurally unemployed--particularly the disadvantaged and youth--through CETA--and the dualism feared by many vocational educators may well come to pass.

We do not view such a schism as healthy for either vocational education or CETA, and we fear that unless the split can be resolved, we are doing the nation's structural unemployed a real injustice. Vocational education simply has too much to offer, and much to learn by working with CETA. And CETA stands to benefit immeasurably by utilizing the expertise and services of vocational education, which has the capacity to link the person in need of basic skills with the vast resources of the public education system and the job market.

Should Congress not take the initiative and if CETA will not, or cannot, who will? For the time being, it will have to be those vocational educators who recognize the need to make sense out of our overlapping manpower policies and who are willing to reorient their thinking towards the more severe problems of structural unemployment. Vocational educators cannot continue to view CETA as a threat or as someone else's responsibility, but as an ally. Vocational educators cannot continue to look down their noses at their relatively inexperienced compatriot but begin to instruct and to learn. If such a change of heart doesn't come to pass, we would predict that CETA will gain more and more responsibility for serving the needs of the structural unemployed--at the expense of vocational education.

In conclusion, our message is that vocational education broaden its self-view to include and encompass the goals of CETA. With it must come a willingness and commitment to cooperate and work with those client groups and individuals who view CETA as the way to employment but who, in reality, would stand to benefit more from the experience and capacity of vocational education. Despite all our efforts to date, structural unemployment remains obdurately with us. In our view, inroads will be achieved only when vocational education and CETA learn to work together toward the common goals of providing all Americans with training and skills to meet the employment needs of a changing society.

COMPREHENSIVE EMPLOYMENT AND TRAINING ACT

by John E. Snyder*

Introduction

The National Congress in 1962 found that there is a critical need for more and better trained personnel in many vital occupational categories, including professional scientific, technical, and apprenticeship categories; and that even in periods of high unemployment, many employment opportunities remain unfilled because of the shortages of qualified personnel. It was further found that the skills of many persons have been rendered obsolete by dislocations in the economy, arising from automation or other technological developments and changes.

Recognition of such critical needs by Congress resulted in the passage of P.L. 87-415 known as "The Manpower Development and Training Act" of 1962." Under this Act, state boards for vocational education were designated as the state agencies for providing training to remedy this situation.

In December of 1973 the Comprehensive Employment and Training Act was passed by Congress. It provides for flexible local planning to provide job training and employment opportunities for persons most in need. The purpose of the Act (Public Law 930203, 12-28-73) is threefold:

1. to provide job training and employment opportunities for disadvantaged, unemployed and underemployed,
2. to assure that training and other services lead to employment and enhance self-sufficiency, and
3. to establish a flexible and decentralized system of federal, state and local programs.

CETA has consolidated various federal categorized manpower programs under a single federal grant which gives designated prime sponsors (governors, mayors and county officials) the opportunity to plan and implement training programs to serve local manpower needs.

*John E. Snyder is assistant commissioner of education in Kansas.

The Comprehensive Employment and Training Act of 1973 (CETA) generates important responsibilities and opportunities for the present education system. This new legislation emphasizes state and local coordinated manpower planning designed to improve manpower services delivery to the population at need. Funding of CETA is written to include 5% monies to supplement vocational education programs and training.

In developing the Comprehensive Employment and Training Act Program close cooperation and good working relationships are maintained with the Governor's Department on Manpower Planning, the State Department of Corrections, the Division of Employment Security, the Apprenticeship Training Division of the Kansas Department of Labor, and other state agencies.

Statement of Problem

With enactment of the CETA program the challenge is at hand--"what is or should be the role of vocational education in the CETA program?"

Only minimal information was provided in the overall legislature as to the exact role of this agency.

Vocational Education Present Activity and Participation

The purpose of the vocational education program is to assist states in maintaining, extending, and improving existing vocational education programs and to develop new programs so that persons of all ages in all communities of the states will have ready access to vocational training that is realistic in light of actual or anticipated employment. Commonalities in the purposes of CETA 1973 and the Vocational Education Act of 1963, as amended mandated similar tasks of their advisory councils, and specific sections of both acts support each other's objectives.

Using both CETA section 112 supplemental vocational education funds and CETA Title I basic grant moneys, prime sponsors have developed agreements for purchase of occupational training in vocational education institutions. Arrangements for services range from individual referral on an as-needed basis, through reserving places for fewer than a class-size group, to class-size training. Many public education agencies and the state board is also under contract with prime sponsors to arrange for training of CETA participants in private educational institutions. In some instances, prime sponsors are subcontracting directly with private educational organizations. Others are utilizing community colleges, vocational-technical institutes, and private training schools more extensively than they were used under the pre-CETA manpower legislation. This utilization appears to be occurring primarily on an individual referral basis.

Available Supportive Vocational Education
Services to the CETA Program

The following is a listing of available supportive services which are provided by vocational education. The staff of the Division of Vocational Education, The Kansas State Department of Education has developed the following.

CETA Educational Services

1. Provide information to the prime sponsors concerning available vocational and related programs now being conducted in the prime sponsor's area, in private and public training facilities, under various sources of funding.
2. Provide information and advice to the prime sponsors concerning vocational education and related training services, including but not limited to course content, length of training, hours of instruction, location of site, condition of plant, adequateness of equipment, and estimated costs.
3. Upon request, by the prime sponsor, select or recommend private and public training facilities based upon compiled knowledge of training.
4. Assist prime sponsors by providing technical assistance in the development of a comprehensive manpower plan.
5. Assist the private or public training agency selected by the prime sponsor in preparing a training project, designed to meet the local needs, as identified in the comprehensive manpower plan.
6. Provide preservice or in-service training for specialized, supportive, supervisory, and other personnel and technical assistance needed in connection with programs established under CETA.
7. Assist the training agency and prime sponsor to establish and maintain a satisfactory education budget system throughout the length of the program.
8. Assist local private or public training facilities in identifying and coordinating key components necessary for successful program operation: procurement of equipment and supplies, employment of staff, renting facilities, and preparation of the plant and site.
9. Maintenance of an equipment inventory service in the established statewide computerized inventory system.
10. Arrange for the exchange of information in the area of education between prime sponsors, local training facilities and other manpower related agencies throughout the state.

11. Providing appraisals, evaluations and management team reviews of educational manpower training and services for prime sponsors. Service could be both on-going and end-point.
12. Assist local private organizations and public agencies in establishing programs for special manpower target groups and to coordinate linkage with programs conducted under other titles of the Act.
13. Coordinate the local Comprehensive Manpower Plans and Statewide Plan for Vocational Education with the Kansas State Plan for Vocational Education.
14. Provide an established and proven delivery system for individual referrals on a statewide basis.
15. Provide in-service programs for instructional improvement for vocational education teachers and management training for professional staff.
16. Program improvement through monitoring and evaluation of occupational training programs.
17. Other services as needed to meet educational programs offered under CETA.

Role of Division of Vocational Education in CETA Program

In Kansas we felt that vocational education should be the sole source for all skill training under Title I and the Balance of State. This is to assure appropriate coordination with the state prime sponsors and eliminate duplication of efforts on vocational and related services. Some challenges confronted projecting programs for flexibility so CETA trainees may receive training on individual referral, fewer than class-size to class-size training. The following are functions which do further enhance assistance to the CETA program:

1. Open entry and open exit
2. Basic Education/GED
3. Counseling and related services
4. Skill training
5. Job placement

Conclusion

The present system of CETA Manpower is far from being a fully coordinated and stabilized program for the total dollar invested and for the benefit of the persons to be served. The following statements may be the key to success as it pertains to vocational education's involvement in the Comprehensive Employment and Training Act.

A common trust must be established between education and CETA to insure adequate planning and coordination of vocational education programs, as was developed among State Employment Security and Vocational Education under the Manpower Development and Training Act.

The State Education Departments with full cooperation should be designated "Sole Source" under CETA, so that full state planning, co-funding, and non-duplication of services can be implemented between state and local CETA and vocational education levels.

THE ROLE OF VOCATIONAL EDUCATION

IN THE CETA PROGRAM

Working Synthesis Report

Position Statement

Vocational education must be a vital partner in the arena of manpower development and a mechanism for the delivery of services. Vocational education has the potential for assisting the Comprehensive Employment Training Act (CETA) in solving our structural unemployment problems. Vocational education has an opportunity for a much greater involvement in the provision of training and services for economically disadvantaged, unemployed, and underemployed persons.

Vocational education performs a valuable service by seeking out new and innovative approaches to assisting CETA clientele, flagging duplicative programs, thus eliminating the possibility of a dual system of manpower development, and finally by developing statewide training and technical assistance programs for CETA staff that will relate and impact directly on the CETA system.

There exist some similarities between the Manpower Development Training Act (MDTA), CETA, and vocational education. We feel that the history of both acts reveals many more dissimilarities, and that more would be gained by meshing the two rather than merging them. Allowing both to continue their own way without some effort to coordinate would be, we feel, counterproductive in the long run.

We believe that the public education system should retain the responsibility for publicly-financed vocational education programs--including the manpower training and retraining programs for adults. CETA and vocational education stand to benefit immeasurably by utilizing the expertise and services of vocational education, which has the capacity to link the person in need of basic skills with the vast resources of the public education system and the job market.

Congress should take the initiative with vocational educators who recognize the need to make sense out of our overlapping manpower policies and who are willing to reorient their thinking towards the more severe problems of structural unemployment.

Vocational education should be the prime source for all skill training under Title I and the Balance of State. This is to assure appropriate coordination with the state prime sponsors and eliminate duplication of effort in vocational and related services. The programs offered by vocational education should be flexible so that CETA trainees may receive training on individual referral, in fewer than class-size to class-size settings. Training options should include:

1. Open entry and open exit
2. Basic Education/GED
3. Counseling and related services
4. Skill training
5. Job placement

Vocational education's role in CETA has been mandated in yet another way, and that is through the State Manpower Services Council. Many state directors of vocational education and vocational board members are actively involved in the proceedings of this council, and are often the representatives for the State Board for Vocational Education. The importance of representation of directors of vocational education on this council cannot be overemphasized.

Recommendations

We recommend that:

1. Congress devise a clearly-defined mechanism that makes it advantageous for both vocational education and CETA to work together and see that the rules and regulations carry out the intent of Congress.
2. The manpower planning councils, in preparing CETA State Plans, provide for closer working relationships and that the legally constituted State Boards for Vocational Education have the opportunity to comment on the development and other provisions of CETA State Plans.
3. Guidelines be developed whereby the 5% of the Governors Grant be identified and appropriated for vocational training with administrative costs being borne by the 4% of the Governors Grant.
4. Trainee allowance payments not be part of the 5% Governors Grant.
5. Closer coordination be initiated involving the regional CETA offices to standardize the interpretation of CETA guidelines.

A common trust must be established between education and CETA to insure adequate planning and coordination of vocational education programs. Vocational education must broaden its self-view to include and help in meeting the goals of CETA. With it must come a willingness and commitment to cooperate and work with those client groups and individuals who view CETA

as the way to employment but who, in reality, would stand to benefit more from the experience and capacity of vocational education.

Inroads will be achieved only when vocational education and CETA work together toward the common goal of providing all individuals with training and skills to meet the employment needs of a changing society.

SECTION FOUR:
**THE ROLE OF VOCATIONAL
EDUCATION IN LARGE CITIES**

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THE ROLE OF VOCATIONAL EDUCATION

IN LARGE CITIES

by Donald V. Healas*

The role of vocational education in large cities is to provide a flexible and versatile series of quality programs that will meet the needs of the population to be served and to produce a competent vocational product that will fit the requirements of the users, the business-industrial-labor complex. Part of this role is the self-development of a positive image and the acceptance of a sharing of the responsibilities inherent in a total educational system.

The actual role is a study in coping with change and mobility. The large cities, in general, are undergoing a traumatic series of events that have been initiated by individuals and groups representing legislatures, Congress, federal, state, or local courts, city councils, mayors, city managers, boards of education, and public and private agencies. One of the major events constantly being referred to in the various media is the "great white flight from the cities" when, in reality, it should most likely be the middle class flight from the cities. In Cleveland, Ohio, there has been a decline in student enrollment over the past several years. But the evidence points to a gradual and balanced decline in the student population. The racial makeup of the student population has remained rather constant over the past few years.

As the middle class population moves out of the large city they take their taxes and educational interests with them. The replacement population, especially in the central city, is not there. If they do appear, their economic plight may prevent a high degree of interest in education and, more specifically, a higher cost quality vocational program. In addition to the base population being on the move, another vital source of revenue and perhaps more importantly jobs for graduates, the small business-industrial concerns which employ more individuals than the large corporations, are moving out to individual sites and industrial parks. They are not being replaced by like businesses or industries in the central city.

As the central city begins to wither and deteriorate and, in some cases, collapse, the political and business structures attempt to block the deterioration with massive construction projects, including sports arenas, local-state

*Donald V. Healas is director of technical-vocational education for the Cleveland Public Schools, Cleveland, Ohio.

or federal buildings, golden agers apartments, apartment-shopping complexes, old towns, and interstate highways. Unfortunately, many such construction sites will not provide a source of income for the school district, while others will not provide for families with school-age children to return to the city. As the city loses the educational interest--children--it becomes more difficult to acquire the operating and construction funds so necessary to provide quality education. However, in Cleveland during the last ten years the people have voted to increase their taxes by one hundred and thirty-seven percent to support the schools.

While this outward mobility is taking place, the price of doing business in a large city school system is on the rise. Salary and benefit negotiations are held yearly or bi-yearly for certified and non-certified staff. Services purchased from outside firms and utilities are increasing as are various pieces of equipment, textbooks and supplies. The cost of security has increased as parents and school administrators evidence concern regarding student safety during school and to prevent equipment loss during the non-operational hours.

The previous highlights help to sharpen the subject and background of vocational education in large cities. As a result, the interested person will find that vocational education programs represent various degrees of readiness, quality, quantity, creativity, ingenuity, and above all, leadership at all levels. The daily routine is only routine in that one is working to provide a service for people. The forces interdicting on the forward planning and movement of vocational education are as many and varied as there are individuals and groups arrayed for or against the system. The groups and sub-groups represent the various ethnic, political, racial, management, labor, professional, church, women's rights, and sometimes radical wanting to impact on vocational decisions. This does not imply that advisory groups are not needed nor their counsel not heeded. They are a vital part of a planning and evaluation system.

The immediate future role of vocational education in large cities must be flexible and versatile so that it can meet the demands of a changing society. There does not appear to be either a standard for patterns of programming nor a universal trend as to the most efficient physical site for the development, implementation, and modification of vocational education programs in the large cities. Each large city school district, even when two or more are located within a given state, has an infinite number of variables that may or may not be found in common or to the same degree. Each district must be able to deal independently with the many challenges supported by the State Department of Education.

Vocational education in a large city must provide for:

1. Strong leadership that is required during this critical growth period.
2. An awareness program of the critical issues facing the large cities. The program should be directed toward the leadership of the state and federal educational agencies.

3. A communication network with supporting agencies, public and private, associated with all phases of vocational education, manpower programs, and career education.
4. The direct input of critical issues to the teacher education institutions.
5. A closed loop system with the business-industrial-labor communities.
6. The design, development, and utilization of a system for vocational education planning that involves the appropriate segments of society and supporting agencies.

THE ROLE OF VOCATIONAL EDUCATION
IN LARGE CITIES

by Addison S. Hobbs*

The general theme for this paper may be taken from the introduction of Conant's book *Slums and Suburbs* which states that:

. . . to a considerable degree what a school should do (vocational programs) and can do is determined by the status and ambitions of the families being served.

The task of vocational education in the cities is to promote education that encourages motivated students to include skill development in their school programs without bias toward the concept of work oriented activities; and, to utilize the positiveness of reinforcement, through hands-on activities, that relate the world of work to academic subject matter with the educationally disoriented student.

Further, funding methodology must be employed to keep current such aspects as expansion of programs, equipment maintenance and replacement, curriculum updating and continuous in-service training related particularly to the development of alternative teaching strategies, long range planning and program analysis.

Quality vocational programs in the cities may be best offered through a network of comprehensive vocational centers whose primary objective is to teach one and two-year skill programs through a competency based approach. The term comprehensive may be operationalized by viewing offerings as a myriad of at least fifteen programs in a minimum of five fields with connecting modules which allow for individual learning and aspiration levels. These programs should not require more than half the student's time during the one or two years of enrollment. Whenever possible, alternative delivery systems should be utilized for maximum individualization potential. Contracts with industry, cooperative education, shared time with suburban centers, and combinations of each has potential for programmatic efficacy.

Large city centers should not approximate the vocational and technical all encompassing high schools of the past twenty-five years' era in spite of the feigned success of a few state efforts. All high schools in large

*Addison S. Hobbs is the state director of vocational-technical education in Michigan.

cities should accept the challenge of teaching the education basics to their students. This leaves the specific job of skill development as a responsibility of the vocational centers. It also delineates the prime responsibility for teaching self-awareness, career awareness, exploration and decision making to the cadre of disciplines and fields whose mission encompasses accountability for such objectives.

Placement services, including up-to-date occupational information and follow-up of graduates, must be available to in-school and out-of-school children, youth, and adults on a regular basis. The centers must function as a job clearinghouse with input from employment security and comprehensive employment training commissions cooperating in a coordinated effort. The true community center philosophy must be utilized to receive acceptance and full utilization by the citizen recipients.

Long range planning utilizing program analysis, evaluation, and vertical/horizontal articulation must be evident if large city vocational centers are to flourish. Students must be prepared both to enter into industry with marketable skills and also receive credit based on their achievement of defined behavioral objectives in community and four-year colleges.

The type and scope of curriculum should be related to the employment opportunities in the general locality and should be funded on an added cost basis. The added cost factors must be based upon program standards of quality established to promote positive programmatic effects and should represent those extra costs not normally covered in school budgets such as: follow-up studies, advisory committee reviews, and reduced pupil-teacher ratios. Traditionally, budgets in large cities are inadequate to provide total educational services, therefore, vocational education funding sources should provide the proper incentive for continuous operation and not add to the burden of yearly "cuts" necessary to balance budgets.

The concept of continuous in-service training for teachers and aides must be addressed by the state colleges' departments of education. Teaching in large city schools requires constant reinforcement of teaching techniques and understanding the individual recipient's attitudes and life styles. Alternative strategies for teaching the accepted objectives are vital and necessary if a vocational program is designed for a large percentage of the secondary population. Perhaps the colleges can adopt certain vocational centers for indepth exploration of needs and delivery system analysis to improve instruction.

Finally, a middle class misnomer alludes to quality programming as the single facet necessary for successful vocational education in large cities. While one cannot discount the time tested rationale, it is equally important that the facilities be ultra attractive. Flamboyance is a pupil drawing card to educational offerings just as "fine threads" and Cadillac cars interest big city students in the community. Capital outlay for designing, constructing and equipping nice to look at centers should continue to have high priority if large city vocational education is to effectively proliferate.

In summary, the writer has described five elements that may positively affect vocational education in large cities. The use of centers using alternative delivery systems on a half day program basis rather than high schools was identified; placement and follow-up services including occupational information on a cooperative basis with other agencies was delineated; long range planning and frequent program analysis must be utilized; in-service training on a continuous basis is recommended; and the design and construction of eye-catching facilities was recommended.

THE ROLE OF VOCATIONAL EDUCATION

IN LARGE CITIES

by Milton Bins*

At a meeting of Directors of Vocational Education from Large Cities in November 1974, Mr. Lowell Burkett, Executive Director of the American Vocational Association, made an insightful comment. He said, "so goes vocational education in large cities--so goes vocational education in the nation." Implicit in his comment is the recognition that state directors of vocational education, acting in collaboration with state boards and local school districts, are in control of the fate of vocational education in the nation. Why is this so? Because to a large degree you can determine what happens to vocational education in large cities.

How to do this? Perhaps in searching for answers to this question we may find some clarification and understanding on the *Role of Vocational Education in Large Cities*. Before moving on we need to share some information with each other.

What is your educational philosophy? What are your values concerning education? Perhaps more basic to our purpose today, the more relevant question is what are the assumptions on which your vocational education philosophy and programs are based? I ask of you no more than I must require of myself--therefore, so that you will understand me, I will state the assumptions and biases upon which my educational philosophy and programs would be implemented:

1. The needs of humans in our emerging post-industrial society are incompatible with the operative values and belief systems within our society. (By operative values I mean those values that have brought us to the present point of technological and industrial developments--those values we can see from action taken--these are not compatible with people's needs.)
2. Mass communication, especially television, has destroyed the vitality of local and regional cultures, placing on the school greater burdens of acculturation to a vague, undefinable national ethic.

*Milton Bins is senior associate for the Council of the Great City Schools, Washington, D.C.

