Job creation properly researched and developed can help vitalize vocational education for educators, their students, and the community. The migration of employers from the inner cities to outlying areas over the past few years has created a wasteland within our cities. To help rectify this situation, vocational education needs to start preparing people to become employers, not only employees. After researchers identify community needs and resources, development teams can work with vocational education agencies to develop entrepreneurship programs for the area. As we move into a technological society, the impact of preparing people to work for themselves is one of the richest resources of futurism. Another pressing national problem is that resources and people are not in appropriate proximity, such as the mismatch between the supply of job seekers and the existence of jobs. To date, vocational education has concentrated on creating job seekers but not recognized job creation as its legitimate concern. Vocational educators have the responsibility to examine and pursue some alternatives for interfacing with the problem of job creation. These alternatives include new urban renewal, decentralized urban renewal, and part-time job creation. (The authors' answers to questions from the audience of research and development staff are attached.) (EM)
JOB CREATION: IMPLICATIONS FOR VOCATIONAL EDUCATION
RESEARCH AND DEVELOPMENT

by
Charles Nichols, Sr.
Director of Vocational, Technical, and Industrial Education
Minneapolis Public Schools

and
Edgar Persons
Professor of Agricultural Education
University of Minnesota

The National Center for Research in Vocational Education
The Ohio State University
Columbus, Ohio 43210

February 1979
The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National 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

The Lecture Series at the National Center for Research in Vocational Education was established to provide a forum for discussing current issues confronting educational research and development among distinguished professionals and National Center and Ohio State University staff. Points of view or opinions do not necessarily represent official National Center or Ohio State University position or policy.
The National Center for Research in Vocational Education at The Ohio State University takes pride in presenting perspectives on job creation by Dr. Edgar Persons, professor of agricultural education at the University of Minnesota, and Mr. Charles Nichols, Sr., Director of Vocational, Technical, and Industrial Education with the Minneapolis Public Schools.

In his lecture, Mr. Nichols discusses job creation as a research and development assignment in large urban centers. He states that the migration of employees from inner cities to suburban areas in the last few years has created "desolation and a wasteland within our cities that is economically and socially irresponsible."

Mr. Nichols emphasizes that, as a result, vocational educators need to begin preparing people not only to become employees but to become employers. Additionally, vocational educators need to conduct research in urban communities to examine closely communities that evidence a downward trend and develop entrepreneurship programs specifically designed to upgrade those areas.

Mr. Nichols concludes his presentation by saying that vocational education needs to look to the future and cooperate with individuals and organizations that it has never cooperated with previously. Additionally, vocational education should consider itself a provider of a service not only to individual students but also to communities.

Mr. Nichols received bachelor's and master's degrees from the University of Minnesota. He has served in various positions including principal and director of the Minneapolis Work Opportunity Center, teacher and principal with the Minneapolis Public Schools, and instructor at the University of Minnesota.

In his discussion of job creation, Dr. Persons describes the most pressing problem of the nation as the "inability to bring resources and people into a working proximity." He states that the results of this problem are seen in many ways—from continuing high unemployment to high costs of welfare and other social programs.

Dr. Persons says that to date, job creation and job saving have not been recognized as the legitimate offspring of vocational education and that vocational education has concentrated largely on creating a supply of job seekers rather than creating jobs. He concludes his presentation by offering alternatives for working to create jobs such as an emphasis on entrepreneurship training in urban renewal programs, vocational schools, and part-time work.

Dr. Persons received a Ph.D. in education from the University of Minnesota. In previous positions, he was visiting lecturer at North Dakota State University; visiting professor at the University of Nebraska; consultant for the Bureau of Elementary and Secondary Education, Title III, ESEA, U.S. Office of Education; and curriculum consultant for the Minnesota State Department of Education.

Robert E. Taylor
Executive Director
The National Center for Research in Vocational Education
The major thesis that I am trying to develop today is not the paper being presented, but rather an effort to stimulate discussion on something that is becoming increasingly important to vocational education, especially vocational education as it applies to our large urban centers. I emphasize that those techniques that work well in our large urban centers will work equally well in our smaller systems. Job creation properly researched and developed can be a new emphasis to help vitalize vocational education for educators, their students, and the community. I hope during our mutual discussion that you take advantage of the opportunity to quiz the presenters and thereby extract information from them and yourselves that will be of mutual benefit and perhaps have a future impact on all of us and vocational education. Too often in convocations of this sort, material is presented, discussed, and forgotten. I would hope that as a result of the technique of printing both my paper and your discussion into one total dialogue, we will develop a source of information that will be useful and productive of change.

As we are looking at these areas involving entrepreneurship, I do not believe that it is necessary for people to spend four years in college in business administration or engineering, or whatever, and then go out and work for someone else for four, five, or ten years, and then finally get into business for themselves. I feel it is quite possible, with appropriate research and development, to have individuals get immediately into the business activity upon completion of even their secondary programs.