3. Technology has changed people's perceptions of their relationship to their own work and increasingly separated the home from the job.
4. It is imperative that changes take place in educational purpose, content, practices, and methodologies. I say these changes are necessary because of the increasing complexity of society, the increasing complexity in human relationships, technological advancements, continued hostility among groups in urban areas, and increasing difficulties in finding solutions to social, economic, and environmental problems.
5. It is the school's obligation to teach new values and belief systems that will enable young people to actively and critically challenge their environment rather than passively adjust to unwholesome impossible conditions.
6. The school is the ultimate determinate of the society and the alternate directions the society might take.
7. The schools must take advantage of critical moments in time when conditions are favorable for change and now is one of those moments when opportunity for change is here--it is not likely to reappear soon.
8. Every man has images, limitations, and expectations of himself (and of others) that tend to be self-fulfilling.
9. Every human being has far greater potential than one would ordinarily imagine, indeed than most people would think ever possible.
10. Our human institutions, just as human beings, are malleable--that is, man's institutions can be shaped, but he is also shaped by them. We can begin understanding some of the complexities of our problems if we can understand the mutual relationship between the human being and human institutions.

Now what I am going to say from now on comes out of the assumption of which I have just spoken.

The Role of Vocational Education in Large Cities ought to be one that reflects an understanding of the needs of students in these cities, their heritages, their value systems, their job or career aspirations, how they see themselves in the society, in the world, and in the future. Simultaneously as educators we must believe in the educability of city youths and accept our responsibility for teaching them to think, speak, read, write, relate to people, and to strive for excellence in all things. This role is necessarily more challenging and demanding on educators and institutions because of the special needs of city public school youngsters. Naturally, additional support systems are required because of the economic and social circumstances surrounding the lives of youth in large cities.

Vocational education in large cities must address itself to the mental attitude of minority students toward "trade school" type training and occupations. The legacy of the past is not soon forgotten.

Now to return to the question of how you can affect what will happen to vocational education in large cities. Perhaps the answers lie in the way you respond to the following facts:

1. The substantial unemployment rate in most large cities (see attachments).
2. The unemployment rate for black teen-agers (16-19 years old) climbed to 39.8% for the first quarter of 1975.
3. The unemployment rate for black workers was 14.0% for August 1975. This was almost twice the rate for white workers. This ratio has generally held at 2 to 1 since the Korean War period.
4. The median income of black men was \$5,370 in 1974 and \$2,810 for black women.
5. The median income in 1974 was estimated at \$7,800 for black families and \$13,400 for white families.
6. Jobless rates for Blacks varied substantially by occupation of last job. Among the major occupation groups in 1974, black managers had the lowest jobless rate--3.3 percent. For several occupations--salesworker; non-farm laborers; and operative, except transport--the unemployment rate was most pronounced (above 10 percent).

One set of responses might be the following:

1. The number one priority for vocational education in large cities is to reduce the unemployment rate of minority youths.
2. Federal and state vocational funds should be allocated on the basis of student needs and the number of students served.
3. A major priority of the state vocational education plan is to equalize educational opportunities for groups and individuals who have been neglected and short-changed because of discrimination for one reason or another.
4. The state will support crash funding efforts for school construction in large cities and for upgrading and maintenance of existing facilities.

People often speak of the past as coming back to haunt us. But sometimes it comes in the form of words of wisdom that are timeless just to keep us reminded that our situation in the present is not unique. Such words were spoken by Abe Lincoln in a message to Congress on January 1, 1862.

The dogmas of the quiet past are inadequate to the stormy present . . . As our case is new so we must think anew and act anew.

Abraham Lincoln
Message to Congress
January 1, 1862

Area Trends in Employment and Unemployment

April 1975
(U.S. Department of Labor)

A "labor area" consists of a central city or cities and the surrounding territory within commuting distance.

Major labor areas usually have at least one central city with a population of 50,000 or more. In most instances boundaries of major labor areas coincide with those of Standard Metropolitan Statistical Areas.

Areas of Substantial Unemployment

A labor area in which the current and anticipated local labor supply substantially exceeds labor requirements is classified as an area of "substantial unemployment." An area is placed in this category when:

1. unemployment in the area is equal to six percent or more of its labor force discounting seasonal or temporary factors, and
2. it is anticipated that the rate of unemployment during the next two months will remain at six percent or more, discounting temporary or seasonal factors.

Twenty-four out of twenty-seven Council member cities were included in the labor areas of substantial unemployment in April 1975. Denver, Dallas, and Washington, D.C. were the only Council member cities labor areas not listed as areas of substantial unemployment in April 1975.

THE ROLE OF VOCATIONAL EDUCATION

IN LARGE CITIES

Working Synthesis Report

Background

The large cities, in general, are undergoing a traumatic series of events that have been initiated by individuals and groups representing legislatures, Congress, federal, state or local courts, city councils, mayors, city managers, boards of education, and public and private agencies. One of the major events constantly being referred to in the various media is the "great white flight from the cities" when, in reality, it is most likely the middle class flight from the cities.

As the middle class population moves out of the large city, they take their taxes and educational interests with them. The replacement population, especially in the central city, is not there. If they do appear, their economic plight may prevent a high degree of interest in education and, more specifically, a higher cost quality vocational program. In vital source of revenue and perhaps more importantly jobs for graduates, the small business-industrial concerns which employ more individuals than the large corporations, are moving out to individual sites and industrial parks. They are not being replaced by like businesses or industries in the central city.

As the central city begins to wither and deteriorate and, in some cases, collapse, the political and business structures attempt to block the deterioration with massive construction projects, including sports arenas, local, state, or federal buildings, golden agers apartments, apartment-shopping complexes, old towns, and interstate highways. Unfortunately, many such construction sites will not provide a source of income for the school district, nor provide jobs, while others will not provide for families with school-age children to return to the city. As the city loses the educational interest--children--it becomes more difficult to acquire the operating and construction funds so necessary to provide quality education.

While this outward mobility is taking place, the price of doing business in a large city school system is on the rise. Salary and benefit negotiations are held yearly or bi-yearly for certified and non-certified staff. Services purchased from outside firms and utilities are increasing as are various pieces of equipment, textbooks, and supplies. The cost of security has increased as parents and school administrators evidence concern

regarding student safety during school and to prevent equipment loss during the non-operational hours. Construction costs are generally higher in the large cities.

Position Statement

The statements included in this position paper apply to individuals served by the three major levels of vocational education: secondary, post-secondary, and adult.

The role of vocational education in large cities is to provide a flexible and versatile series of quality programs that will meet the needs of the population to be served and to produce a competent vocational product that will fit the requirements of the users, the business-industrial-labor complex. Part of this role is the self-development of a positive image and the acceptance of a sharing of the responsibilities inherent in a total educational system.

The actual role is a study in coping with the change and mobility factors highlighted in the previous section. As a result, the interested person will find that vocational education programs represent various degrees of readiness, quality, quantity, creativity, ingenuity, and above all, leadership at all levels. The daily routine is only routine in that one is working to provide a service for people. The forces interdicting on the forward planning and movement of vocational education are as many and varied as there are individuals and groups arrayed for or against the system. The groups and subgroups represent the various ethnic, political, racial, management, labor, professional, church, women's rights, and sometimes radicals wanting to impact on vocational decisions. This does not imply that advisory groups are not needed nor their counsel not heeded. They are a vital part of a planning and evaluation system.

Recommended Activities

In order to help meet the various forces preying on large cities as they attempt to offer high quality vocational education, the following activities are most strongly recommended.

1. Delivery of services to students. Placement services, including up-to-date occupational information and follow-up of graduates, must be available to in-school and out-of-school children, youth and adults on a regular basis. Institutions must function as a job clearing-house with input from employment security and comprehensive employment training commissions cooperating in a coordinate effort. Students must be prepared both to enter into industry with marketable skills and also receive credit based on their achievement of defined behavioral objectives for continuing education.

2. Community relations. The true community philosophy must be utilized to receive acceptance and full utilization by the citizen recipients.
3. Administration. Long-range planning utilizing program analysis, evaluation, and vertical/horizontal articulation must be evident for continuing education. Adequate funds must be provided in order to carry out quality programs involving continuous operation, follow-up studies, added equipment costs, reduced class-teacher ratios, and security.

Large cities' school boards of education and the administration of these districts must express as a top priority a dedication to the principles of vocational education and a willingness to provide the leadership necessary.

4. Personnel certification and development. The concept of continuous in-service training for teachers and aides must be addressed by higher education. Teaching in large city schools requires constant reinforcement of teaching techniques and understanding the individual recipient's attitudes, life styles, and other needs. Alternative strategies for teaching the accepted objectives are vital and necessary if a vocational program is designed for a large percentage of the target population. Perhaps the colleges can adopt certain institutions for in-depth exploration of needs and delivery system analysis to improve vocational instruction.
5. Facilities. Capital outlay for designing, constructing and equipping nice-to-look-at vocational institutions should continue to have high priority if large city vocational education is to effectively proliferate. A middle class misnomer alludes to quality programming as the single facet necessary for successful vocational education in large cities. While one cannot discount the time-tested rationale, it is equally important that the facilities be ultra-attractive. Flamboyance is a pupil drawing card to educational offerings just as "fine threads" and Cadillac cars interest big city students in the community.

The number one priority for vocational education in large cities is to reduce the unemployment rate of youths, especially minorities. Federal and state vocational funds should be allocated on the basis of student needs. A major priority of the state vocational education plan is to equalize educational opportunities for individuals who have been neglected and short-changed because of discrimination for one reason or another. To move in this direction, the state may support crash funding efforts for school construction in large cities and for upgrading and maintenance of existing facilities.

Summary

It is imperative that changes take place in educational purpose, content, practices and methodologies. These changes are necessary because of the

increasing complexity of society, the increasing complexity in human relationships, technological advancements, continued hostility among groups in urban areas, and increasing difficulties in finding solutions to social, economic, and environmental problems.

It is the school's obligation to teach new values and belief systems that will enable young people to actively and critically challenge their environment rather than passively adjust to unwholesome impossible conditions.

The schools must take advantage of critical moments in time when conditions are favorable for change, and now is one of those moments when opportunity for change is here--it is not likely to reappear soon.

Our human institutions, just as human beings, are malleable. That is, institutions can be shaped, just as the people within them are, but shaped by themselves. We can begin understanding some of the complexities of our problems if we can understand this mutual relationship between the human being and human institutions.

SECTION FIVE:

**THE ROLE OF RESEARCH IN
VOCATIONAL EDUCATION**

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THE ROLE OF RESEARCH IN VOCATIONAL EDUCATION

by Howard F. Hjelm*

Federal policy toward the administration of vocational education R&D is unique and distinct from that of general education R&D. By law, it is delegated specifically to the Office of Education rather than to the National Institute of Education, the agency of the federal government that has primary responsibility for the administration of educational R&D. Furthermore, the Vocational Education Act establishes a pattern of sharing of funds between the Office of Education and the states for its administration. It is my opinion that this federal-state partnership in the administration of vocational education R&D has turned out to be a wise and beneficial arrangement and should be nurtured and continued.

One major issue in regard to the administration of the discretionary funds is the level at which the priorities are established. Should the Commissioner's discretionary funds be for nationally established priorities and the states' discretionary funds for state priorities, or should both the Commissioner's and the states' discretionary funds be for individual state priorities? This issue, because there is not consensus in regard to it, creates conflict in the system for the administration of vocational education R&D. The proposed legislation sponsored by the Administration, the American Vocational Association, and the American Association of Community and Junior Colleges all call for the Commissioner's discretionary funds to be targeted on national priorities and not on priorities of the individual states. My position would be that the Commissioner's discretionary funds should be for nationally established priorities with the states' portion of the funds being used for the individual priorities identified by each of the states. A cooperative and orderly process involving the states and the Office of Education for generating necessary data and inputs for setting national priorities should be established. The state directors of vocational education could assist in formulating such a process.

Such matters related to the issue of national priorities versus state priorities for the Commissioner's discretionary funds are (1) What should be the role of the states in reviewing applications submitted to the Commissioner? (2) Should the Commissioner's discretionary funds be allotted by state? and (3) How are the National Advisory Council on Vocational Education and the State Advisory Councils on Vocational Education to be involved in setting national priorities?

*Howard F. Hjelm is director of The Division of Research and Demonstration, U.S. Office of Education.

A second major issue is the consolidation of the vocational education discretionary R&D related programs--Part C research, Part D demonstrations, Part I curriculum development, and Part F personnel training. The proposed legislation sponsored by the Administration consolidates all four of these programs. The proposed legislation sponsored by the American Association of Community and Junior Colleges consolidates Parts C, D, and I, whereas, that sponsored by the American Vocational Association does not consolidate any of them. Arguments can be made for consolidation of some or all of the programs and arguments can be made for not consolidating them. My position would be consolidation of the programs, at least Parts C and D.

A third major issue is how do we manage and support a system that enhances the utilization of the outputs of the vocational education R&D efforts. This is a difficult thing in the best of worlds as there is always a certain amount of resistance to change, and utilization of R&D products means change. I believe that the Research Coordinating Units (RCU's) are a potential vehicle for enhancing and speeding up this total process of utilization of products from R&D. The states should strengthen their support of the RCU's. However, there is not consensus on how the RCU's should be financially supported. The legislation sponsored by the American Vocational Association specifically authorizes their support with Part C research funds. The legislation sponsored by the Administration and the American Association of Community and Junior Colleges does not permit the discretionary funds to be used for the support of RCU's.

There are a number of other issues concerning the administration of vocational education R&D. For example: (1) Should the Commissioner support a national R&D center or centers? (2) Should there be a minimum level of funding for each state? (3) What should be the proportion of the discretionary funds shared by the Commissioner and by the states? (4) Should the authorization levels in the legislation for discretionary funds be fixed, a percent of the basic grant, or left unspecified? (5) How should the interests of the post-secondary institutions be accommodated in the administration of the discretionary funds? and (6) Should there be cost sharing requirements?

THE ROLE OF RESEARCH IN VOCATIONAL EDUCATION

by Kenneth M. Eaddy*

It is assumed that a major responsibility of state vocational directors is to maintain and improve vocational programs as quickly as possible, for the greatest number of persons at the least cost to those who support the system. Based upon this assumption it is well to consider the support of research activities designed to provide information immediately useful to the resolution of the many complex problems confronting directors.

For the purpose of this paper research is conceived in its most generic sense--as an integral part of program planning, implementation, evaluation, and diffusion. This view perceives research not as a narrow function which is the role often portrayed, but rather as a functional part of the total vocational system. The role then of research is to facilitate change and improvement in vocational education.

This role is not in opposition to the intent of Congressmen who enacted the Vocational Education Amendments of 1968. A review of the document indicates, even to a hasty reviewer the breadth of activities and the intended functional role of research in vocational education. It may be well to again note that Part C of P.L. 90-576 authorizes 50% of the research funds to be used by states for the purposes of supporting up to 75% of the cost of research coordinating units; for grants to colleges, universities, other public or non-profit private agencies, and local educational agencies; and for contracts with private agencies, organizations, and institutions. The monies may be used to pay up to 90% of the costs of contracts or projects for research and training programs; experimental, developmental, or pilot programs; and dissemination of information from research and demonstration programs. Part C is not the limit of authorization in the Act to support research activities. Reference is made to Section 122(b) 2 and 3 which treats evaluation and manpower needs data; Section 122(s) 8 deals with evaluation and development activities as a part of ancillary services.

The Act also includes support of activities designed to develop, establish and operate exemplary and innovative programs in Part D.

There is no doubt that a Legislative Mandate exists in P.L. 90-576 to support research as an integral part of each state vocational system.

*Kenneth M. Eaddy is chief of the Bureau for Vocational Research in Florida.

Given acceptance of the role of research to the system of vocational education the remainder of this paper will briefly treat roles of research related to the subsystems of planning, implementation, evaluation and diffusion of vocational programs.

The ultimate success of any vocational program is in great measure dependent upon the quality of planning achieved. At the state level directors may be responsible for maintaining accurate labor market need data; manpower availability information; facility and equipment inventories; enrollment figures; training capacity projections; fiscal resource needs and a host of other pertinent data useful to educators at all levels in developing efficient comprehensive plans. The role of research and related activities to this function of the vocational system is indeed varied. As gaps in the information and data bases are identified and made known by specialists in this area, research efforts can be brought to bear on many of the problems of planning. For instance, an examination of the planning function may indicate a less than effective need assessment link. Need assessment models can be adapted or adopted from existing systems to fit the specific needs of this very necessary and often missing link. Research expertise can be useful in solving this critical problem. To continue thoughts along this line, if an acceptable model for conducting need assessments is developed, research methods of testing and validating the system can be readily provided by researchers to planners. One additional step involving the use of research and related activities may be appropriate to bring the "needs assessment" problem to closure. That step is dissemination and diffusion of the improved system shown to have value in the field-testing phase of development. The processes of dissemination/diffusion are complex but vital to the improvement of vocational education. The possibility of productive efforts in this area is enormous and planners of vocational education should expose a host of fertile research problems in this area.

A second sub-system of vocational education is program implementation. This area of operation is so varied and complex as to almost defy even a cursory examination in this limited paper. However, for thinking purposes it may be profitable to consider the activities of instruction and relate them to research. It is assumed that professional instructors of vocational programs must be responsible for selecting valid program objectives; choosing effective learning experiences; organizing efficient learning structures and devising adequate evaluations for assigned occupational areas. In an era of constant and rapid technological change this task is impossible to achieve without a viable research and development system. Learning managers cannot possibly be expected to adequately deal with the new knowledge generated in the fields of psychology, anthropology, medicine, biology and other disciplines relating to vocational education. Yet, legislators, parents and persons employing the products of vocational programs--the students, expect highly trained graduates at the least possible cost, and rightly they make those expectations known publicly.

Research must play an important role in solving the many complex problems hinted at in the above paragraph. Valid program objectives can only be identified if a systematic approach is used to collect and constantly keep

updated those entry level worker skills and competencies. Research techniques to select adequate sample sizes; accurately determine time spent in performance of tasks; pinpoint criticality and perishability of objectives are examples of elements not dealt with extensively several years ago, but they represent crucial areas of concern to instructors today. Without research and development, instructors will not use the most effective teaching methods or effective instructional materials. Curriculum development laboratories should not be considered a luxury today in vocational education. They represent a "must" on many directors' list of support areas. Teachers do not have the time nor the expertise to develop and validate through field-test instructional materials guaranteed to teach at least 90% of the students 90% of the program objectives shown through rigorous investigation to be needed for entry level work. Nevertheless, vocational teachers must begin to make those guarantees to the public and research and related activities are necessary for this high level performance. Persons having the skills and competencies to assist teachers in this area are available, but they are in short supply. Large numbers must be trained and research can help train them. As responsible vocational educators we cannot afford to use less than the best instructional materials. Teachers, instructors, classroom managers, administrators and supervisors must be trained, and those already employed must be retrained to use the materials. Again, research and related activities are necessary resources to bring to bear on the problems of in-service training.

Lack of space does not permit further discussion of the facilitating role of research to this interesting area of implementation. One is limited only by imagination in the continued description of relationships of instruction to research.

A third sub-system of vocational education is evaluation. Evaluation has many relationships with research. All directors of vocational education must provide for evaluations of existing programs to determine the degree to which students have achieved stated program objectives. Special and innovative programs must be assessed as to their value in bringing about resolutions to identified problem areas. Costs of programs must be identified and results used in determining effectiveness, benefit and utility ratios. Citizens who support vocational education programs are no longer willing to spend scarce funds in support of programs having low percent returns on dollars invested. Educators must know how to measure program success and use their findings in making decisions about future levels of program support. Research and related activities can facilitate a more positive and successful move to the use of evaluation as a management tool by teachers through developing, testing, and making the system available.

A fourth sub-system of vocational education in which research has a close relationship and facilitating role to play is that of dissemination and diffusion.

If vocational directors are to have a positive impact on programs of vocational education, answers to needs must be identified, developed, validated and diffused. Research and related activities can be used in a facilitating role to create this situation.

For example, research activities are needed in the development and validation of effective practices which can be installed in a new vocational situational context without excessive costs. This calls for conceptualizing, developing, testing and installing a system which interfaces vocational education alternatives with needs which have been identified through planned evaluations. Many working relationships, such as those that must exist between change agents and user groups; developers and facilitators; facilitators and community representatives; and the structural relationships of objectives to strategies must be established, described and controlled if diffusion of improved practices is to occur in vocational education.

It is the opinion of this writer that research and related activities can and must provide supporting or facilitating roles to the vocational educator who sincerely endeavors to structure a situation in which the subsystems of planning, implementation, evaluation and diffusion provide a realistic, quality vocational program to all who can profit from such training.

THE ROLE OF RESEARCH IN VOCATIONAL EDUCATION

by Daniel E. Koble, Jr.*

NOTE: The ideas and opinions expressed in this paper are those of the author and do not necessarily reflect the philosophy, policies, or points of view held by his employer, The National Center for Vocational Education.

Research basically is a problem-solving strategy. It is interrelated and interactive with evaluation and development in resolving real problems in vocational education. Research is a purposive strategy for solving problems in that it has evolved over time as a means for achieving specific ends. It is an empirically based process which involves making and recording direct observations in one form or another. The major purpose of research is the creation of generally applicable knowledge. Research is the process of converting unknowns to knowns. The greatest single use which can be made of research in vocational education at all program levels is in the activities related to systematic problem solving.

Development in vocational education is another empirically based process. Development produces the tools and procedures needed in performing educational operations.

Research and development should be used by practitioners in vocational education as tools for the facilitating of program goals and objectives and for the reduction of uncertainty which is inherent to the making of program decisions.

The most practical type of research is that type which has immediate and effective application to known problem situations related to the delivery of vocational education. A vital part of this delivery system is the activities which deal with the supervision and/or administration of vocational instruction. Practicing managers of vocational programs at all levels must make effective use of research output in one or all of the following ways:

1. Development and testing of new curriculum areas
2. Quality control of instructional programs and related services

*Daniel E. Koble, Jr. is a research specialist with The Center for Vocational Education, The Ohio State University, Columbus, Ohio.

3. Decision making
4. Policy formulation
5. Resource allocation
6. Program planning
7. Uncertainty reduction

The role of research in vocational education is primarily one of improving, refining, adjusting, and extending all dimensions of vocational education. Examples of specific dimensions which may be addressed by research efforts are: planning, assessment, development, administration, supervision, instruction, guidance, job placement, finance, etc.

Research efforts in vocational education should employ a variety of research activities such as:

1. Basic research is the purest and most fundamental type of research. Its conduct is directed toward a correlation of human experiences into the total structure of thought and understanding in such a manner that the resulting coordination is complete and meaningful. A minimum amount of activities should be needed in this area since much basic research which has been completed in disciplines such as psychology, sociology, and economics can be adapted for use in vocational education. However, a minimal program of basic research should be maintained in order to treat the unique needs of vocational programs not covered by the products of these other related areas.
2. Applied research uses the input from basic research to solve existing problems in vocational programs. It is directed at demonstrating that the findings of fundamental or basic research may be applied in new and useful ways toward predetermined goals. The bulk of all research activities conducted at a national or broad-based level should be aimed at application oriented goals.
3. Analytical research is performed for the purpose of finding out the composition, structure, and other vital characteristics of a given institution, organization, object, practice or other variable in vocational education. Examples of this type of research are: needs analysis at various organizational and political levels within vocational education and demographic surveys of state and local vocational education agencies including important characteristics.
4. Action research is an on-the-job type of problem solving activity used by instructors, supervisors, administrators, ancillary personnel and others to upgrade the quality of their actions and decisions. This type of research is developmental in nature and is case specific in that the findings resulting from such activities are not applicable beyond the specific case studied.

5. Client research is conducted to determine (a) the attitudes and needs of clients and potential clients of vocational education, (b) the best specifications for educational programs, and (c) the relative effectiveness of educational programs. Examples are manpower need and supply studies, surveys of community attitudes toward vocational education and follow-up studies of former students.
6. Curriculum research involves a systematic investigation and assessment of the identification of content to be included in the vocational education program. Also includes a study of the selection and placement of instructional materials, activities, and experiences so as to maximize educational benefits for individual learners.
7. Deliberate research involves the examination and assessment of findings from studies or points of view relating to values or interpretations of vocational education programs. This is a think-tank type of research which involves discussion or exchange of ideas and/or opinions along with a progressive clarification of such issues and values with the purpose of the development of practical applications.

The research function in vocational education is extremely diverse and should be performed at all levels within the vocational continuum. Because of this diversity of performance location and level the activities and outcomes expected from research at the various continuum components should also vary greatly.

ROLE AND FUNCTION OF AGENCIES/INSTITUTIONS IN VOCATIONAL EDUCATION RESEARCH

Level	Agency/ Institution	Functions--Activities--Products
National	Congress of the United States, Office of Education, National Institute of Education	Basic function is one of guiding and supporting research activities at the state agency level. Activities include establishing national goals and priorities, providing federal source funds to improve, extend, and expand research programs at the state level. Provide technical assistance to state vocational education research activities through regional offices. Provide a national center for research, development, dissemination, and personnel development in vocational education. Collect, process, and publish data about vocational education in the various state units. Assess the adequacy and effectiveness of research organizations

Level	Agency/ Institution	Functions--Act . ities--Products
State	State Legislative Bodies, State Vocational Education Governing Boards, State Vocational Education Agencies	Basic function is one of guiding and supporting research activities at the intermediate and local agency levels (to include higher education institutions). Activities include establishing state goals and priorities, providing state source funds to improve, extend, and expand research activities at local, intermediate, and in other sub-level agencies. Provide technical assistance and services to intermediate and local level vocational education research and development functions through a state research coordinating unit. Collect, process, and utilize data about vocational education in the various intermediate, local, and related agencies and institutions throughout the state. Assess the adequacy and effectiveness of research and development activities in local, intermediate, and related agencies and institutions.
Inter- mediate (regional) and local	Intermediate and local boards of control, intermediate and local vocational education agencies and institutions	Basic function is that of identifying, selecting, and adopting program and instructional practices/techniques which will upgrade the program of vocational education. Activities include establishing local goals and priorities, providing local source funds to improve, extend, and expand research/development activities in educational institutions. Intermediate units and larger urban units provide technical assistance and services to school building units through a research coordinating unit. Collect, process, and utilize data about vocational education in the various building units and related institutions throughout the unit served. Assess the adequacy and effectiveness of research/development activities in the district and in each institution being served.

Some general principles which apply to programs of research in vocational education are:

1. Research in vocational education should mean different things to different people depending on their job assignment, level of function, perception of the job to be done and background of experience. Each level, institution, and agency should have a commonly accepted broad set of goals, functions, and activities which serve as minimum standards of performance. Each unit must have wide latitude to operate within these minimum standards and to add additional functions/activities as necessary and desirable.
2. The National Center for Vocational Education provides a multitude of research and development related services and functions. Among these are basic research in areas not adequately investigated by other research agencies or institutions; applied research through the analysis of problems/needs and the application of basic research findings to a solution; and consultative and other services as needed.

Long term solutions to complex problems/needs should be thoroughly field tested and validated before final release. This field testing may take a combination of two forms:

- a. formative field testing where development and testing are done simultaneously through close interrelationships of Center research staff and interested practitioners in the field,
- b. summative field testing where development is done by Center research staff with advice from practitioners. In this case field applications are held up until all developmental activities are completed. Field testing and validation takes place at a limited number of sites under rigidly controlled conditions. Materials are disseminated only after they are proven to be successful.

The Center should coordinate and facilitate the dissemination of research findings to state, intermediate, and local agencies.

The Center should supplement and complement those resources which state, intermediate, local institutions and agencies have by providing consultative assistance and various problem centered field studies as requested.

3. A system needs to be employed to identify areas of overlap and gaps in research. This is especially needed in the area of curriculum research where many duplicative research efforts are now underway at all levels.
4. State research coordinating units should devote the major portion of their activities to deliberative research, curriculum research,

client research, and analytical research. An adequate amount of attention should be given to the dissemination of innovative and exemplary materials/ideas.

5. Local research efforts should be limited to developmental/implementation activities which include analytical research, action research, and client research.
6. There is a critical need to invest more risk capital at all levels of vocational education in well-planned research activities. The basic financial support for research activities should be derived at a source which is most appropriate to the level of application, i.e., federal funds should be used to support primarily those research efforts which have a national impact; state funds should be used to support primarily those research efforts which have a statewide impact, etc.
7. Funding strategies for research and development activities contained in all forthcoming state and federal vocational education legislation should be carefully structured in order to allow agencies and institutions who are the recipients of the funds to use their discretion in assigning funds to one of these two functions or to write the legislation more specifically in order to differentiate between these two uses in a more precise manner.
8. Personnel development activities such as programs of internship, externship, in-service and preservice staff development should be structured so as to foster an appreciation and understanding of research in vocational education.

In summary the following two definitions may be used to differentiate and identify programs of research and development in vocational education.

Research means a formal, intensive, and systematic investigation which employs the scientific or problem-solving method and is directed toward the clarification and/or resolution of a problem.

Development means a process of scientific inquiry which results in improvement in a product, program or situation. Such term cannot be equated with either production or use, but occurs when progress toward specified outcomes takes place. Revision cycles with feedback loops are essential to the process.

NOTE: Attached are copies of previous research position statements passed by NASDVE and AVA.

RESOLUTION OF THE NATIONAL ASSOCIATION
OF STATE DIRECTORS OF VOCATIONAL EDUCATION

RE: CONTINUED SUPPORT OF
THE NATIONAL R&D CENTER FOR VOCATIONAL EDUCATION
December 10, 1974
New Orleans, Louisiana

Recognizing the continuing need for research, development, dissemination, and training in vocational education which in part can most effectively be provided through a National Center, and the sustained support of The Center at The Ohio State University by the National Association of State Directors of Vocational Education and the American Vocational Association,

BE IT RESOLVED that the National Association of State Directors of Vocational Education reaffirm its resolution of September 7, 1970 and indicate continued support of the American Vocational Association's House of Delegates resolution of December 12, 1963 and continue to urge the Office of Education to provide adequate support for the National Center.

S. Francis Tuttle
President

RESOLUTION

Passed by the Board of Directors of the National Association of State Directors of Vocational Education, Thursday, September 17, 1970

Recognizing the general excellence of the program and activities of The Center for Research and Leadership Development at Ohio State and the many contributions it has made to Vocational and Technical Education throughout the U.S., Be it resolved that the Executive Committee of the National Association of State Directors reaffirm its support of this Center at Ohio State and its leadership training seminar for the directors.

Because of the management and staff expertise at The Center and the education and economic efficiencies to be achieved through building on these existing strengths we therefore encourage continued support for The Center by the O.E. and the states and request that authorized financial support be achieved for the O.S.U. Center before additional centers are established. Further as new Research, Development and Training initiatives are contemplated in Vocational Education we request that consideration be given to the feasibility of the Center's providing some of these services.

RESOLUTION PASSED BY THE HOUSE OF DELEGATES
OF THE AMERICAN VOCATIONAL ASSOCIATION
Atlantic City, New Jersey
December 12, 1963

NATIONAL CENTER

WHEREAS, the current social and economic climate places increased urgency on the need for an expanded, extended, and improved program of vocational and technical education including new techniques to meet changing needs, and

WHEREAS, pending legislation proposes additional aid for expansion and adjustment of vocational education to meet these training needs and emphasizes the importance of more effectively attacking problems to meet these needs which involve the several existing vocational services and new services which do not now exist, and

WHEREAS, these increased responsibilities place greater demands on state staff leadership, thereby creating greater need for in-service leadership training and advanced study for present and prospective staff members, and

WHEREAS, a National Center for Advanced Study and Research in Agricultural Education has been established and has aided the profession in meeting these increased responsibilities, and

WHEREAS, such a Center limited to agricultural education can provide only limited service in the broad field of vocational education, and

WHEREAS, a National Center for advanced study and research in vocational education is needed for cutting across and going beyond present areas, as well as depth study in each area is needed, and

WHEREAS, the establishment of a national center for advanced study and research in vocational and technical education would provide a means of meeting significant needs for state staff and research development in overall vocational services as well as providing for the unique needs of each service, and

WHEREAS, a National Center for advanced study and research in vocational education would supplement and extend existing state and institutional programs as well as stimulate such existing programs,

THEREFORE, BE IT RESOLVED THAT the AVA approve in principle and support the establishment of a National Center for advanced study and research in vocational and practical arts education which would include strong advanced study and research programs in each vocational and practical arts education service under the direction of an overall National Center staff which would promote and strengthen overall administrative and supervisory leadership development of vocational education, coordinate research efforts, and develop methods and programs to meet needs not being met in present programs.

THE ROLE OF RESEARCH IN VOCATIONAL EDUCATION

Working Synthesis Report

Position Statement

The primary role of research in vocational education is to serve as a source of renewal for vocational education programs. As vocational education's chief problem solving strategy, research is interrelated with all processes of vocational education. It is a purposive strategy for solving problems which inhibit or restrain the renewal process in vocational education. This view perceives research not as a narrow function which is the role often portrayed, but rather as a functional part of the total vocational system.

Research is problem-focused and in all its forms permeates every level and dimension of vocational education. Research is a support service which possesses capacities for (1) problem identification and validation; (2) alternatives selection; (3) idea testing; (4) risk taking; (5) information generation, review, synthesis and dissemination; (6) prioritizing problems and use of resources; (7) problem solving; (8) creating generally applicable knowledge; and (9) the application of new technologies to the educational planning, development, and management process.

Recommendations

While research is clearly a "need" of vocational education, it too has needs. Research, to be a viable support service to vocational education, needs:

1. a clearly defined, saleable and practical description which clarifies application of the scientific method to the problems and issues of vocational education;
2. a system for management of research functions and actions;
3. a cycle that is not self-perpetuating but rather is a source of renewal for vocational education;
4. a management vehicle, such as an RCU or center which integrates the system and the cycle into a functional support dimension;
5. resources, both fiscal and human;

6. the understanding, support, criticism and utilization of data and information by top level managers or decision-makers; and
7. to be exercised in an unconfined, valueless fashion in contributing to management information.

Research in vocational education is dependent upon these needs. They can only be addressed by a thorough analysis or description of the dimension of vocational education which are dependent, in turn, upon research. Critical dimensions which are "research-dependent" are: improving, refining, adjusting, and extending existing vocational education programs. Examples of specific dimensions which may be addressed by research efforts are: planning, assessment, development, administration, supervision, instruction, guidance, job placement, and finance.

Research in vocational education should mean different things to different people depending on their job assignment, level of function, perception of the job to be done and background of experience. Each level, institution, and agency should have a commonly accepted broad set of goals, functions, and activities which serve as minimum standards of performance. Each unit must have wide latitude to operate within these minimum standards and to add additional functions, activities as necessary and desirable.

Long-term solutions to complex problems/needs projected within this framework should be thoroughly field-tested and validated before final release.

Effective research requires investment of risk capital at all levels of vocational education in well-planned research activities. The basic financial support for research activities should be derived at a source which is most appropriate to the level of application, i.e., federal funds should be used to support primarily those research efforts which have a national impact; state funds should be used to support primarily those research efforts which have a statewide impact, etc.

In order to maximize benefits of research it is necessary that adequate funds be provided to maintain and strengthen a national center and state centers with a strategy for linkage, coordination and cooperation to reduce redundancy and unnecessary duplication in vocational education research.

SECTION SIX:
STANDARD CHARACTERISTICS
FOR VOCATIONAL EDUCATION
PROGRAMS

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STANDARD CHARACTERISTICS OF VOCATIONAL EDUCATION

by Darrell L. Parks*

Standard characteristics are an inherent part of the philosophy and definition of vocational education. Standard characteristics should be:

- an outgrowth of a philosophy of vocational education,
- consistent with the role of vocational education,
- a corporate part of the governance of vocational education, and
- supportive to the definition of vocational education.

Thus, the standard characteristics of vocational education, as set forth in this paper, will by necessity reflect and relate to a philosophy and definition. Furthermore, the term "standard characteristics," as reflected within the content of this paper, relates to distinguishing traits or features regarding vocational education which are important in fulfilling its purpose, and which may or may not be consistent with individual educational disciplines.

For the purpose of this paper, standard characteristics of vocational education will be viewed from a perspective common to both state and local levels of program administration and/or operation. Admittedly, selected characteristics may have slightly different interpretations depending on the program level. However, the ensuing proposed characteristics are inherent to sound program management and effective services to youth and adults regardless of the level of operation.

1. Philosophical and educational foundation -

Initially a program of vocational education must be founded upon a sound philosophical and educational base. Without such a base upon which to build, the program will have neither stability nor a sense of direction.

The program philosophy should reflect the fundamental purpose of vocational education and its place in the social, economic and educational environments. Specifically, the philosophy should address two fundamental questions:

*Darrell L. Parks is assistant director of vocational education in Ohio.

- a. Why vocational education in lieu of or in conjunction with other educational concepts?
- b. What is vocational education with respect to meeting current and projected social, economic and individual needs?

The educational program should be a core type curriculum aimed at preparing individuals for employment. Such a vocational education base must embrace the principals of learning which point up the importance of the relationship of knowledge taught to the effective use and application of such knowledge.

The philosophical and educational foundation for vocational education must emanate from a state leadership point of view. However, such a foundation must be subscribed to at the local level of program administration and operation if it is to be effective.

Subsequent to the formulating of a philosophical and educational base relative to vocational education, it is necessary to structure and implement an effective delivery system for vocational education. Such a delivery system must possess a set of standard characteristics if the state educational agency (SEA) and the local educational agencies (LEA) are to fulfill their respective leadership roles in program development, implementation and administration.

2. Constituency support -

Although treated as a separate entity, building program constituency is dependent upon and closely allied with other characteristics related to program philosophy, quality and outcomes. However, the importance of program constituency merits discussing it independently of other common characteristics.

Constituency support does not come about automatically, but must be cultivated and nurtured at all program levels if vocational education is to prosper and grow. Vocational education is a service effort for both the individual and business and industry. Close relationships must be developed and maintained with persons who need vocational education and agencies who employ the product in order to assure current and relevant program content and skill development. Vocational education functions within, and as a part of the social and economic environment. Community involvement and input must be sought and taken into account if continuing public support is to be realized. Legislatively, there must be laws and regulations and financial support for vocational education if it is to reach its potential in services to our society, and finally, vocational education must be packaged in such a manner that it appeals to the needs and interests of a significant segment of the student clientele.

Ultimately, the goal of building a constituency is to attain the degree of commitment and support for vocational education that will

assure its prominence and permanence on the educational scene. Thus, each program level and, in fact, each individual program offering must possess and effectively utilize the appropriate constituency promoting vehicles essential to program development, operation and success.

3. Program planning -

It is the responsibility of the SEA to provide an adequate program of vocational education for all people in all parts of the state. In order to fulfill such a responsibility, careful and detailed planning on a statewide basis is essential. Such planning must be based upon a set of statewide goals and measurable program objectives and the effective utilization of valid regional and/or statewide data and information.

Once developed, the state plan for vocational education must be translated into LEA level plans of action. If differences arise between SEA and LEA plans of action for vocational education, adjustments will have to be effected in order that the plans are compatible. Hence, a standard characteristic of vocational education at all program levels should be a carefully developed and documented program plan that is based upon a set of specific goals and measurable program objectives and which will facilitate and support subsequent planning and programming efforts.

4. Pattern for program development and expansion -

Like most social movements supported and financed via local, state and/or federal tax revenues, vocational education must compete for the limited tax dollar. Based on the assumption that vocational education needs exceed available sources of revenue, it is essential that optimal use be made of available dollars. The assurance that fiscal optimization is being realized necessitates a carefully derived pattern for program development and expansion. Thus, a fourth standard characteristic of vocational education should be the existence of a comprehensive pattern for program development and expansion supported by legislation and fiscal commitments at the state and local levels, and which takes into account occupational needs, student base, and educational resources available or required.

5. Program standards -

In order to provide the quality of services needed by the individual and employers and to assure an effective use of fiscal and educational resources throughout the state, it is essential that vocational education programs be built around and maintained upon a set of appropriate program standards. These standards should address the "four factors of production" relative to vocational education; namely, curriculum and instruction, facilities and equipment,

instructional staff and students. Consequently, a fifth standard characteristic of vocational education should be the availability of a comprehensive set of program standards related to the "four factors of production" in vocational education that contribute to and enhance the quality of the programs of instruction. Such standards must be accompanied by the appropriate mechanisms for monitoring and enforcing them.

6. Personnel development -

Regardless of the soundness of the program philosophy, the comprehensiveness of goals and objectives, or the appropriateness of program standards, the degree to which vocational education is effective is largely dependent upon the availability of quality state and local leadership and instructional personnel. An adequate supply of competent personnel is too important to vocational education's success to leave to chance. Thus, a sixth standard characteristic of vocational education should be a well defined and operative program of professional personnel development which assures an adequate supply of leadership and instructional personnel who are imbued with both the technical and pedagogical skills and understandings essential to program development and operation.

7. Evaluation -

Program review and evaluation are key ingredients to any program's success. Program review in vocational education should embrace two dimensions; namely, process and product evaluation.

Process evaluation is formative in nature and its primary purpose should be the improvement, development and expansion of vocational education. This evaluative component assures the effectiveness of the program variables of curriculum and instruction, facilities and equipment, instructional staff and students. Comprehensive evaluation measures of a formative nature should provide for a self-review of programs at the operational level as well as an external assessment from a SEA perspective.