My discussion today concerns research and development, mainly research and development in job creation for vocational education.

I would like to narrow the focus even further, and take a look at job creation as a research and development assignment in our large urban centers or concentrations. We have been faced with an interesting dilemma in this country over the last few years: that is the migration of employers from the inner cities to the suburban and outlying areas. This has created desolation and a wasteland within our cities that is economically and socially irresponsible. Something needs to be done to rectify this situation to stem the flow of talent from our large urban concentrations, and at the same time, establish a practical and useful way of using the talent that’s retained.

During the course of preparing for this paper, I did a little bit of what I choose to call “Nichols’ Scientificless Research”; that is, while I had the opportunity to visit several large cities in the United States, I walked the streets in some of the areas that were dilapidated and run-down, and talked with people in bars, restaurants, service stations, on street corner bus stops, etc., about their community. One feeling that seemed to come through was the utter frustration of joblessness and lack of availability of employment in the immediate future, or even in the far future, for these individuals.

We are missing, as we look at the future, a tremendous opportunity for vocational education to once again have a great impact on our society, both socially and economically. I do not think
that we can any longer put up with the convenience of merely preparing people for work. We will have to reexamine our emphasis and start preparing people not only to become employees, but to become employers. This is where a very important function in the research part of the R & D arises.

We need to have extensive, even exhaustive, research in our urban communities to examine closely those neighborhoods that evidence a downward trend. This is readily visible as one begins to examine the store fronts that are being boarded up, the small shops that are moving, the idle people, the vacant lots, and all the other denigrating aspects of a deteriorating area. Researchers will have to examine the people, the talents, the socio-economic factors, and the other human resources that are available in that area. As the result of this research, the development phase can start. Given that certain kinds of businesses could be viable in those areas, the development teams would work with the educational agencies, especially the vocational ones, to develop entrepreneurship programs, specifically for those areas. This would involve calling forth and developing the talents of the people in the instructional field to work with the people in the urban areas who can benefit from that instruction and help them reopen those businesses as well as appropriate new enterprises.

It has always been interesting to me that when we examine an airline need, for instance, first there is research on where the air transportation is needed. Then there is development for the carrier. Finally there is fiscal involvement by the government (subsidies, if you will) to help the airline provide service and, coincidentally, jobs. I think it is high time that we examine the same sort of subsidization for our neighborhoods that show evidences of deterioration. It is considerably less expensive than welfare; and considerably more realistic in the use of human resources.

Let me depart for a moment, and talk about an excerpt from a discussion we had in Washington on a specific situation. We determined that dry cleaning, as a local industry, is the type of business that many young people go into for themselves. The amount of investment needed was not completely beyond the reach of someone who had gone into an employment situation and had progressed to a position of reasonable responsibility. Nevertheless, we knew also that the person had to be informed about what the business was and had to be involved with all the techniques, from the handling of customers to the purchases of the necessary chemicals. Consequently, in our particular school, a business was set up by an instructor, staff, and students—a complete dry cleaning plant, with clothes receiving, handling, cleaning, delivering, etc. On top of that, the instructor worked with the students in billing, advertising, developing customer relationships, and managing the total operation by themselves. We know that the actual handling of money by students causes some concerns in some quarters of our system. That is a bias that we will have to eliminate. As I mentioned in my talk in Washington, I know there were some discrepancies in the bookkeeping, but I can say with assurance that they were minimal and that there was a considerable amount of self-discipline developed by the individuals involved. Additionally, self-discipline was a very important factor in helping some individuals get into business for themselves.

As a result of this, we have on record an individual who now owns his own dry cleaning plant. He operates it in an area that was on the verge of depression, and still has not completely recovered. The area is improving and the individuals in the area are exercising more of their talents to improve the situation, not just because of him and the business he has, but because of the total commitment of the neighborhood to improve itself. Coincidentally, since I last talked with the young man in the dry cleaning business, he has added a record shop in a formerly vacant building adjacent to his dry cleaning plant. Some latent talents have been developed, and we haven't any idea how far they will go or how long they will last. But it is good to gamble on human beings, and research and development puts the odds in our favor.

Here is one other interesting piece of nonscientific research. While preparing our aircraft to come down to this meeting, I got into a discussion with a man in a hangar adjacent to us. When he
found out that I was director of vocational education in Minneapolis, he made it a point to come over and speak to me because he was a former graduate of Minneapolis Vocational High School and Dunwoody of Industrial Institute. He has three aircrafts in his small machine tooling company—none of which is worth less than $50,000. I would suggest that he is doing quite well. My problem with it is that it happened probably incidentally, rather than as a purposeful act of the vocational program, which is not the way it should be.