The degree of success and support enjoyed by vocational education will be largely dependent upon the number of students who obtain full time employment and who perform satisfactorily on the job. Such employment obtained by the products of vocational education must be directly related or closely associated to the type of training received. Student placement and follow-up is essentially a product or summative evaluation component and is the accountability measure for vocational education. Placement and follow-up evaluation is primarily a LEA responsibility and not only reflects the qualitative aspects of the educational program, but also assesses the soundness of the philosophical and educational base upon which the program has been built.

Therefore, an inherent standard characteristic of vocational education is a mechanism which provides for periodic formative and summative program evaluation. It is desirable that such a review process include a LEA self-review and an external review from a SEA level. The evaluation mechanism should also provide a means for review follow-up and program redirection.

In summary, standard characteristics of vocational education must be an outgrowth of and built upon a philosophical foundation. Once the standard characteristics have been determined, operational criteria must be established for each standard characteristic. The establishing of such operational criteria must once again evolve from and relate to the program philosophy.

STANDARD CHARACTERISTICS FOR VOCATIONAL EDUCATION

by Otto P. Legg*

The topic suggests that there are problems with standards and identifiable characteristics of vocational education. I believe the basic problems can be identified as follows:

1. the range of occupations in business and industry;
2. the scope and diversity of vocational programs as occupational requirements are translated in curriculums, both are in some state of constant readjustment;
3. the sudden growth of students, teachers, and administrators;
4. the changing needs, attitudes and values of individuals and institutions;
5. the history of practice (tradition) within the ranks of vocational and general educators;
6. the educational process and structure; and
7. the effect of the various interpretations of the federal vocational acts and regulations.

Within each vocational program area there must be recognized, agreed upon authoritative models or patterns which serve as a basis of comparison for guidance which are typical and distinctive. The task then becomes how to keep typical and distinctive models or patterns recognized, accepted, and followed. With the growth of vocational education by specialization, by institutional setting and by state, varying patterns emerge. Coupled with a constant and great influx of new teachers and administrators from many backgrounds of interest and experience the diversity of patterns multiply. Multiply the differences which are likely to occur by state and locality within each narrow area of occupational preparation by the number of possible occupations and the situation is further complicated.

*Otto P. Legg is an education program officer with The Program Support Branch of The U.S. Office of Education, Division of Vocational and Technical Education.

When we look for agreement on the authoritative models or patterns to follow in continuing to provide vocational education we are confronted by this vast array of conditions defying standardization. We have what I believe to be the most influential documents describing the standard characteristics of vocational education which outline the parameters of vocational education. The language was designed to allow for flexibility of continued growth and adjustment. These are the Vocational Education Act of 1963, as amended and the Code of Federal Regulations, Chapter 45, Sections 102 and 103. Within Section 102 are the objectives of instruction and the content of vocational instruction.

Section 102.4(b) Objectives of Instruction. (1) Vocational instruction shall be designed to: (i) prepare individuals for gainful employment, including volunteer firefighters, as semiskilled or skilled workers or technicians or semiprofessionals in recognized occupations and in new or emerging occupations; or (ii) prepare individuals for enrollment in advanced or highly skilled vocational and technical education programs; or (iii) assist individuals in the making of informed and meaningful occupational choices, or (iv) achieve any combination of the above objectives.

Section 102.4(e) Content of Vocational Instruction. The content of vocational instruction shall be developed and conducted in accordance with the following standards to assure soundness and quality in such instruction:

1. The program of instruction shall be based on a consideration of the skills, attitudes, and knowledge required to achieve the occupational or other objective of such instruction, and includes a planned sequence of those essentials of education or experience (or both) deemed necessary for the individual to achieve such objective.
2. The program of instruction shall be developed and conducted in consultation with employers and other individuals or groups of individuals (such as local advisory committees) having skills in and substantive knowledge of the occupations or the occupational fields included in the instruction.
3. The program of instruction shall include the most up-to-date knowledge, attitudes, and skills necessary for competencies required to meet the occupational or other objective of such instruction.
4. The program of instruction shall be sufficiently extensive in duration and intensive within a scheduled unit of time to enable the student to achieve the occupational or other objective of the instruction.
5. The program of instruction shall combine and coordinate classroom instruction with field, shop, laboratory, cooperative work, apprenticeship, or other occupational experience which (a) is appropriate to the occupational or other objective of the instruction,

(b) is of sufficient duration to develop competencies necessary for the student to achieve such objective, and (c) is supervised, directed or coordinated by persons qualified under the State Plan.

Are we measuring the quality and intensity of instruction? Do we have the proper combination of educational experiences to satisfy competency requirements? Are the individuals who administer and teach totally qualified? I contend the basic characteristics of vocational education are described but the evaluation and measurement activities necessary to achieve recognized and agreed upon standards are yet to be attained.

This situation unattended leaves a vacuum into which all who will may propose or substitute a measurement.

Vocational education is and should be kept in a controlled dynamic state influenced by the environment in which it exists recognizing that the environment is constantly changing.

We may at some point attain "Standard Characteristics for Vocational Education Programs" but we are not there yet!

STANDARD CHARACTERISTICS FOR VOCATIONAL
EDUCATION PROGRAMS

by James E. Wall*

Traditional vocational education curriculums have related to only a small portion of the overall learning process, the skill acquisition portion. Currently, however, curriculum developers are utilizing a more coordinated systems approach in the preparation of instructional materials. This approach includes at least minimal components in the systems. These system components are directed toward increasing the learning effectiveness of curriculums and their instructional materials. They also are directed toward a consideration of the quality of life that a person might live as a result of acquiring and applying work skills.

Any statement concerning curriculum standards must be preceded by a few important characteristics which the standards should possess. The standards should be broad enough to cover all aspects of the concept curriculum. Simultaneously the standards statement should address the basic factors in curriculum, i.e., assessment to determine curriculum needs, development and testing of instructional materials, implementation or installation of materials, and evaluation and follow-up to determine learning effectiveness and to obtain data for curriculum revision and/or new offerings. Curriculums that are developed on this type of foundation will possess a maximum of flexibility. Such flexibility will cause them to be more transportable than materials not so characterized.

With the above general comments in mind, attention is focused on specific standards. Standards 1, 2, and 3 are concerned with needs assessment.

1. Curricular offerings should be based on a thorough analysis of occupational patterns and trends, business-industrial-agricultural trends, community and/or state development trends, and population shifts and changes in composition. Decisions about curricular offerings should be influenced by a wide variety of citizen/worker groups, councils, and committees. The emphasis should be on people involvement.

*James E. Wall is associate dean for research and development, The College of Education, Mississippi State University, Mississippi State, Mississippi.

2. Curricular offerings should be influenced by students and/or trainees--their goals, aptitudes, interests, ability levels, socioeconomic characteristics, and their present and projected enrollment numbers, curricular offerings should be integrated with supporting services including other educational subjects, social services, guidance and counseling services, financial aid and support, remedial education, etc.
3. Curriculums, while oriented to individual needs of diverse groups, should strive to integrate "special needs" persons into regular programs insofar as is feasible and practical. This standard will be easier to achieve if curriculum materials are developed in an individualized instruction format.

Standards 4, 5, 6, 7, and 8 deal with curriculum materials development.

4. Curriculum development should be based on a set of national standards which provide uniformity of procedural steps, style, and format. Such standards, once adopted by curriculum laboratories and centers across the nation, would go far in enhancing the transportability of materials. The National Network for Curriculum Coordination in Vocational-Technical Education has as one of its long-range goals that of deriving a set of national standards for curriculum development.
5. The curriculum development process should contain as a minimum the following steps: (a) conduct feasibility study of all available data; (b) conduct task analysis; (c) develop performance objectives; (d) develop criterion-referenced measures; (e) validate criterion-referenced measures; (f) validate performance objectives; (g) develop learning sequence; (h) develop learning strategies; (i) develop modules-units-lessons; (j) validate modules; (k) implement and field test the system; (l) follow-up graduates or evaluate. By following a process similar to that cited above, curriculum products would possess certain built-in guarantees of quality and learning effectiveness. The curriculum products would be more apt to: (a) prepare persons for successful entry and advancement in employment; (b) be relevant to changing social, economic, and technological conditions; (c) provide successful participation as a citizen in our society; (d) provide required basic general education; and (e) meet the needs of diverse student groups.
6. Curriculums should be designed to encourage students to learn to make decisions, and to be responsible for their choices. Decision-making is probably the most important process a student will ever learn. Although difficult to integrate into the curriculum, decision-making is basic to advancement potential in any career.
7. Curriculums should be designed in an individualized instructional mode to enhance the monitoring of student progress and to aid in vertical and horizontal progression through sets of curriculum modules

or lessons. Several advantages can be attributed to the individualized instruction concept. These are: (a) each student makes continuous progress toward mastery of instructional content; (b) every student continues to mastery of content at his own rate; (c) every student is engaged in the learning process through active involvement; (d) the student views the learning process as primarily self-directed; (e) every student is able to evaluate the quality, extent, and rapidity of his progress toward mastery of successive areas of the learning continuum; (f) the student develops a favorable attitude toward school and learning in general; (g) the student may develop interest in specific academic and/or vocational subjects; (h) the student manifests increased motivation toward vocational and related academic subjects; and (i) different students work with different learning materials adapted to individual needs and learning styles.

8. Curriculum content should be based on research into job/task analysis which would involve incumbent workers and their supervisors. The research model used by the Vocational-Technical Education Consortium of States is an excellent example of "front-end" analysis of tasks in a job domain. It allows for periodic up-dating as new tasks emerge for given jobs.

Standards 9 and 10 deal with curriculum dissemination and implementation.

9. Curriculum dissemination and diffusion could be enhanced through increased support for and maximum use of the National Network for Curriculum Coordination in Vocational-Technical Education (NNCCV-TE). The NNCCV-TE is composed of six regional curriculum coordination centers, with each center having six to twelve affiliated states and trust territories.
10. Curriculum packages intended for widespread use should contain appropriate information that would aid in adoption, adaptation, and installation. Such information should include details of the development process, validation procedures, field-test results, needed in-service training of staff, and other suggestions which might prove helpful in implementing the curriculum.

Standard 11 deals with curriculum research and evaluation.

11. Portions of the resources currently existing in the state Research Coordinating Units should be used in improving and expanding curriculum research and evaluation. Some RCU resources and staff expertise may be used in determining curriculum offerings by analyzing data accumulated in management information systems. Similarly, RCU resources might be brought to bear on curriculum data storage and retrieval and information dissemination.

Curriculum is a major aspect of vocational education. As such it warrants increased support. Curriculum is the vehicle through which all vocational education decisions are carried out, no matter what level at which the decisions are made. Any decision made sooner or later will ultimately impact on the teaching/learning environment--the point at which curriculum purposes are manifested.

STANDARD CHARACTERISTICS OF VOCATIONAL EDUCATION

Working Synthesis Report

Position Statement

To discuss standard characteristics of vocational education apart from the philosophy and definition is a very difficult task. Standard characteristics should be:

1. an outgrowth of a philosophy of vocational education,
2. consistent with the role of vocational education,
3. a corporate part of the governance of vocational education, and
4. supportive to the definition of vocational education.

Furthermore, the term "standard characteristics," as reflected within the context of this paper, relates to distinguishing traits or features regarding vocational education which are important in fulfilling its purpose, and which may or may not be consistent with individual educational disciplines.

Standard characteristics are needed in six areas of vocational education: philosophical and educational foundations, program planning, constituency support, program standards, evaluation and personnel development.

Philosophical and Educational Foundations

A program of vocational education must be founded upon a sound philosophical and educational base. Without such a base upon which to build, the program will have neither stability nor a sense of direction.

The program philosophy should reflect the fundamental purpose of vocational education and its place in the social, economic and educational environments.

The educational program should be a core type curriculum aimed at preparing individuals for employment. Such a vocational education base must embrace the principles of learning which point up the importance of the relationship of knowledge taught to the effective use and application of such knowledge.

Program Planning

The standard characteristics of vocational education in all program levels should be a carefully developed and documented program plan that is based upon a set of specific goals and measurable program objectives and which will facilitate and support subsequent planning and programming efforts.

This statement is supported by the Vocational Education Act of 1963 as amended and the Code of Federal Regulations, Chapter 45:

Section 102.4(b) Objectives of Instruction. Vocational instruction shall be designed to--(1) prepare individuals for gainful employment, including volunteer firefighters, as semiskilled or skilled workers or technicians or semiprofessionals in recognized occupations and in new or emerging occupations, or (2) prepare individuals for enrollment in advanced or highly skilled vocational and technical education programs, or (3) assist individuals in the making of informed and meaningful occupational choices, or (4) achieve any combination of the above objectives.

Constituency Support

To build a constituency is to attain the degree of commitment and support for vocational education that will assure its prominence and permanence on the educational scene. Each program level and, in fact, each individual program offering, must possess and effectively utilize the appropriate constituency promoting vehicles essential to program development, operation and success.

Constituency support does not come about automatically, but must be cultivated and nurtured at all program levels if vocational education is to prosper and grow. Vocational education is a service effort for both the individual and business and industry. Close relationships must be developed and maintained with persons who need vocational education and agencies who employ the product in order to assure current and relevant program content and skill development. Vocational education functions within, and as a part of, the social and economic environment. Community involvement and input must be sought and taken into account if continuing public support is to be realized. Legislatively, there must be laws and regulations and financial support for vocational education if it is to reach its potential in services to our society, and finally, vocational education must be packaged in such a manner that it appeals to the needs and interests of a significant segment of the student clientele.

Program Standards

Another standard characteristic of vocational education should be the availability of a comprehensive set of program standards related to the "four

factors of production" in vocational education that contribute to and enhance the quality of the programs of instruction. These standards should address the "four factors of production" relative to vocational education; namely, curriculum and instruction, facilities and equipment, instructional staff and students.

Again support of this statement is found in the Vocational Education Act of 1963 as amended and the Code of Federal Regulations, Chapter 45:

Section 102 (e) Content of Vocational Instruction. The content of vocational instruction shall be developed and conducted in accordance with the following standards to assure soundness and quality in such instruction: (1) The program of instruction shall be based on a consideration of the skills, attitudes, and knowledge required to achieve the occupational or other objective of such instruction, and includes a planned sequence of those essentials of education or experience (or both) deemed necessary for the individual to achieve such objective. (2) The program of instruction shall be developed and conducted in consultation with employers and other individuals or groups of individuals (such as local advisory committees) having skills in and substantive knowledge of the occupations or the occupational fields included in the instruction. (3) The program of instruction shall include the most up-to-date knowledge, attitudes, and skills necessary for competencies required to meet the occupational or other objective of such instruction. (4) The program of instruction shall be sufficiently extensive in duration and intensive within a scheduled unit of time to enable the student to achieve the occupational or other objective of the instruction. (5) The program of instruction shall combine and coordinate classroom instruction with field, shop, laboratory, cooperative work, apprenticeship, or other occupational experience which (i) is appropriate to the occupational or other objective of the instruction, (ii) is of sufficient duration to develop competencies necessary for the student to achieve such objective, and (iii) is supervised, directed or coordinated by qualified persons.

Evaluation

An inherent standard characteristic of vocational education is a mechanism which provides for periodic formative and summative program evaluation. It is desirable that such a review process include a self-review and a review from a state education agency level. The evaluation mechanism should also provide a means for review follow-up and program redirection. An evaluative component assures the effectiveness of the program variables of curriculum and instruction, facilities and equipment, instructional staff and students. Program review and evaluation are key ingredients to any program's success. Program review in vocational education should embrace two dimensions; namely, process and product evaluation. Student placement and follow-up is essentially a product of summative evaluation component and is an accountability measure for vocational education.

Personnel Development

A standard characteristic of vocational education should be a well defined and operative program of professional personnel development which assures an adequate supply of leadership and instructional personnel who are imbued with both the technical and pedagogical skills and understandings essential to program development and operation.

The soundness of the program philosophy, the comprehensiveness of goals and objectives, the appropriateness of program standards, and the degree to which vocational education is effective are dependent upon the quality of state and local leadership and instructional personnel. A supply of competent personnel is vital to program success.

SECTION SEVEN:

**MANAGEMENT INFORMATION SYSTEMS
FOR VOCATIONAL EDUCATION**

MANAGEMENT INFORMATION SYSTEMS

FOR VOCATIONAL EDUCATION

by Harold Starr*

A management information system has been defined as:

the formal configuration of human and capital resources and programs in an organization that results in collecting, encoding, storing, processing, retrieving, communicating, decoding, and using data for management decision and control. The main purpose of the definition is to focus attention on the key characteristics: formal configuration, resources-- human and capital, programs, information processing activities, management decision and control. (Kriebel and van Horn, pp. 16-17)

While definitions for a management information system vary, it is generally agreed that a management information system has three distinct but interrelated sub-systems. These sub-systems are an input sub-system which deals with the identification of management-useful data, and procedures for their collection; a data management sub-system which deals with the encoding, organizing, and storing of source data; and an output sub-system which decodes the stored data and reorganizes them in user-specified formats. The literature further classifies management information systems as first, second, third, or fourth generation systems, depending on their level of technological sophistication.

First generation management information systems rely primarily on unsystematically organized data bank input sub-systems and use manual or non-computer equipment for organizing and storing data. Second generation MIS is characterized by more formally organized data derived from an analysis of management data needs. However, the various information components were usually developed independently and without coordination or compatibility among the various components. Data are stored and decoded by the use of inefficient computers. Third generation MIS stresses data processing efficiency, the development of data collection instruments, data flow

*Harold Starr is a research specialist with The Center for Vocational Education, The Ohio State University, Columbus, Ohio.

procedures, and the organization of data files. However, third generation MIS pays relatively little attention to coordination or integration and design of the data management and output sub-systems to improve the usability of data provided through the input sub-system. Fourth generation management information systems differ from the first three generations of MIS development by utilizing generalized data base management system computer software technology to maximize user accessibility to data bases to produce flexible and timely outputs, and emphasis is placed on the production of information which will serve all levels of management. Thus, effectiveness of fourth generation MIS is assessed primarily by the extent to which MIS data outputs aid in the implementation of organizational goals and objectives.

A review of the literature on the developments in management information systems for vocational education indicate that, to a considerable extent, many SDVE's continue to operate with second and third generation systems. In such systems a disproportionate degree of emphasis seems to be placed on the quest for an impossible dream: that of identifying the allusive, simple, common core of unchanging data elements which can be supplied with minimal effort by local school sources, and which will provide users with the maximum data needed for decision making with regard to policy formulation, operations and control, and for accountability purposes. In second and third generation systems information users are ordinarily required to specify their information needs and associated output specifications long in advance of their production. Unfortunately, in the daily operational world of vocational education it is exceedingly difficult to clearly identify present data requirements, even more difficult to identify future data needs, and almost impossible to specify "the" format in which data outputs will be needed to make them maximally useful for management decision making. Currently, management personnel who depend on second and third generation MIS specify their data output requirements, then a computer programmer creates a program to produce the required output. Although the steps required to produce these outputs (usually in the form of foot-thick printouts) might appear to be simple in practice, this process requires anywhere from several hours at the very best, assuming that the information needed is extremely simple, to several days or even weeks if the information desired resides in unassociated data files.

Vocational education management must be responsive to a dynamic, changing environment. Thus, management information systems for vocational education must be designed to be dynamic and to be able to accommodate continuous information redefinition and information reorganization to meet organizational goals. In changing and dynamic environments second and third generation MIS are obsolete. What is required are fourth generation systems.

Hayman et al. point out that in a dynamic fourth generation MIS:

(1) initial MIS development never results in outputs which fully meet decision needs, so that long-term developmental activity (an evolutionary approach) is essential; (2) organizational needs and functions change over time, and the MIS must change with them; (3) technological changes require that the system must be updated. The information system is embedded in a larger system; therefore, it must continuously feed back information on its own performance, and it must change accordingly (p. 2).

To meet these requisites, fourth generation systems are designed so that input sub-systems accommodate data base change and updating; data management sub-systems accommodate to modifications in data bases created by new management data requirements. The use of generalized data base management computer software packages are a major means for more effectively modifying and updating data bases.

In fourth generation systems data bases are able to be accessed rapidly through teletypewriter terminals by a number of data users. In addition, simple or complex data outputs can be produced in a timely manner without the need to predefine information outputs long in advance of their use. Data base "browsing" and the production of ad hoc reports to satisfy unanticipated information needs by management are a major feature of fourth generation management information systems. These fourth generation systems also provide management with a more efficient mechanism than ever before for producing data to respond to a broad array of decision, control, and reporting needs.

While a MIS is not a management system, the use of fourth generation MIS in management decision making and control might well have the effect of impacting on the management style and management activities of SDVE's; especially as MIS provides users with feedback for verifying the effects and benefits of data based management decisions.

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MANAGEMENT INFORMATION AND POLICY FORMULATION

by LeRoy A. Cornelsen*

In addressing this topic, my discussion will focus on information used by program managers to determine policy which affects vocational education programs. Certainly, management information systems can provide data for many uses other than for policy development, but we are now talking about policy setting or, said differently--making administrative decisions.

Before discussing the maintenance and use of complex information systems, perhaps we should mention the need to realize that only recently have we begun to look seriously at information systems that do more than process routine data for administrative functions. Such systems have routinely included information on student and financial accounting, manpower supply and demand, resource allocation and general reporting. To electronically process, store and retrieve mountains of data improves the efficiency of the management process, but doesn't necessarily affect policy.

How then can a good management information system improve the formulation of policy? Administrative program decisions (policy) normally emanate from two broad sources: (1) legal authority and (2) professional judgment. In either case, but especially where alternative policy choices are permissible, policy decisions can be greatly enhanced by a thorough examination of the potential outcomes of several policy alternatives designed for one particular problem or issue.

Through simulated projections, forecasting and the use of modeling, the feasibility, effects and outcomes of major policy alternatives can be tested before making and implementing a particular policy decision. Furthermore, the analysis of current policy, (if to be left unaltered) should examine the long term effects for comparison with alternatives.

Conducting such policy analysis requires a variety of data bases and system capabilities but the first step in this process is the identification of the critical policy decisions that are to be made. Frequently, decisions affect other decisions so that policy analysis should take cognizance of this domino effect.

*LeRoy A. Cornelsen is director of planning for the Bureau of Occupational and Adult Education, U.S. Office of Education.

The analysis of policy requires data specific to the contemplated decision(s) and may extend beyond the data base available in a standard MIS. Economic, demographic and socioeconomic data would, for example, be necessary for some decision analysis but not for all. The core data base which serves the other routine management functions will in most cases not be sufficient for policy analysis. Existing data bases may be very useful in developing a policy analysis capability, but whether and how to augment the base cannot be determined in advance of systematically classifying the policies to be formulated.

The relationships required between potential policy and the data suggest a dynamic system which is used on a frequent, ready access basis. Unless the decision maker conceives of the application and use of an information system as an interactive system rather than one which produces a glossy report containing executive policy briefs, the system will be neither responsive, timely or effective.

The extent to which a policy maker becomes personally involved in the actual process is a matter of style. However, unless the decision maker is really willing to reexamine basic policy assumptions, change the logic of decision making and be willing to establish and implement new policy in the fashion just described, one may as well continue past behavior since the risk is smaller and much less costly albeit less creative and potentially inferior. There is so much data which may be used in these analyses that policy makers must rely on others to pre-test decision effects before they are made.

What I have attempted to describe and convey is that improved policy formulation and decision making requires new information and a different approach to management, but the inhibiting factors are largely human. Although management and use of information systems is not an exact science, the technology exists to implement a system which will support informed decision making.

While stress is being placed on greater accountability for use of public resources, the justification of policy decisions must also be based on comparative analysis, not only on the analysis of the consequences of an individual policy decision. Decisions affect the future whether or not they are made with the future in mind.

A STANDARDIZED MANAGEMENT INFORMATION
SYSTEM FOR VOCATIONAL EDUCATION

by Arthur M. Lee*

There are five characteristics which I believe should be found in a good management information system today. One is a definition of each item of data which is uniform within a state and compatible with the definitions used in other states. Definitions should be neither too rigid nor too flexible, and never ambiguous. When vocational education or a particular kind of vocational education is defined with too many conditions attached, schools will either not offer the programs or they call them by other names. In either case, a management information system under those circumstances will contain faulty data.

On the other hand, definitions should not be so flexible that each local school or teacher must be left to decide what they mean. To define a program as including certain conditions without clearly limiting what may be included leads only to ambiguity. Thus, secondary vocational education includes grades seven through twelve in the federal guidelines. And since grades below seven are not excluded, a number of states report students in grades K-6 as secondary vocational education students.

A second characteristic of a good management information system is that only primary source data are used. The unduplicated count of vocational education enrollments, for example, should be obtained from the records of individual students, not from taking a percentage of the duplicate count in classroom or program enrollments. By the same token, the number of black students or of males or females can only be accurate if it is taken from the individual files of all students enrolled.

Above all, the number of students enrolled in a particular program or cluster of occupations--as opposed to the total program or cluster enrollment--must be tabulated from individual student enrollment records, not from class records. Otherwise, the occupational enrollment is a duplicate figure, counting some students more than once when they are enrolled in more than one occupational area. To use this figure in comparison with projected employment demand is to overstate the supply side of the equation.

*Arthur M. Lee is director of Project Baseline, Northern Arizona University, Flagstaff, Arizona.

A third characteristic found in a good management information system is the use of automation. In handling individual student data, and individual program and financial data, the volume is too large to do it by hand. Even more important is the greater assurance of accuracy and the shorter time required in processing which can be achieved through the use of computers. Thirty-four states are now using computers in some part of their vocational education reporting system, and seven more are planning to do so within the next two years.

What seems to be overlooked by a great many states, however, is that automation is as important at the local school or school district level as it is for the state vocational education division. Individual student records for a school of any size cannot be used to collect more than a very limited number of data items without putting them on magnetic tape or high speed discs and letting a computer make the tabulations. Most states are getting around this at the present time by collecting their own primary source data in a separate procedure following the local school registration. There is nothing wrong with their doing it this way, except that it means duplicating what every school with data processing of its own has already done or for which arrangements could have been made to have had done.

There are usually two principal objections to the use of local school enrollment, follow-up, financial, and professional personnel data. One is that it would cost too much. The other is that the effort required to develop automation in all schools and to get the schools to supply a state agency with the enormous volume of data needed--and which could be run through a single state computer--is simply too great to be undertaken.

The answer to the first objection is that no one knows what the cost would be, but there are reasons to believe it would be less than the critics predict. A study sponsored by the National Science Foundation reports that 58.2% of U.S. public secondary schools (grades 7-12) already used computers or had computer capability in 1974. By 1984 the study predicts that all secondary schools will have data processing. The study also found that while computer usage increased from 34.4% of the secondary schools in 1970 to 58.2% in 1974, the amount of money being spent for data processing had not gone up. This was due to more efficient use of the systems and lower costs for equipment.

The answer to the second objection is partly found in the answer to the first. Virtually all post-secondary schools already have computer capability. When the secondary schools have it as well, all that remains is to make arrangements with each local school district and educational institution for copying and forwarding to the state agency the separate data files needed for vocational education management, planning, and reporting.

The fourth characteristic required in a good management information system is the use of standardized coding. This is the key to keeping large volumes of individual source data straight. It is essential for computer storage and retrieval. Without standardized coding, every school district and educational institution in a state will adopt its own identification

numbers for every different kind of data being entered in a computer. And without standardization among states, uniform definitions are difficult to maintain. In the end, accurate data as well as the efficient compilation and exchange of data, depend on uniform coding.

The codes already exist and are being regularly updated. They are contained in the Handbook series issued by the National Center for Educational Statistics, especially Handbooks II, VI, and VII. OE course codes are the ones most often used. School codes, district codes, and county codes--to name a few others--should be used just as widely from the Handbooks instead of each school or state making up its own.

The fifth characteristic of a good management information system is that its subsystems are interlocking. These are student enrollment, student follow-up, professional personnel, and program. Program includes finance. Interlocking permits cost and other program analysis by type of student enrolled, for example. It makes possible knowing not only how many students who completed their programs are employed, but which ones. In the absence of social security numbers at the state level, this is more difficult than it would be otherwise, but not impossible.

The interlocking device is, of course, the standardized code numbers which must be entered on each file. Individual student enrollment files and follow-up files are linked directly when social security numbers are used. When anonymous numbers are used, each will have been assigned by a local school or district. In reporting follow-up information the local school or district should use the same number for each student that was assigned for the enrollment files. This, together with the school and school district code, will make it possible for a state computer to make the linkage.

These are the essential characteristics as I see them. Now, how does the system work? It goes into operation the first day of every school year or term. The state agency receives magnetic tapes or discs from each local school district containing whatever portion of student, teacher, and program files it has arranged to have copied and forwarded. The state's computer can then be programmed to print out the compilations and analyses needed for management and funding decisions.

There are two more observations to be made about a system of this kind. It must contain regular feedback and updating procedures. These can be worked out on a schedule, and when functioning properly the state agency should be able to make printouts of its final data compilations and analyses shortly after the end of a school year or term.

The other observation is that the description here is only half of the complete system, the data input half. The other half is the feedback from managers and decision makers in adjusting programs to better suit their purposes and meet their needs. Associated with this half of the system also is planning, both immediate and long range.

SECTION EIGHT:
PROGRESS REPORTS

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VOCATIONAL-TECHNICAL EDUCATION CONSORTIUM OF STATES

PROGRESS REPORT PRESENTED TO

STATE DIRECTORS OF VOCATIONAL EDUCATION

by Ben A. Hirst, Jr.*

Introduction

The Vocational-Technical Education Consortium of States (V-TECS) began operation on July 1, 1973, with nine members consisting of the states of Alabama, Florida, Georgia, Kentucky, Mississippi, Texas, and Virginia and associate members from the U.S. Air Force and the U.S. Navy. In 1974-75, the states of Louisiana and South Carolina were added, bringing the membership to eleven. During the current year, the states of Delaware and Tennessee have been added with strong interest in membership being shown by the states of Indiana and North Carolina. V-TECS is expected to grow to a membership of fourteen to fifteen states and three to five associate members. The Consortium now has a current membership consisting of Alabama, Delaware, Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, Tennessee, Virginia, and the U.S. Air Force and the U.S. Navy.

Development of V-TECS Model

The Southern Association of Colleges and Schools (SACS), Commission on Occupational Education (COEI), funded a fifteen-month study which formed the basis for the development of the V-TECS Model. The model provides for the orderly development and quality control of V-TECS products and catalogs. The model consists of 12 major activities and 47 sub-activities. The model resulted from a comprehensive study of projects and procedures used to develop performance-based vocational education in the states of Alabama, Florida, Michigan, Utah, Massachusetts (Project CAREER), the U.S. Air Force, Air Training Command, and the Educational Testing Service of Princeton, New Jersey. The model was further refined and expanded by use of a national jury of experts using the Delphi technique. The V-TECS Model has been developed and operationalized to about 85% of its capacity. Very few changes have been made in the model as originally developed. This factor indicates

*Ben A. Hirst, Jr. is executive director for The Vocational-Technical Consortium of States.

the validity of the Delphi technique in futuristic or forecasting-type research. The last two major activities in the V-TECS Model are being developed by the staff and committees of the Board of Directors. Those activities consist of the methods to be used for revising and updating V-TECS catalogs and third-party evaluation strategies. Complete implementation of the V-TECS Model is expected during the current fiscal year.

Projects Completed and under Development

V-TECS has completed seven catalogs of performance objectives, criterion-referenced measures, and performance guides, all of which are directed toward use by the learner in vocational education programs. Ten additional catalogs are in the final stage of completion and will be distributed to member states within the next thirty to forty-five days. V-TECS has completed seven projects and has fifty-seven under development. A steady flow of completed catalogs will be coming from V-TECS with all presently assigned projects to be completed by early 1977. All V-TECS products have strong quality control features and criteria applied, so that transportability and confidence can be held at a high level. Each performance objective written in the final catalogs is based upon a thorough research process including an occupational sampling of job incumbents by use of task listings. V-TECS has surveyed in excess of 7,000 job incumbents with more than 16,000 task statements as a basis for the catalogs of performance objectives. Survey instrument reliability ranges from a low of .77 to a high of .97 for the twenty-three surveys completed. The response rate for V-TECS incumbent worker surveys is in excess of 85% by maintaining rigorous follow-up procedures. Attachment "A" (white section) of this report provides information on the first seventeen surveys. Attachment "B" (yellow section) of this report provides a printout of the status of each currently assigned project in V-TECS. The code for the printout appears at the beginning of the report. The abbreviations above the columns in the report are defined as follows:

MEM of AGR: The Memorandum of Agreement, a control document which provides for the orderly development and quality control features of the V-TECS process. Product description, delivery dates and other information are included in this Agreement between the states and V-TECS.

STATE OF ART: The submittal of a state-of-the-art report to V-TECS. This is basic research to identify what has been accomplished in the field and how these accomplishments have implications for V-TECS work.

OCC INV: This reference is to the development and submittal of an occupational inventory instrument to be used in the survey of job incumbents. This instrument is the basic data collection device used by V-TECS.

DOMAIN REPORT: This report consists of updated information regarding the state-of-the-art, listing of persons interviewed to

validate task listings, background information, and tool and equipment included in the occupational inventory and survey. The design of the sampling procedures used to identify participants in the study and other details related to basic applied research.

DATA: This represents the receipt of punched data cards resulting from the use of the occupational inventory and responses from the incumbent workers.

WTR: The submittal of a report on the selection and projected use of the writing teams which develop the performance objectives, criterion-referenced measures and performance guides based upon the data collected from job incumbents.

FLDRV CAT: This column represents the field review version of the catalogs and their submittal to the V-TECS Central Office. The field reviews are conducted using a comprehensive field review design for improving and validating the work of the writing teams.

FINAL CAT: This column represents the submittal of the final catalog for distribution and use by V-TECS member states. This catalog incorporates the changes and recommendations collected during the field review and is considered to be ready for use by curriculum developers, supervisors, teachers and students.

Dissemination and Diffusion

Each of the V-TECS member states is developing comprehensive dissemination and diffusion plans. These plans and experiences are being shared by member states to insure that catalogs are moved from the state agencies to the local users with complete instructions on their use and application. This process is the most critical in the total process used by V-TECS. It is the "cutting edge" for successful use and application of performance-based vocational education in the classroom or lab with the student.

Updating and Revision of V-TECS Catalogs

A comprehensive system of revising instructional validation and updating of V-TECS catalogs is being developed. The procedure will be based upon active use of the performance objectives, criterion-referenced measures, and performance guides by students and teachers. Brief but critical information will be collected from the students and teachers and analyzed with implications for updating and revising the catalogs. Additional input will be received from craft advisory committee members regarding the job conditions stated in the objectives and the standards of performance required of the student under these job conditions. These pieces of data will provide for comprehensive decision-making regarding the content, validity, and relevance of V-TECS catalogs as measured by the users.

Conclusion

V-TECS has developed extensive expertise in the basic research of performance-based vocational education, occupational inventory development, sampling and surveying job incumbents, writing and cataloging performance objectives based upon occupational task analysis procedures, and the validation both in the educational and job environment of the V-TECS catalogs. This expertise is broadly based in the technical coordinators and project personnel in the V-TECS member states and is enhanced by a staff of technical experts who assist and monitor quality control for the V-TECS Board of Directors. Work accomplished by V-TECS to date is worth in excess of 2.2 million dollars and is being shared by member states to improve vocational education with emphasis upon student-demonstrated performance.

ATTACHMENT "A"

Vocational-Technical Education Consortium of States
Statistical Survey Data

State	Project Title	Project Number	Sample Size	Response Rate	Usable Rate	Reliability Coefficient
Florida	Sod Production	1220	188	98.9	98.4	.776
	Auto Body Repair	1221	196	87.8	87.8	.873
	Turf Management	1222	237	99.2	98.7	.923
	Auto Mechanics	1223	208	99.5	99.0	.943
Georgia	Data Processing	1331	190	90.5	90.0	.953
	Machinist	1332	190	72.0	68.9	.945
Kentucky	Dental Assistant	1441	166	67.4	66.3	.942
	Tractor Mechanic	1442	235	71.4	70.2	.924
	Cashier/Checker	1443	208	73.4	72.6	.822
	Carpentry	1444	226	84.4	83.2	.969
	Bank Teller	1445	329	83.2	82.7	.850
	Child Care	1446	166	86.3	85.5	.912
	Mississippi	Plumbing	1551	180	86.1	85.5
	Landscaping	1552	167	94.6	94.6	.936
Texas	Water Operator	1661	162	97.2	95.1	.913
Virginia	Secretary	1771	576	87.8	87.8	.848
	Food Service	1772	346	89.6	89.0	.891

Total Sample Size: 3,970
Total Usable Returns: 3,407

Usable Return Rate: 85.82%

ATTACHMENT "B"

V-TECS Product Availability Matrix as of September 22, 1975

Prepared for State Directors of Vocational Education

Snowmass-at-Aspen, Colorado

Code Key:

X = Available at V-TECS

A = Currently Being Printed

CR = Preparing Cross Reference Tables

KP = Being Keypunched

Dates are Projections of Arrival at V-TECS

PROJ NO	MEMO OF AGR	STATE OF ART	OCC INV	DOMAIN REPORT	DATA	WTR	FLDRV CAT	FINAL CAT
ALABAMA								
1111	Air Conditioning	12/05/3	X	X	X	X	X	10/20
1112	Radio/TV	12/05/3	X	X	X	X	X	10/27
1120	Nurseryman	10/31/4	X	X	10/15	10/15	12/01	02/01
1121	Bookkeeper	11/11/4	10/10	10/16				
1122	Auto Parts Clerk	02/14/5	X	X	X			
1123	Lic Prac Nurse	10/31/4	X	X	09/20	10/02	10/05	12/30
1124	Alterationist	10/31/4	X	X	X	X	10/01	
1125	Cosmetologist	10/31/4	X	X	X	09/21	A	11/01
1126	Bricklayer	11/07/4	X	09/23				

ATTACHMENT "B" (continued)

PROJ NO	MEMO OF AGR	STATE OF ART	OCC INV	DOMAIN REPORT	DATA	WTR	FLDRV CAT	FINAL CAT
1131	Maid							
1132	Cattle Rancher							
DELAWARE								
3001	Sheet Metal							
3002	Warehousing							
FLORIDA								
1221	Auto Body	01/25/4	X	X	X	X	X	CR
1222	Turf Mgmt	01/25/4	X	X	X	X	X	A
1223	Auto Mechanic	04/29/4	X	X	X	X	X	A
1236	Welder	12/15/4	X	X	A			
1237	Floriculture	12/15/4	X	X	X	X		
1238	Hospital Ward Clerk		X	X	X	X		
1239	Tax Collector	01/02/5	X	X	X	X		
1299	Housing Mgr		A	X				
1241	Dressmaking							
1242	Med Lab Asst							
1243	Building Inspector							

ATTACHMENT "B" (continued)

PROJ NO	MEMO OF AGR	STATE OF ART	OCC INV	DOMAIN REPORT	DATA	WTR	FLDRV CAT	FINAL CAT
GEORGIA								
1331	Data Processing	12/05/3	X	X	X	X	X	X
1332	Machine Opr	12/05/3	X	X	X	X	X	X
1343	Programmer	11/15/4	X	09/25				
1344	Emer Med Tech	10/15/4	X	X				
1355 Electronic Technician								
1356 Appliance Repair								
KENTUCKY								
1441	Dental Asst	12/05/3	X	X	X	X	X	A
1442	Tractor Mech	12/05/3	X	X	X	X	X	CR
1443	Cashier/Checker	12/05/3	X	X	X	X	X	CR
1444	Carpenter	12/05/3	X	X	X	X	X	CR
1445	Teller	12/05/3	X	X	X	X	X	X
1446	Child Care	12/05/3	X	X	X	X	X	CR
1453	Electrician	12/01/4	X	X				
1454	Legal Secretary	11/01/4	X	X				
1455	Medical Asst	11/01/4	X	X				
1456	Drapery Wkr	12/01/4	X	X				

ATTACHMENT "B" (continued)

PROJ NO	MEMO OF AGR	STATE OF ART	OCC INV	DOMAIN REPORT	DATA	WTR	FLDRV CAT	FINAL CAT
1457	Floral Sales	02/15/5	X					
1458	Ag Parts Clerk	12/01/4	X	X				
1461	Waiter/Waitress							
1462	Office Machine Opr							
1463	Travel Counselor							
LOUISIANA								
2095	Ship Operations	11/07/4	X	X	10/08	10/21		
2096	Hotel/Motel Mgmt	02/28/5	10/12	10/23				
2011	Petroleum Technician							
2012	Shipfitter							
MISSISSIPPI								
1551	Plumbing	01/09/4	X	X	X	X	X	X
1552	Landscaping	01/09/4	X	X	X	X	X	X
1563	Cotton Gin Opr	09/17/4	X	X	X	10/15		
1564	Ind Sewing	09/17/4	X	X	X			
1571	Health Care Worker	07/16/4						
SOUTH CAROLINA								
2132	Textile Production	01/06/5	X	X	10/10			

ATTACHMENT "B" (continued)

PROJ NO	MEMO OF AGR	STATE OF ART	OCC INV	DOMAIN REPORT	DATA	WTR	FLDRV CAT	FINAL CAT
2133	Small Engine Repair	01/06/5	X	X	10/12			
2144	Homemaker							
2145	Business Machine Repair							
VIRGINIA								
1771	Secretary	12/31/3	X	X	X	X	X	X
1772	Food Service	12/31/3	X	X	X	X	X	X
1788	Logging	12/19/4	X	X	09/22			
1789	Nurse Aide	09/23/4	X	X	X	09/25		
1790	Farm Equip Opr							
1791	Fast Food Operator							

CAREER EDUCATION: ITS STATUS TODAY

by William F. Pierce*

Modern career education activities burst upon the educational science in late 1971. Although initially loosely defined, most of the educational ideas embodied in the concept were warmly endorsed by many if not most vocational educators. This early endorsement probably resulted from two principle considerations, both of which centered around the lack of a specific definition. First, vocational educators embraced the concept because, as they understood career education, they felt that many of the time honored beliefs of vocational educators would be enhanced by its further development. Others had a more programmatic reason for their quick acceptance and promotion of career education. In their view, since career education was not well defined, many activities could legitimately be subsumed under its name. Consequently, a number of "pet ideas" or education strategies which were not being adopted by general educators as rapidly as their proponents hoped were simply renamed career education. Whatever our motives, in its formative years, career education was sustained and nurtured by vocational educators. Without the level of support career education received from vocational education, it is questionable whether it would have survived those early months and years. For example, an analysis of OE expenditures for fiscal year 1973 showed that 70.1% of all funds for career education were committed under the Vocational Education Act of 1968 and Part F of EPDA. Of the funds spent for "comprehensive"¹ career education activities, 87.3% came from these two vocational education authorities.

Bureau of Occupational and Adult Education Activities

As essential as this support was, vocational educators were understandably disturbed that so much of the federal commitment to vocational education was being directed to career education activities. Although career education was accepted as a logical, appropriate and necessary precursor to vocational education, the activities being funded seldom lead to the acquisition of specific occupational skills by students. Consequently, too many federal funds were being diverted, in the view of most vocational educators, to non-vocational education purposes.

*William F. Pierce is deputy commissioner for occupational and adult education, U.S. Office of Education.

¹See Supplemental Note.

In July of 1973, thanks partly to these expressed concerns but thanks also to the apparent availability, for the first time, of federal funds allocated specifically for career education, the Assistant Secretary of Education and the Commissioner of Education agreed that Part C, D, and I funds should be redirected to more specifically meet vocational education research and curricular needs.

It is understood at that time, however, that since vocational education and career education cannot be separated, that there would be instances when some of these funds would still need to be allocated to career education. The guiding principle behind the decision was, therefore, to make vocational education funds primarily available for strictly vocational education purposes.

Consistent with that decision, for the past two years, the vast majority of the approximately 45 million available to the Commissioner under Parts C and I of the '68 Act and Part F of EPDA were allocated to vocational education purposes.

For example, of the seven million available under Part I for fiscal years 1974 and 1975, all but about \$850,000 was spent for vocational education activities. The \$850,000 was allocated to three projects which were more career education than vocational education in nature. Current plans call for none of the FY '76 funds available under Parts C and I of the Vocational Education Act of 1968 to be expended for career education purposes. EPDA Part F will continue to call for the inclusion of career education concepts as an integral part of the preservice and in-service Vocational Teacher Training activities. Part D will emphasize, during the 1976 funding circle, the implementation of the NIE Experienced Based Career Education model in those states which choose that option.

In summary, for BOAE, the clear emphasis is on vocational education activities with secondary emphasis, and in those few instances where appropriate, necessary funding, directed to career education.

Office of Career Education Activities

During 1975 federal funds were made available specifically for career education for the first time.

In August of 1974, Congress enacted specific legislation dealing with career education (Section 406, Title IV, Public Law 93-380). In December of 1974, Congress appropriated \$10 million to begin the implementation of this legislation.

The authorizing legislation called for two types of activities in the first year. The U.S. Commissioner of Education was authorized to make grants to state and local educational agencies, institutions of higher education, and other nonprofit agencies and organizations to support projects to demonstrate the most effective methods and techniques in career education and to develop exemplary career education models. The Commissioner was also directed

to conduct a survey and assessment of the current status of career education programs, projects, curriculums, and materials in the United States and submit to the Congress a report on such survey and assessment. The Commissioner was also directed to establish a National Advisory Council for Career Education; the Council's duties are to advise the Commissioner on the implementation of the current legislation and to determine the need for further legislation in order that all citizens may benefit from the purposes of career education.

In the spring of 1975, the National Advisory Council for Career Education was established, with Dr. Sidney P. Marland, Jr. as its chairman. An RFP was issued, proposals were reviewed, and a contract was awarded to the American Institutes of Research for the conduct of the survey and assessment of the current status of career education as called for in the legislation.

An announcement was published in the Federal Register concerning the availability of grant funds for projects to demonstrate the most effective methods and techniques in career education and to develop exemplary career education models. In response to this announcement, 880 applications were submitted to the Office of Career Education by the cut-off date of April 21, 1975. These 880 applications, which requested a total of \$71 million, were carefully and systematically reviewed and rated by specially-constituted review panels. The 80 proposals judged to be the best of the 880 were selected for support. Negotiations with the potential grantees were conducted during the month of June, and on June 30, 1975, the grant award documents were mailed to the successful applicants. Thus the projects funded with the fiscal year 1975 funding will actually be operational during fiscal year 1976. A summary of the 80 grant awards, as well as the one contract for the survey and assessment activity, is provided in Attachment B. As indicated in the attachment, the \$10 million appropriation was distributed across six categories of activities.

Since awarding the 80 grants, the Office of Career Education has undertaken two activities designed to improve project management and project evaluation. The 80 project directors were asked to attend a workshop in Washington where the undesirable management practices uncovered in the first round of Part D projects were thoroughly discussed. These undesirable practices were emphasized in a \$250,000 evaluation project of the Part D program which was undertaken by the Office of Planning and Evaluation within the Office of Education. The intent of the workshop was to help new project managers learn from our past mistakes and hopefully, therefore, to improve program results and effectiveness. During that same conference, heavy emphasis was placed on program evaluation. The Office of Career Education brought in four top evaluators and made one of them available to each project manager for one hour to discuss the evaluation of his or her project. The consultant had read the proposal and could, therefore, offer specific, as well as general advice.

Dr. Kenneth Hoyt, the Director of the Office of Career Education has once again undertaken a series of mini-conferences in career education to be conducted at The Center for Vocational Education at Ohio State University during the fiscal year. The 24 mini-conferences will involve practitioners,

state coordinators of career education, and representatives outside the field of career education in the following areas of concern relating to career education:

1. The Teaching Learning process - grades K-3
2. The Teaching Learning process - grades 4-6
3. The Teaching Learning process - grades 7-9
4. The Teaching Learning Process - grades 10-12
5. Evaluation
6. Counselors
7. Business, Industry-Labor
8. Parents
9. Handicapped persons
10. Females
11. Gifted and Talented persons
12. Minority persons

The National Advisory Council for Career Education, chaired by Dr. Sidney Marland, Jr., has undertaken a study of the feasibility of federal career education legislation. In carrying out this work, the Council has commissioned four papers which are to be presented, in at least draft form, at the September Council meeting. The four papers deal with the following issues:

- A Plan for Implementing Aspects of Career Education Directly Related to Vocational Education
- Comparative Analysis and Synthesis of Existing Legislation Relating to Career Education
- A Preliminary Attempt to Draft Comprehensive Career Education Implementation Legislation

In addition, the National Advisory Council has commissioned nine additional papers designed to provide the Council with general information it feels it needs. These papers are:

"The Efficacy of Career Education, Career Awareness"

"An Analysis of Federal Legislation Bearing on Career Education"

"Key Concepts to be Addressed by NACCE"

"The Efficacy of Career Education, Academic Achievement"

"The Emerging History of Career Education: A Summary View"

"An Analysis of State Laws on Career Education and Pending State Legislation"

"The Efficacy of Career Education, Career Decision Making"

"The Efficacy of Career Education, Other"

"Doctoral Research Studies Related to Career Education"

Even though career education has begun to receive state and federal funds specifically allocated for that purpose, a recently released report from the Council of Chief State School Officers indicates a continuing heavy involvement in career education by state level vocational educators. The report, entitled *The Status and Progress of Career Education* points out that in 19 states the person having assigned responsibility for career education reports to the senior state official responsible for vocational education.

In addition, the study further shows that 22 of 52 states reporting indicate that the person assigned responsibility for career education is totally supported with federal funds. Thirteen of those 22 people are supported solely with Vocational Education Act funds. One reported total support from EPDA Part F funds and two states showed a combination of vocational and some other type of federal funds. Nine states reported a combination of state and federal funds with four of the nine reporting the federal share as coming from vocational education sources. The other five did not identify the federal source.

One can summarize this data by saying that 31 of 52 states reporting indicated that at least 20 of the 31 assigned career education positions at the state level are supported in whole or in part by federal vocational education funds. There is, therefore, an obvious continued support of career education by state vocational educators.

For 1976, projects in the same five categories that were emphasized in 1975 will be solicited. In addition, of the \$10,135,000 available for 1976, sufficient funds will be set aside to provide a maximum of \$50,000 to each state educational agency to develop a state career education plan for the implementation of career education programs in the local educational agencies of the states. The statute authorizes this planning activity only for fiscal years 1976 and 1977.

It is anticipated that the FY 1976 rules and regulations will be published in the Federal Register within the next six weeks.

National Institute of Education Activities

For the past several years the administrators of the Career Education Program of the NIE has been working very closely with officials in both BOAE and the Office of Career Education in OE. Under their research mandate, the NIE has been addressing basic research issues while BOAE and the Office of Career Education has been more concerned with program implementation and strategy design. This should not be interpreted to imply that NIE cannot or will not engage in action oriented research but is meant to suggest that program administrators have been working together to develop a reasonable division of labor and to assure that duplication of effort does not take place.

The broad nature of the NIE's research mandate, coupled with the broad definition of career education generally agreed to by most educators, have resulted in some NIE funded projects which clearly address specific career education issues. Other projects clearly address basic questions in vocational education while still others are equally applicable to vocational education as they are to career education. Consequently, it should be recognized that NIE's program concerns are not exclusively focused on career education. In a soon to be published NIE document this point is made explicit when they state:

Career education cannot succeed without good vocational education but career education includes more than vocational training. Some aspects of the problem such as what skills needed for job entry, seem related most closely to vocational education and manpower training. The career development process clearly begins, however, long before a young person chooses to enroll in a vocational training program and some people believe that career education, if successful, could reduce the eventual need for manpower training. In addition, career development affects all youth and adults, not only those planning to enter an occupation which requires less than a baccalaureate degree, which defines eligibility for job training under current vocational legislation.

Although about \$45 million have been spent by the NIE on career education R&D during the last two fiscal years, about \$40 million has been devoted to the completion of projects begun by OE and transferred to NIE. Listings of the new projects accomplished with the \$5 million can be obtained from the NIE.

Fiscal year 1976 priorities "will focus on" the four broad areas of concern of:

- Career Awareness
- Career Exploration
- Career Preparation
- Career Access

The NIE career education program will have a total of \$15 million available for fiscal 1976. Because of continuation costs, only about \$2 million will be available for new starts. The program is further complicated by the fact that Congress mandated that \$26 million of NIE's total \$70 million for '76 must be spent at the labs and centers. The career education program must spend \$5 million of its total of \$15 million in labs and centers in order to comply with the Congressional mandate. Only about \$4 million of its \$13 million continuation costs are with labs and centers. Consequently, about \$1 million of the \$2 million available for new starts in '76 must be allocated to labs and centers.

In general terms, some of NIE's fiscal 1976 areas of concern can be summarized as follows:

1. Intervening in occupational stereotyping by sex and race at grades 4, 5, and 6.
2. Determining what factors impact most significantly on the career decision making process--and when.
3. Implementation of Experienced Based Career Education models.
4. Determining and cataloging the training attitudinal and experience needs of cooperative coordinators.
5. Determining what cognitive, affective and vocational skills are most transferable.
6. Determining how best to increase the public and private sector's financial contribution to allow adults increased opportunities to pursue part time studies.

This list is intended to be illustrative, not complete. Further detailed information on the 1976 priorities should be available from the NIE within two weeks.

Summary

Career education can be characterized as alive and well. With the still limited funds available it can also be characterized as greyhound lean.

Vocational educators provided its initial and essential early support. Although we have begun the weaning process, the level of financial support still being provided at the federal, state and local levels still express the vocational educators general acceptance of the concept.

Supplemental Note

An OE project will be designated a "Comprehensive Career Education Project" if it contains all of the following objectives:

1. To develop and expand the career awareness of all students in the educational levels served.
2. To provide all students in the educational levels served with opportunities for detailed exploration and/or specific and general knowledge and skill attainment in careers of their choice through in-school and out-of-school activities.
3. To provide career-oriented guidance and counseling to all students in the educational levels served.
4. To provide career placement services to all students in the educational levels served who are preparing to exit the educational program to insure that each student enters or returns to either: (a) a job; (b) further formal education; or (c) a specific alternative life experience designed in terms of the individual's career development.
5. To improve the cognitive and affective performance of all students in the educational levels served by restructuring the curriculum to focus all subjects around a career development theme.
6. To provide training for educational personnel to improve their capability to design, operate, and/or evaluate those aspects of educational programs which meet the preceding objectives.

Career Education--Fiscal Year 1975

Approved Projects

<u>Category</u>	<u>No. of Proposals</u>	<u>Funding Recommended</u>
1. Activities designed to effect incremental improvements in K-12 career education programs.	45	\$5,802,756
2. Activities designed to demonstrate the most effective methods and techniques in career education in such settings as the senior high school, the community college, and institutions of higher education.	7	918,691
3. Activities designed to demonstrate the most effective methods and techniques in career education for such special segments of the population as handicapped, gifted and talented, minority, low income, and female youth.	12	1,045,364
4. Activities designed to demonstrate the most effective methods and techniques for the training and retraining of persons for conducting career education programs.	4	750,298
5. Activities designed to communicate career education philosophy, methods, program activities, and evaluation results to career education practitioners and to the general public.	12	1,173,708
6. Activities designed to accomplish a survey and assessment of the current status of career education programs, projects, curriculums, and materials in the United States, as required under subsection (e) of Section 406 of Public Law 93-380.	<u>1</u>	<u>308,640</u>
TOTALS:	81	\$9,999,457

Average grant size: \$123,500

THE EDUCATION COMMISSION OF THE STATES

LOOKS AT VOCATIONAL EDUCATION

by Richard M. Millard*

From its inception the Education Commission of the States has recognized the areas of vocational, occupational, and career education, not only as areas of major concern but as areas out of which a new synthesis of educational direction and goals may and should emerge. The first special report of the commission, Report No. 1 (1967), written by Leon Minear, was entitled *Occupational Education: Changing Contexts*.

In the late 1960's and the early 1970's the commission, in cooperation with the National and Regional Governors Conferences took the lead in urging the regional and specialized accrediting agencies to expand their scopes to include vocational institutes and schools in the accrediting process. Because vocational education cuts across the traditional lines separating secondary and post-secondary education, we convened for the first time a joint meeting of the regional higher education accrediting agencies, the elementary-secondary accrediting agencies, the National Commission on Accrediting and representatives of the vocational educational and political communities in Chicago in 1970 (chaired by then Governor McNair of South Carolina) to discuss the importance of accreditation in vocational education. This may have had some impact on the more rapid development of the occupational and vocational commissions in the Southern and New England Associations of Schools and Colleges.

At the steering Committee meeting in St. Louis in the fall of 1969, a task force on occupational education in post-secondary education was authorized. This task force, also chaired by Governor McNair, issued its report in the fall of 1971. The report was adopted as an official document of the commission.

The reason for the commission's continuing concern with occupational, vocational, and career education is not hard to see. Frankly, it could not, not be concerned. The commission is literally a compact among 45 states and two territories designed to serve as a forum to help bring the political

*Richard M. Millard is director of higher education services for The Education Commission of the States, Denver, Colorado.

and educational communities closer together on state and national levels, to consider educational policy alternatives for and affecting the states and to help strengthen education in the states (among other things). Education is historically and constitutionally primarily a state responsibility. Not only are vocational and occupational education an integral part of the total educational spectrum, but if the primary function or goal of education is to prepare individuals for effective living in the contemporary world, then in the broad sense career development is the central aim of education. Vocational and occupational education are not then adjuncts or substitutes for those students not in the mainstream but are or should be integral to the mainstream itself. In 1915, John Dewey argued, and I believe correctly, that "the democracy which proclaims equality of opportunity as its ideal requires an education in which learning and social application, ideas, practice, work, and recognition of the meaning of what is done, are unified in the beginning and for all."¹

Occupational and vocational education in the more technical sense are not and should not be confined by traditional barriers to particular types or levels of schools or institutions. While the federal government has in fact fostered or supported vocational and occupational education from the Morrell Land Grant of 1962 and more specifically since the Smith-Hughes Act of 1917 and the Vocational Education Act of 1963, the primary funding and interest in vocational and occupational education has come from and is indigenous to the states. The basic position of the commission on the critical importance of occupational education was clearly stated in the task force report, *Vocation as Calling*, in 1971. It argued "(1) that occupational education must be seen within the total context of education; (2) that the concept of occupational education in the restricted sense of skill preparation for immediate entry into the work force needs to be broadened to include the cluster approach to occupational preparation necessary for orientation to the gainful occupations and career planning much earlier in the educational process than is generally now the case; and (3) that, so conceived, vocational, occupational, technical, and career education not only are integral to and not alternatives for the educational process at all levels, but must be taken into account and reflected in all major educational decisions and priority determinations in local, institutional, state and federal settings now and in the future if the educational structures and strategies for revitalizing the nation's educational system are to meet the needs for the contemporary world" (p. 3).

The report called for the development of "a dynamic local-state-federal partnership in which the state accepts the responsibility for being the senior and originating partner" (10). It went on to suggest that "state government should continue to assume major responsibility in cooperation with the range of its public, private and proprietary educational systems and institutions, local government, and business and industry for maintaining, improving and expanding career opportunities through developing a system of occupational education in consonance with the need of its people and the man-

¹*Schools for Tomorrow*. New York: Alfred A. Knopf, 1915, p. 143.

power requirements of the state and the nation" (10-11). It underlined the necessity of comprehensive planning as the condition of developing such a system. "Essential to effective state responsibility and leadership in career and occupational education is recognition of the state's responsibility for comprehensive statewide planning. Such planning should be clearly distinguished from the development of limited plans for federal purposes in accordance with federal guidelines. To the contrary, the development of such limited plans should be based upon, grounded in and be consistent with the state's comprehensive planning efforts" (11). Such planning needs to be a continuous process and to be integrally related to all other forms of statewide planning for education and not considered a third force in competition with elementary-secondary educational planning for post-secondary educational planning.

The activities of the commission as they relate to occupational, vocational, and career education since 1971 have generally followed the principles developed in the task force report. We were involved in the New Orleans conference of 1973 which for the first time brought together state directors of vocational education, community colleges, and adult education. The theme of our annual meeting in Miami in 1974 was "Education to Make a Life, to Make a Living," and a major component of the program was devoted to the latter with workshops and special sessions devoted to various aspects of incorporating occupational, vocational, and career education into the mainstream of education.

More recently at the Arlington Steering Committee meeting last March, we brought together in a forum to discuss directions of federal support for vocational education representatives of a wide variety of groups concerned with different aspects of vocational and adult education to focus on principles and areas of agreement. While there was wide divergence among the group on some specific issues, there appeared to be something approaching consensus on the need for a much clearer statement of national objectives in occupational and vocational education and that among these objectives should at least be the following:

1. access to appropriate vocational, occupational, and career education regardless of age or level of educational attainment;
2. more effective and continuous planning at all levels to meet local, state and national needs of citizens--planning that includes the working community as well as education units and institutions;
3. improved school and institutional guidelines, counseling and career information to protect students as consumers;
4. innovation in vocational, occupational and career education to meet changing needs of students of all ages, including those who because of work or life conditions cannot attend full time or in traditional schools and campuses; and
5. interrelation of vocational education with academic education in effective development of career preparation and renewal.

It was strongly suggested at the forum that steps should be taken to bring representatives of the various national groups concerned with occupational, vocational, and career education together more frequently--not only to improve communication but to deal with common concerns.

During the past year, we have been represented in the advisory group to the College Entrance Examination Board study (financed by NIE) on education-to-work linkages and currently have under consideration cosponsorship of a conference or series of conferences dealing with the results of the report.

Finally, the general theme for our annual meeting in 1976 will relate to education, work, and career development. In connection with this we have received some funds from the Office of Education to develop background papers not only for the annual meeting but for the Office of Education on education and work and the concept of career as the basis for educational synthesis. The planning committee for this project held its first meeting this last Monday in Denver (September 22, 1975). We will be calling on many of you for help and advice as this project continues.

PROGRESS REPORT ON

COOPERATIVE ADULT EDUCATION STUDY

by Allen B. Moore* and James C. Granger**

President Gerald Ford in an August 1974 Commencement Address proclaimed a new emphasis for industry/education cooperation across the United States.

I propose a great new partnership of labor and educators . . . Accordingly, I have asked the Secretaries of Commerce, Labor and HEW to report to me new ways to bring the world of work and the institution of education closer together.

With any new thrust, it is important to look at what is currently happening and to study those efforts which may offer models for future development and refinement. No new emphasis can begin in a vacuum, without knowing what has happened and what is currently happening.

The overall goal for this Center for Vocational Education project sponsored by the U.S. Office of Education was to identify, study and disseminate information about cooperative adult education programs which are currently in existence in order that the programs themselves may act as models and their experience may improve future collaborative efforts.

The field of industry/education cooperation for adult education is large and it has, in many states, a long history. There are management development programs, college/industry personnel exchange, and tuition reimbursement plans available in almost all industries and businesses. Interaction is ongoing everyday and covers many levels of cooperation--from fee reimbursement plans to teacher/worker exchange. It would be nearly impossible to cover the whole range of adult education in cooperation with business and industry in one study.

The project focused its attention on one area of industry/education cooperation for adult learning. Not that any of the other types of programs are less important but in order that a more complete study may be undertaken,

*Allen B. Moore is project director for The Cooperative Adult Education Study at The Center for Vocational Education, The Ohio State University, Columbus.

**James C. Granger is a program assistant at The Center for Vocational Education.

and to provide the specific information requested by the U.S. Office of Education, the project was limited to one area of cooperative education efforts. This area is industry/education cooperation for adults with less than a high school education. Specifically those programs which were somewhat non-traditional in that they showed "true" cooperation and that they were completely locally administered. However, since many of the project results are related to the process of cooperation, the findings may be widely transferable to other joint efforts.

The project may be thought of in two phases, identification and study. The identification phase consisted of contacting some 15,000 persons, inquiring as to whether they knew of programs which met the parameters listed above. Contacts were made with all public community and junior colleges of the American Association of Community and Junior Colleges, all public school districts with over 3500 students, all members of the National Council of Local Administrators in Vocational Education, all state and regional directors of vocational education and adult education, state industry-education-labor coordinators, as well as a host of other suggested and identified persons. Some 238 persons were identified as potential directors of cooperative adult education programs through this process.

With all of these contacts, mailings, and follow-ups, it is still clear that not all programs in the United States have been identified. The goal of the project was not to identify all the cooperative programs in America, but to study a sufficient number to provide information for decision making and fostering other such efforts.

The study phase of the project began with the development of criteria by which the identified programs could be examined. A panel was selected with representatives from industry, adult educators, state department of adult education directors, labor organizations, and local program directors participating. This panel was selected for their representative views and expertise in cooperative adult education. The panel followed something of a needs assessment process in developing the criteria in that the main question asked was, "What ought (in the ideal sense) to be a part of a good cooperative adult education program?"

The criteria identify twelve wide areas of concern and under each of these a varying number of more specific statements clarified the general topic. These specific statements formed the basis for the development of the questionnaire, telephone interview, and site visit data gathering instruments used to study the identified programs. The twelve areas of concern or criteria developed by the panel were: (1) Needs Assessment; (2) Objectives; (3) Staffing; (4) Procedures and Materials; (5) Pre-Planning; (6) Funding; (7) Administration; (8) Job Placement; (9) Communication; (10) Evaluation; (11) Accepting and Screening Participants; and (12) Counseling.

A mail questionnaire was sent to the 238 program directors which were specified from the identification phase. Seventy-one of the program directors responded that they were currently carrying on programs which met the parameters. Many directors reported more than one program. Thus, a total of 108 programs were identified and reported in the product named *A Partial Listing of Cooperative Adult Education Programs.*

From this group of 108 programs, 29 programs at as many different sites were selected for telephone interviews. The project staff contacted the 29 program directors and gathered information about criteria specified by the panel. The information gained from these 29 telephone interviews was then formed into the abstracts which became the product known as *Abstracts of Selected Cooperative Adult Education Programs*. The directors of the programs reviewed and commented on these abstracts prior to their publication.

Reports of the on-site visits made by the staff and project panel were prepared with the title of *Case Studies of Selected Cooperative Adult Education Programs*. These reports contain the information gathered on-site which is related to the twelve (12) areas of concern. The directors of the programs visited, reviewed and commented on the case studies prior to publication.

A publication of guidelines which are related to the twelve criteria is found as *Guidelines for the Development and Study of Cooperative Adult Education Programs*. This product is designed to be a practitioner's handbook to be used by local program directors and state staff. While not professing to be the final word in cooperative adult education programming, this publication does provide some practical suggestions for the development and evaluation of cooperative efforts.

The last publication product resulting from the project is a paper entitled *Discussion of Industry/Education Cooperation for Adult Learning*. As the project proceeded it became apparent that there were some important issues related to cooperative adult education which needed further clarification. This publication reviews fourteen issues such as developing inter-agency contacts, who benefits--who pays, and industry's view of cooperative programs. These topics are discussed in order to aid the future development of cooperative industry/education efforts.

Conclusions

Through this project it is evident that cooperative adult education is an important component of many educational agencies across the United States. There are a great number of types of cooperative arrangements. Some programs identified had industries working with public schools, vocational and technical institutes, community colleges, and state departments. Industries are providing direct funding, materials, release time, and facilities for these programs. Generally these programs are meeting their goals and those involved are pleased with the results.

Some specific areas which were uncovered relating to cooperative programs may now be noted:

1. Many of these programs are begun because educational agencies are facing declining enrollments and they are looking for new populations to serve. Industry is looking for inexpensive training methods and is willing to implement basic education programs in hopes that it can upgrade employees' skills, improve morale, and, perhaps, affect safety on the jobs.

2. Whenever two systems interface (in this case industry and education) there is the possibility of one system becoming subserviant or a subsystem of the other. That is, one system stops trying to meet its own goals and becomes committed to the other system's objectives. Cooperative programs are very susceptible to this condition. The way to prevent this from happening is to have both systems or agencies clearly state the goals to which they are committed and to "stick to them." Clear communication of both parties' overall goals is one of the most important aspects of cooperative programs.
3. Cooperative programs require a strong leader, one who will meet head-on with both agencies. This leader is also the key linking-pin between the cooperating parties. Having such a leader as a linking-pin is necessary but can also be a problem. The problem arises when the leader becomes so "key" to the program that without him or her the cooperation is lost.
4. In the same vein, documentation is very important to cooperative programs. By putting things in writing the two parties, which in some ways "speak different languages," can be clear as to the program's needs, objectives and evaluation.

Some other findings in brief include: business is generally eager to cooperate once the "ice is broken"; unions want and need to be informed though they may not have the time for heavy involvement; and, absolute clarity of what participants can expect from involvement is a necessity.

Mr. Elliot Estes, President of General Motors Corporation, in a speech given before the professional organization of industrial trainers, commented on one of his industry's strategies toward training:

The fourth and final strategy is the wider use of the external educational training resources that are available. We are trying to develop closer relations with schools, especially high schools and community colleges. We believe this may give industry and education the chance to form a new and mutually beneficial alliance.

We can see that industry is ready for cooperation, cooperation is possible; now the question is how great can the future be?

Relationship to Vocational Education

It is our belief that the future of cooperative adult education can be greater with the continued active involvement of vocational educators. Many of the programs we studied were fostered by persons in the field of adult education. It is the combined expertise of adult educators and vocational educators which fully "sound-out" the programs under study. Each brings a knowledge base to the program that is necessary for a truly quality effort.

The ideal is a four pronged approach, combining industry management, representatives of organized labor, vocational educators, and adult educators.

One specific area in which the expertise of the vocational educator is valuable relates to career or vocational counseling. During the study of cooperative programs it was clear that guidance programs, where they existed at all, did not adequately serve adults. The important strides which have been made in vocational guidance need to be adapted to adult cooperative programs and infused into these programs.

A second area concerns the relationship of the participant's work to the educational program. Several of the sites we visited lacked a strong linkage between the program content and what the participant does on his or her job. For example, participants interviewed expressed the desire to learn math as it specifically applied to their job. One industry was in the process of converting their machinery to metric dimensions. The methods and procedures vocational educators have developed, and use, which apply the curriculum to experiences on the job would be very helpful in this type of cooperative program for adults.

Finally, the evaluation of cooperative adult education programs could be improved with the increased input from the field of vocational educators. Again, the methods and procedures used in vocational education to measure program success and plan for improvements need to be adapted and put to use in cooperative programs.

These three are only an indication of the great number of areas where vocational education has and can continue to contribute to cooperative programs for adults. These programs can open whole new populations which can be served. By cooperating with industry, educational systems can find new friends at tax levy time or when state priorities are being set. The future of these types of efforts is exciting and it will take the continued commitment and expertise of the adult and vocational educator to see it through.

CHIEF STATE SCHOOL OFFICERS LOOK

AT VOCATIONAL EDUCATION

by Jack P. Nix*

The other day I heard a wonderful story about Harry Truman I think you would enjoy, especially since you are vocational education people and we're out here together just across the way from mid-America.

This incident happened soon after Mr. Truman ascended everybody by moving back to his modest white frame home in Independence, Missouri, after being President of the United States and hobnobbing with kings and rulers. He was riding down Highway 40 to Jefferson City when he saw a woman trying to herd some hogs that had gotten loose. He told his driver to pull over, because he wanted to help the lady get her hogs in.

When Truman got to Jefferson City there was a reporter waiting to meet him. He couldn't believe the President had been out on the highway herding hogs. But Harry Truman said yes, he had done it. He said somebody had to, and anyway, "He'd been a farmer long before he got to be President."

Well, vocational education was an educational issue long before some of us became involved in it. In Georgia, as far back as the turn of the century, we had a school superintendent named Gustavus Glenn who was advocating that students be taught to work with their hands, saying that a good industrial program would solve most of the state's economic problems in years to come.

Through the decades since that time vocational education has been cussed and discussed, and this particular round in which we are currently involved has lasted almost a year now. As long ago as March I testified before Carl Perkins' subcommittee on career, vocational, and occupational education. As of now, the House and Senate are both about through with their hearings, and they have made some field visits to observe vocational education in action during the summer.

We expect that the Senate will vote out a bill in October, possibly lumped in with higher education, and that the House will pass not one, but two vocational bills. It's a long shot, but we might have a conference and final bill before Christmas, certainly sometime early next year.

*Jack P. Nix is superintendent of schools in Georgia and president of The Council of Chief State School Officers.

At any rate, the new vocational education bill has been long and arduous in its development. The issues certainly have had a fair hearing, and everyone has had ample opportunity to express their opinions. There are so many proposals, in fact, it is somewhat difficult to sort them out. The five major bills present a range of choices from simple extension of the present amendments to drastic plans for restructuring the whole program to wholesale consolidation and cuts. There's something for almost everyone.

I know you have studied the various proposals, as we have in Georgia and as the Chief State School Officers have through their regional coordinators. I presume you are familiar with the varying ideas being offered. I think it is time now for those of us who have influence in this area to plan our strategy and consolidate our forces to insure that we finally come out with a bill we can all live with.

The Council of Chief State School Officers, through its task force on pending vocational legislation, has spent considerable time and effort studying these bills, and the conclusion is that the Chiefs should support H.R. 3037 sponsored by the American Vocational Education. It is our feeling that this bill, with some modifications, would be most favorable to state education agencies, and of course we would expect your sympathies as state vocational directors to be aligned with the states also.

This proposal is not perfect; I have yet to see one that is. But as a whole and with some changes I will mention shortly, it is acceptable.

Briefly, here is what H.R. 3037 does:

It reorganizes and consolidates the previous acts and provides greater authorization of funds. These would amount to \$1.5 billion in fiscal year 1976.

It consolidates Parts B, E, F, and G of the 1968 amendments--those sections dealing with career education, job placement, guidance, research, and exemplary projects. In my testimony last March I supported this idea, plus other consolidations, which would enable the states to move easily and effectively ahead in developing workable programs of career guidance and exploration for elementary and high school students. I would also like to see a consolidated section dealing with support activities, and a third that would encompass residential vocational programs, consumer and homemaking, cooperative education and work study and basic state vocational programs.

Now consolidation of the kind I propose, and the AVA, and H.R. 3037 propose, is one thing, but the kind of consolidation proposed by the administration bill is a horse of a different color

Under the administration bill, disguised as consolidation, overall authorization levels for vocational education funding are considerably reduced. In addition, state advisory councils are strengthened, strict limitations are placed on the amount of federal funds that can be expended

for vocational education, and 50 percent of special projects funds are reserved for the commissioner, time limitations are placed on projects funded under Title IV. In summary, the administration bill detracts from, and in some ways tears down, the program of vocational education that has been so carefully built through the years by the states.

The bill we support is more generous, less restrictive and provides a more workable framework for the new directions many of our states are trying to take in their vocational programs.

It retains the set-asides for programs for handicapped and disadvantaged students and authorizes additional funds in support of pilot programs for the disadvantaged and handicapped. This provision presents a problem for me personally and for the Council. In particular, the assigning of any percentage figure for use of funds in certain areas does not take into account the diversity among the states. Some states already have special provisions for offering additional programs and services for disadvantaged and handicapped students. While we recognize that some vehicle is necessary to insure that this group of students is served, we would prefer that the set-aside figure be reduced to 25 percent or less, and that the implementation of these funds by the states be left somewhat flexible.

Another set-aside provision causes us similar reservations as we consider what parts of the bill we can support, and that is the 30 percent earmarked for post-secondary and adult programs. This provision is felt to be restrictive, and would hamper the states in their planning for and administration of these programs. I might note here that while this bill earmarks funds for these two special groups, it fails to recognize the need for vocational programs to serve women and non-English speaking people. If groups are going to be singled out for special funding, it would seem these two groups deserve attention also. A better way would be to leave more of the decision making up to the states as to what to do with their funds within certain guidelines.

I am pleased that H.R. 3037 authorizes funds for student organizations, because I feel these are among the most effective adjuncts of the vocational program we have. I have been closely involved with a number of youth groups, and I have seen often and firsthand what they can mean to individual students and even whole groups of young people.

It seems to me that this bill, better than any others I have seen, treats the states and state boards of education fairly and with respect and understanding for their leadership roles in education. While I am unhappy about the 50 percent set-aside of funds for the commissioner, I am pleased that the bill provides funds to state boards for innovative projects and supports the idea of a research coordinating unit. It also provides that funds may be used to support programs to acquaint teachers with research findings, efforts to test the effectiveness of findings, demonstration and dissemination projects, curriculum development and exploration of new careers. On the matter of discretionary funds for the commissioner, I contend that 50 percent is excessive. In no instance should it be more than 25 percent,

and 10 to 15 percent would be more appropriate. Our experience in the past with similar discretionary funds has been that this approach is generally unproductive. Very few materials have been developed which are acceptable nationwide.

H.R. 3037 makes a stab at solving another problem that has been plaguing vocational educators for years. We all know there is a considerable amount of information and data available on manpower supply and demand, yet it either is not adequate or is in the wrong form to be of help in state and local planning of vocational education. In Part C of the bill there is a provision that the Secretary of Labor and the Commissioner of Education jointly develop a data system on manpower supply and demand. The section even includes funds to carry out the project. This is a very strong addition to the legislation which should be supported and welcomed by all states in their planning efforts. It could help us greatly with some of the problems we have had with CETA.

While I am speaking in a positive vein I will mention what I, and the Council, consider to be one of the most positive aspects of H.R. 3037. We strongly agree with the requirement under Part A that the federal government deal directly with state boards of education in all matters concerning education. We also believe in the "sole state agency" concept included in the same section. Not only is it efficient and economical, preventing duplication of staffs and planning efforts, it makes things easier on students by avoiding articulation problems as they advance from one level to the next. It insures that all areas of vocational education will be treated fairly and equitably in the use of funds and resources. Most important, it makes sense and it has been proven to work. State boards of education have an excellent record of administering and properly maintaining vocational education funds and programs through the years.

On the other hand, the very next section of the bill relating to leadership in vocational education seems to fly in the face of the philosophy of state board responsibility. This whole section--section 103--strikes at the issue of state governance. If it is implemented it would give the federal government inordinate power in determining all facets of vocational education. The states are legally responsible for education in the United States; they are unique in their ability to allocate a range of resources for regulation, finance and leadership in education. And they are in strategic positions to identify needs within their own boundaries. While I can readily see that there are some identifiable national concerns in the area of vocational education, they certainly should not be specified as areas of program operation by the U.S. Office of Education. That is carrying "concerns" to the extreme. This whole section really should be deleted. At the very least its language should be toned down, using words like "assist" and "recommend" instead of "direct" and "prescribe."

The section pertaining to statewide planning and accountability staff is similarly restrictive and contradictory. On the one hand we have a section (104) that says plainly, "Nothing in this Act shall be construed to authorize

any department, agency, officer or employee of the United States to exercise any direction, supervision or control over the curriculum, program of instruction, administration, or personnel of any educational institution or school system." There's nothing ambiguous about that. But a few sections later (108) state boards are told how they shall organize staff. The whole section is too prescriptive and puts state boards into the administrative rather than the policy making area. Certainly, in states where vocational education falls under the jurisdiction of the chief state school officer, the chief and not the state board should have primary responsibility for preparing comprehensive statewide plans for vocational education and for designating planning groups.

I would also like to see some changes in the bill's provisions relating to state advisory councils. Right now, as you know, members are appointed by the governor or, in states where the board is elected, by the board. This places the appointment in the political arena and is inconsistent with most legislation which provides for the appointment of advisory councils by the constitutional or statutorily designed state officials responsible for education. The council and I would prefer to see this provision changed to allow the chief state school officer in conjunction with the state board of education to appoint council members in those states where the state education agency is responsible for vocational education.

I realize I may have spent a large proportion of time this evening pointing out negative aspects of H.R. 3037. But at this juncture, I think it is more important for you to be aware of these problems with the bill than to hear what we like about it. The idea is that we will all get to work now and change those things we don't like so that the final product is as near as we can come to consensus. I certainly intend, on behalf of both the state of Georgia and the Council, to pursue the issues I have raised to you. What we are all after--you, me, the Council and the Congress--is a workable plan for vocational education that will permit us to get the job done in an efficient and effective manner with as little bureaucracy at each level as possible.

I personally feel there is some urgency about this whole matter, and that we must have a bill soon if the states are going to make a significant contribution through vocational education to the recovery of the economy.

APPENDIX

EXHIBIT A: SEMINAR AGENDA

EXHIBIT B: PROGRAM PRESENTERS AND
PARTICIPANTS

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EXHIBIT A

SEMINAR AGENDA

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PROGRAM

1975 National Leadership Development
Seminar for State Directors of Vocational Education
"Issues and Answers in Vocational Education"

The Wildwood Inn--Snowmass, Colorado
September 23-26, 1975

MONDAY

SEPTEMBER 22, 1975

7:00 p.m. -

8:30 p.m.

Registration

Wildwood Lobby

TUESDAY

SEPTEMBER 23, 1975

7:30 a.m. -

8:30 a.m.

Registration

Opticon Lobby

FIRST GENERAL SESSION

8:30 a.m.

Opticon Theater

PRESIDER

Luther Hardin, Associate Director
for Vocational, Technical, and
Adult Education, Arkansas

OPENING REMARKS--WELCOME

Marvin Buckels, Chairman of State
Board for Community Colleges and
Occupational Education, Colorado

GREETINGS FROM THE CENTER

Robert E. Taylor, Director
The Center for Vocational Education

SEMINAR EVALUATION

Kay Adams, Graduate Research Associate
The Center for Vocational Education

SEMINAR CHARGE

Joe Mills, State Director of Vocational,
Technical, and Adult Education, Florida

9:15 a.m.

Topic A: A Philosophy for Vocational
Education

PRESENTERS

Charles J. Law, Jr., Director of
Occupational Education, North Carolina

Darrell L. Parks, Assistant Director
Vocational Education, Ohio

Melvin Miller, Head, Department of
Vocational-Technical Education
University of Tennessee

Topic B: The Governance of Vocational
Education at the State and
Local Levels

PRESENTERS

Roald F. Campbell, Emeritus Professor
The Ohio State University

Don K. Gentry, Executive Officer/State
Director, Vocational Education, Indiana

Charles F. Nichols, Sr., Director of
Vocational-Technical and Industrial
Education, Minneapolis, Minnesota

10:30 a.m.

Coffee Break

Opticon Lobby

10:45 a.m.

PROGRESS REPORTS

Opticon Theater

MANAGEMENT INFORMATION SYSTEMS FOR
VOCATIONAL EDUCATION

PRESENTERS

Harold Starr, Program Director
The Center for Vocational Education

LeRoy A. Cornelsen, Director of
Planning Bureau of Occupational and
Adult Education, U.S. Office of
Education

Arthur M. Lee, Director
Project Baseline, Northern Arizona
University

12 Noon Lunch (individually arranged)

1:30 p.m. TASK FORCE DEVELOPMENT OF POSITION PAPERS

Special Task Force on Definitions
(Note: This task force will meet each
afternoon of the seminar.)

Chairman Clarence Burdette Suite 154
Recorder Don Gentry

Topic A: A Philosophy for Vocational Education

Task Force I Chairman Don Fowler Turkey Trot
Task Force I Recorder Dan Dunham

Task Force II Chairman Roy Irons Green Cabin
Task Force II Recorder Arthur Binnie

Task Force III Chairman Peter Bowen Naked Lady
Task Force III Recorder Warren Smeltzer

Topic B: The Governance of Vocational
Education at the State and
Local Levels

Task Force I Chairman Robert Mullen Granite
Task Force I Recorder Dale Post

Task Force II Chairman Arnold Loomis Suite 153
Task Force II Recorder Carrol Burchinal

Task Force III Chairman Grady Knight Upper Powderhorn
Task Force III Recorder Monty Multanen

3:00 p.m. Coffee Break Campground

3:30 p.m. TASK FORCE MEETING
(Note: Continue with same schedule
and locations as earlier sessions.)

5:00 p.m. Adjourn

EVENING SESSION

6:00 p.m. Hospitality Hour The Tower

Sponsored by Brodhead-Garrett Co.
Cleveland, Ohio
Host: Tom Rogers
Educational Consultant

7:30 p.m. Western Barbeque Fanny Hill Saloon

TOASTPERSON

Wilma Ludwig, Assistant State
Superintendent of Vocational
Education, New Mexico

CHIEF STATE SCHOOL OFFICERS LOOK AT
VOCATIONAL EDUCATION

Jack Nix, State Superintendent of
Schools and President, Chief State
School Officers, Georgia

WEDNESDAY

SEPTEMBER 24, 1975

SECOND GENERAL SESSION

8:30 a.m.

Opticon Theater

PRESIDER

Gene Dorr, Associate Superintendent
for Career Education and Director
for Vocational Education, Arizona

Topic C: The Role of Vocational
Education in the CETA Program

PRESENTERS

Ann Donovan, Director, CETA Coordina-
tion Unit, Bureau of Occupational and
Adult Education, U.S. Office of Education

Nathaniel Semple, Minority Staff Member
Committee on Education and Labor
U.S. Congress

John Snyder, Assistant Commissioner
of Education, State Department of Edu-
cation, Kansas

9:30 a.m.

Topic D: The Role of Vocational
Education in Large Cities

PRESENTERS

Donald V. Heelas, Director
Technical-Vocational Education
Cleveland Public Schools

Addison Hobbs, State Director
Vocational Education and Career
Development Services, Michigan

Milton Bins, Senior Associate
The Council of the Great City
Schools, Washington, D.C.

10:30 a.m.

Coffee Break

Opticon Lobby

10:45 p.m.

PROGRESS REPORTS

Opticon Theater

CURRICULUM DEVELOPMENT--THE
VOCATIONAL-TECHNICAL EDUCATION
CONSORTIUM OF THE STATES (V-TECS)

PRESENTER

Ben Hirst, Executive Director
V-TECS Project, Commission on
Occupational Education Institu-
tions, Southern Association of
Colleges and Schools

CAREER EDUCATION

PRESENTER

William Pierce, Deputy Commissioner
for Occupational and Adult Education
U.S. Office of Education

12 Noon

Lunch (individually arranged)

1:30 p.m.

TASK FORCE MEETINGS

Topic C: The Role of Vocational
Education in the CETA Programs

Task Force I Chairman James Bishop Turkey Trot
Task Force I Recorder Conrad Shuman

Task Force II Chairman Wilma Ludwig Green Cabin
Task Force II Recorder

Task Force III Chairman William
Schuermann Naked Lady
Task Force III Recorder John Snyder

Topic D: The Role of Vocational
Education in Large Cities

Task Force I Chairman Walter Verney Granite
Task Force I Recorder Geneva Fletcher

Task Force II Chairman Glen Strain Suite 153
Task Force II Recorder Robert Van Tries

Task Force III Chairman Courtney Riley Upper Powderhorn
Task Force III Recorder Sherwood Dees

3:00 p.m.

Coffee Break

Campground

3[^] : 30 p.m.

TASK FORCE MEETINGS

(Note: Please continue with same schedule
and locations as earlier sessions.)

4^f 15 p.m.

Adjourn

4^f 30 p.m.

NASDVE Meeting

Opticon Theater

Conducted by Francis T. Tuttle
State Director, Vocational
Education, Oklahoma

EVENING FREE

THURSDAY

SEPTEMBER 25, 1975

7:30 a.m.

CHUCKWAGON BREAKFAST

Fanny Hill Saloon

TRAIL BOSS

Darrell Parks, Assistant Director
Vocational Education, Ohio

AVA REPORT--STATUS OF FEDERAL AND
STATE LEGISLATION AFFECTING VOCATIONAL
EDUCATION

Lowell A. Burkett, Executive
Director, American Vocational
Association

REPORT OF NATIONAL ADVISORY COUNCIL
FOR VOCATIONAL EDUCATION

Reginald Petty, Acting Executive
Director, Washington, D.C.

THIRD GENERAL SESSION

9:00 a.m.

Opticon Theater

PRESIDER

Otho Jones, State Director
Division of Career Development
Programs, District of Columbia

Topic E: The Role of Research in
Vocational Education

PRESENTERS

Howard J. Hjelm, Director, Division
of Research and Demonstration, USOE

Kenneth Eaddy, Chief, Bureau of
Vocational Research/Evaluation,
Florida

Daniel E. Koble, Jr., Research
Specialist, The Center for Vocational
Education

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Topic F: Standard Characteristics for
Vocational Education

PRESENTERS

Darrell Parks, Assistant Director
Vocational Education, Ohio

Otto Legg, Education Program Officer
Program Support Branch, USOE

James Wall, Associate Dean (R&D)
Mississippi State University

10:30 a.m. Coffee Break Opticon Lobby

11:00 a.m. PROGRESS REPORTS Opticon Theater

THE EDUCATION COMMISSION OF THE
STATES LOOKS AT VOCATIONAL EDUCATION

PRESENTER

Richard Millard, Director
Higher Education Services
Education Commission of the
States, Denver

COOPERATIVE ADULT EDUCATION

PRESENTER

James Granger, Research Specialist
The Center for Vocational Education

12 Noon Lunch (individually arranged)

1:30 p.m. TASK FORCE MEETINGS

Topic E: The Role of Research in
Vocational Education

Task Force I Chairman Elwood Padham Granite
Task Force I Recorder Carl Lamar

Task Force II Chairman William Anderson Suite 153
Task Force II Recorder William Swenson

Task Force III Chairman Chuck Hopkins Upper Powderhorn
Task Force III Recorder Pat Weagraff

Topic F: Standard Characteristics for
Vocational Education Programs

Task Force I Chairman Turkey Trot
Task Force I Recorder James Geary

Task Force II Chairman Eugene Lehrmann Green Cabin
Task Force II Recorder William Jackson

Task Force III Chairman Homer Edwards Naked Lady
Task Force III Recorder James Durkee

3:00 p.m. Coffee Break Campground

TASK FORCE MEETINGS

(Note: Please continue with same schedule
and locations as earlier sessions.)

5:00 p.m. Adjourn

SPECIAL EVENT--COLORADO NIGHT

6:30 p.m. Rocky Mountain Oyster Fry Village Green

CAMP COOKS

Bob McCaffree/Colorado Young Farmers

SHEEP HERDER

William Wolf, Director, Occupational
Education, State Department of
Education

COLORADO YOUNG FARMERS' REPRESENTATIVE

Maynard Smith, 1976 National Institute
Chairman

GREETINGS

Leon P. Minear, Regional Commissioner
U.S. Office of Education, Denver

LeRoy Swenson, Director, Occupational
and Adult Education, U.S. Office of
Education, Denver

(Dinner music and entertainment for
the evening provided by Country Sunshine
led by Eddie Webster, vocational printing
instructor, Colorado Mountain College.)

FRIDAY

SEPTEMBER 26, 1975

8:30 a.m.

FOURTH GENERAL SESSION

Opticon

PRESIDER

Richard W. Rowles, State Director
Occupational Education, Wyoming

9:00 a.m.

Task Force Reports

11:30 a.m.

Seminar Summary

Robert E. Taylor, Director
The Center for Vocational Education

12 Noon

Adjourn

EXHIBIT B

PROGRAM PRESENTERS AND PARTICIPANTS

Kay Adams
Graduate Research Associate
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Arch Alexander, Deputy Director
State Department of Education
1515 West 6th Street
Stillwater, Oklahoma 76074

William Anderson
Deputy Associate Superintendent
1535 West Jefferson
Phoenix, Arizona 85007

Jim Ashman
National Computer Systems
4401 West 76th Street
Minneapolis, Minnesota 55435

Kent Bennion
Assistant Regional Commissioner
Occupational and Adult Education
50 Fulton Street
San Francisco, California 94102

William Bergman
Associate Director
Business Research Bureau
University of South Dakota
Vermillion, South Dakota 57069

Arthur A. Binnie
State Director of Vocational
Education
Building #17, Air Industrial Park
Olympia, Washington 98504

Milton Bins, Senior Associate
The Council of the Great City
Schools
1707 H Street, NW
Washington, D.C. 20006

James R. Bishop, Branch Director
Support Data Branch
Room 883, State Office Building
Montgomery, Alabama 36130

Peter F. Bowen, State Director of
Vocational Education
Roger Williams Building
Hayes Street
Providence, Rhode Island 02908

Marvin Buckels, Chairman
Colorado State Board for Community
Colleges and Occupational Education
444 17th Street
Denver, Colorado 80202

Carrol E. Burchinal
State Director
Vocational Education
State Board of Vocational Education
900 East Boulevard Avenue
Bismarck, North Dakota 58505

Clarence Burdette
State Director for Vocational Education
1900 Washington Street, E
Charleston, West Virginia 25305

Lowell A. Burkett
Executive Director
American Vocational Association
1510 H Street, NW
Washington, D.C. 20005

John Cardigan, Sales Manager
Brodhead-Garrett Company
4560 East 61st Street
Cleveland, Ohio 44105

Roald Campbell
2273 East Tara Lane
Salt Lake City, Utah 84117

Chuck Clawson, President and Chairman
of the Board
Brodhead-Garrett Company
4560 East 61st Street
Cleveland, Ohio 44105

LeRoy A. Cornelsen, Director
Planning Office/BOAE
400 Maryland Avenue, SW
Washington, D.C. 20202

William G. Cummins
Senior Program Officer
Vocational-Technical Education
1114 Commerce Street
Dallas, Texas 75202

Sherwood Dees, State Director
Vocational Education
100 North First Street
Springfield, Illinois 62706

Ann E. Donovan, Director
CETA Coordination Unit
7th & D Streets, SW
Washington, D.C. 20202

Eugene L. Dorr
Director
Vocational Education
1535 West Jefferson
Phoenix, Arizona 85007

Daniel Dunham
Maryland State Department
of Education
P.O. Box 8717
Baltimore, Maryland 21240

Jim Durkee
State EPDA Coordinator
Laramie, Wyoming

Kenneth M. Eaddy
Bureau Chief, Research
258 Knott Building
Tallahassee, Florida 32304

Homer E. Edwards, Branch Chief
USOE Region V
300 South Wacker Drive
Chicago, Illinois 60606

T. L. Faulkner, State Director
Vocational-Technical and
Higher Education
State Department of Education
Montgomery, Alabama 36104

Geneva Fletcher
Deputy State Director
120 West Market Street
Indianapolis, Indiana 46204

Donald W. Fowler
Assistant State Director of Vocational
Education
721 Capitol Mall
Sacramento, California 95814

James P. Geary
Member, State Board of Education
5 Main Street
Petersburg, West Virginia 26847

Don K. Gentry
Executive Officer
State Director
120 West Market Street
Indianapolis, Indiana 46204

James Granger, Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Kenney E. Gray, Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Billie Grogan
State Department of Education
Capital Plaza Tower
Frankfort, Kentucky 40601

Luther Hardin, Associate Director
Vocational, Technical and Adult
Education
State Education Building
Little Rock, Arkansas 72201

Donald Healas, Director
Technical-Vocational Education
Cleveland Board of Education
1380 East 6th Street
Cleveland, Ohio 44114

Ben Hirst, Executive Director
V-TECS Project
795 Peachtree Street, NE
Atlanta, Georgia 30308

Howard F. Hjelm, Director
Division of Research and
Demonstration
DHEW/USOE
Washington, D.C. 20202

Addison S. Hobbs, State Director
P.O. Box 928
Lansing, Michigan 48904

Charles O. Hopkins
State Department of Education
1515 West Sixth Avenue
Stillwater, Oklahoma 74074

Roy D. Irons, State Administrator
506 North 5th
Boise, Idaho 83720

Bill Jackson, Assistant Director
State Department of Education
State Education Building
Santa Fe, New Mexico 87503

Verdell Jackson, Director
Career & Vocational Education
State of Alaska
Pouch F--State Office Building
Juneau, Alaska 99811

Otho E. Jones
Assistant Superintendent
415 12th Street, NW
Washington, D.C. 20004

Sam Kerr, Associate Regional
Commissioner, Occupational
and Adult Education
1321 Second Avenue
Seattle, Washinton 98101

Ralph Kester, Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Grady Knight, Coordinator of
Vocational Program Planning
State Education Building
State Capitol Grounds
Little Rock, Arkansas 72201

Daniel E. Koble, Jr.
Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Andrew Korim, Director
Grants Management and Development
Community College of Allegheny County
Pittsburgh, Pennsylvania

John Lacey, Senior Program Officer,
Voc-Tech Education
USOE Region VIII
Room 11037 Federal Officer Building
19th and Stout Streets
Denver, Colorado 80202

Carl F. Lamar, State Director
Vocational Education
2011 Capital Plaza Tower
Frankfort, Kentucky 40601

Charles J. Law, Jr.
State Director
Department of Public Instruction
Division of Occupational Education
Raleigh, North Carolina 27611

Arthur M. Lee, Director
Project Baseline
Box 15015
Northern Arizona University
Phoenix, Arizona

Otto P. Legg
Education Program Officer
Program Support Branch
U.S. Office of Education
Washington, D.C. 20202

Eugene Lehrmann, State Director
Wisconsin Board of VTAE
4802 Sheboygan Avenue
Madison, Wisconsin 53702

Patricia K. Lewis, Secretary
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

M. G. "Pete" Linson
1100 Skyline Drive
Fort Collins, Colorado 80521

Arnold Loomis, Chief
Supplemental Support Program
P.O. Box 928
Lansing, Michigan 48904

Wilma Ludwig
Assistant State Superintendent
of Vocational Education
State Department of Education
Santa Fe, New Mexico 87503

Duane Lund
Superintendent of Schools
Staples, Minnesota 56479

Robert H. McCaffree
Publications Specialist
State Board for Community Colleges
and Occupational Education
1525 Sherman Street
Denver, Colorado 80203

Thaine D. McCormick
Assistant Regional Commissioner
601 East 12th
Kansas City, Missouri 64106

Sherrill McMillen
Acting Director, DVTE
U.S. Office of Education
6926 Southridge Drive
McLean, Virginia 22101

Richard Millard, Director
Higher Education Services
Education Commission of the States
1860 Lincoln Street
Denver, Colorado 80203

Melvin D. Miller, Head
Department of Vocational-
Technical Education
University of Tennessee
Knoxville, Tennessee 37916

Joe D. Mills, Director
Vocational Education
State Department of Education
204 Knott Building
Tallahassee, Florida 32304

Robert A. Mullen, Deputy Director
Department of Public Instruction
Division of Occupational Education
Raleigh, North Carolina 27611

Monty Multanen, Director
Career and Vocational Education
942 Lancaster Drive, NE
Salem, Oregon 97310

Mark Newton
Graduate Research Associate
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Charles Nichols, Director
Minneapolis Public Schools
Area Voc-Tech Institute
1101 Third Avenue, South
Minneapolis, Minnesota 55404

Duane M. Nielsen, Chief
Vocational Education and Personnel
Development
U.S. Office of Education
Washington, D.C. 20202

Jack Nix
State Superintendent of Schools
242 State Office Building
Atlanta, Georgia 30334

Charles A. O'Connor, Jr.
Director
Occupational and Adult Education
Region II
26 Federal Plaza
New York, New York 10007

E. B. Oleson, State Director
Division of Voc-Tech Education
State Department of Education
222 West Pleasant Drive
Pierre, South Dakota 57501

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Elwood A. Padham
Associate Commissioner
Maine State Department of
Educational and Cultural
Services
Augusta, Maine 04330

Darrell L. Parks
Assistant Director
Vocational Education
65 South Front Street
Columbus, Ohio 43215

Reginald Petty
Acting Executive Director
National Advisory Council for
Vocational Education
Washington, D.C.

William F. Fierce
Deputy Commissioner, BOAE
U.S. Office of Education
Washington, D.C. 20202

Tony Pitale
Massachusetts State Department
of Education
178 Tremont Street
Boston, Massachusetts 02111

Dale M. Post, Director
Division of Occupational Education
State Education Department
Albany, New York 12230

James L. Reid, Executive Director
NASDVE
6610 Rannock Drive
Catonsville, Maryland 21228

R. Courtney Riley, State Director
Vocational Education
4 Savage Circle
Carson City, Nevada 89701

Tom Rogers, Educational Consultant
Brodhead-Garrett Company
4560 East 61st Street
Cleveland, Ohio 44105

Richard W. Rowles, State Director
Occupational Education
State Department of Education
Cheyenne, Wyoming 82002

William Rowland, Deputy Chief
Vocational-Technical Education
105 Loudon Road
Concord, New Hampshire 03301

Edwin L. Rumph
Director of Field Coordination
Office of Education
7th and D Streets, SW ROB 4052
Washington, D.C. 20202

Paul Schalles
State Department of Education
P.O. Box 911
Harrisburg, Pennsylvania

Leo Schreiner, Program Director for
Occupational Education and Professional
Development
Texas Education Agency
201 East 11th Street
Austin, Texas 78701

William O. Schuermann
Director of Career Education
Iowa Department of Public Instruction
Grimes State Office Building
3858 Sherman Boulevard
Des Moines, Iowa 50319

Nathaniel Semple
Minority Staff Member
Committee on Education and Labor
U.S. Congress
Washington, D.C.

Conrad Shuman, Director
Vocational Education
Department of Public Instruction
John G. Townsend Building
Dover, Delaware 19901

Robert Smallwood, Director
Occupational and Adult Education
USOE--Region III
3535 Market Street, P.O. Box 13716
Philadelphia, Pennsylvania 19101

Warren G. Smeltzer
Assistant Director
Vocational Education
Maryland State Department of
Education
P.O. Box 8717
Baltimore, Maryland 21240

Donald Snodgrass
Assistant Regional Commissioner
OAE, Office of Education
50 Seventh Street, NE
Atlanta, Georgia 30323

John E. Snyder
Assistant Commissioner
120 E. 10th Avenue
Topeka, Kansas 66612

Daniel Stabile
Educational Specialist
Career and Vocational Education
Office of Overseas Dependents
Education
Architect Building 138
1400 Wilson Boulevard
Arlington, Virginia 22209

Harold Starr, Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Ruth Stovall
Branch Director
Program Services
Room 885, State Office Building
Montgomery, Alabama 36130

Glen H. Strain
Assistant Commissioner of Education
for Vocational Education
233 South 10th Street
State Department of Education
Lincoln, Nebraska 68508

LeRoy H. Swenson
Assistant Regional Commissioner
Occupational and Adult Education/
DHEW
19th and Stout Streets
Denver, Colorado 80202

William R. Swenson
Assistant State Administrator
506 North 5th
Boise, Idaho 83720

Ruth Tangman
National Advisory Council for Vocational
Education
425 13th Street, NW, Room 412
Washington, D.C. 20004

Robert E. Taylor, Director
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Charles Turman
Assistant Director
Occupational Education
State Department of Education
207 State Services Building
1525 Sherman Street
Denver, Colorado 80203

Francis Tuttle
State Director
Vocational Education
State Department of Education
1515 West Sixth Avenue
Stillwater, Oklahoma 74074

Robert Van Tries
Assistant Commissioner
State Department of Education
571 Capitol Square Building
St. Paul, Minnesota 55101

Walter C. Verney
Acting Assistant
Regional Commissioner, OAE
Room 2303, JFK Federal Building
Boston, Massachusetts 02203

James E. Wall
Associate Dean (R&D)
Mississippi State University
P.O. Drawer DX
Mississippi State, Mississippi 37962

Frank Wimer
State Department of Education
Building #17
Airdustrial Park
Olympia, Washington 98506

William Woolf
Director
Occupational Education
State Department of Education
207 State Services Building
1525 Sherman Street
Denver, Colorado 80203

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