Finally, as we examine research and development, let me discuss what we are doing in research and development. We are initiating, at the Minneapolis Area Vocational Technical Institute, as the building is being constructed, a program of options for young people where they can concentrate in a field of their choice rather than a specific, mandated, curriculum area. They can, in a sense, pick and choose and shop among programs to get those essential parts that they need to go into business for themselves. Then, through a cooperative arrangement with the adjacent community college, they are able to go in and take the necessary academic courses to help them get involved in business management. Following that, through cooperation with the Metropolitan State University, they are able to, at the upper level, go into the baccalaureate program and complete a degree in an area of their choice.

The final and most important chapter in this development phase of research and development is the financing. I alluded earlier to an airline getting subsidies. The Small Business Administration is going to have to make the necessary adjustments in policy so that it can work with the educational system to help young people get the necessary capital, with the concomitant support to handle it, so that they can initiate a business enterprise. The Small Business Administration is going to have to, as part of its responsibility in working with the educational institutions, initiate a policy of successful financing, rather than finance for what I tend to call “business disaster.” I must confess, as a minority person, that this is a bias I have against the Small Business Administration.

Vocational education has too long, in my opinion, been too conservative. We have always maintained that young men and women should come into a program and prepare for employment. We have set curricula, performance profiles, competency-based methods of assessing, community evaluation—all of these proper activities—but we have not taken the risk of seeing what vocational education could be doing in the year 1990 or 2000.

As we move into a technological society, the impact of preparing people to work for themselves is one of the richest resources of futurism and future progression for vocational education that I see existing. We can take young people into our programs, give them the basic understanding of the business or industry, provide them the opportunity to experience that business within our schools by running businesses within our schools, and then provide them the opportunity to go on to either further, preparation or directly into the job market with a future provision that they can go into the kind of preparation that encourages entrepreneurship. This involves, then, consorting with our academic partners in getting courses in sales at the professional level, advertising, and accounting—courses that can be initiated in the vocational programs and carried to their ultimate consummation in a great variety of other educational enterprises.

Many times, in meetings such as this, we talk as if we have the choice to do this sort of thing. I do not feel that we do. Unless we provide the type of preparation that allows for access to the free enterprise system, vocational education is most properly doomed to be replaced by some other kind of education.

I like to look at the future. We are spending a considerable amount of the taxpayers’ dollars in Minneapolis at this time to develop a new Area Vocational Technical Institute—an institute which
I hope will be a model for programs throughout the country. One of the basics of the program is to allow individuals to mix and match their courses so they can develop those skills that are essential in operating their own businesses. It's not that difficult to do or to imagine. You do not have to build a new school to do it, but I do believe you have to build new philosophy. That philosophy is one that says we are going to break away from the traditional, move into the future now, cooperate with individuals and organizations that we have never cooperated with before, and consider ourselves as providers of a service not only to individual students but to our communities. By doing this we are going to provide security for ourselves, for our programs, for the people that support our programs (the business community) and for the people who make use of programs (the students).

Programs that allow young people to see themselves as becoming captains of industry—even if they are captains of a very small ship—are the ones that are going to attract them to vocational-technical education. This will not be at the expense of those who want to attend the academic programs but will be a resource for them to come to after they have attended the academic programs so they can put their academic skills into a goal-oriented vocational program where they develop the skills that allow them to become individuals in the community who are successful business persons and enthusiastic supporters of the vocational education programs.
The Overarching Premise

We have a problem. We have followed the advice of the old adage, "Ignore it — maybe it will go away." We have ignored it; it has not gone away. If we continue to ignore it, it will still not go away. The nation's most pressing domestic problem for the moment, for the last decade — and probably for the remainder of most of this century — revolves around the location or relocation of people in some proximity to an adequate resource base. There is ample evidence that the magnitude of this problem has not diminished and in most places it is increasing.

Almost all of the major cities of the United States stand as transparent proof of the inability to bring resources and people into a working proximity. Our nation has been successful in congregating people. It has not been successful in congregating the resources of education, businesses, and industry in sufficient scale or focus to provide the jobs and the job skills that allow many of our congregated citizens to become productive contributors to society. The results are evident — high unemployment (especially among youth and minorities), high costs of welfare and other programs, massive deterioration of the quality of life in some of the central cities, growth of illegal business activity, appalling crime rates, and the inability of city governments to cope with the costs of their own enterprise. It is not necessary to search very hard or very long to find the evidence that suggests people and resources are disparately matched.

The problem is not unique to the city. A disproportionate number of the nation's poverty stricken people resides in the countryside. The hills and hollows and small towns of rural America nurture yet another form of the mismatch of people and resources. Here the problem of the day is not manifested in great numbers of persons being unemployed, but rather in a combination of some unemployment with greater amounts of underemployment. In the small communities of the nation there are millions of people who survive at a bare subsistence level without public support. It is masked poverty. For people in many regions, the economics of the whole community is tied in one way or another to the agricultural economy. Their prosperity rises and falls with the prosperity of the farmers and ranchers. It is an intricate combination of forces, closely woven within the economic web of a single industry. The problems of an aging population, lack of community services and amenities, coupled with wide geographic dispersion of the populace, make the overarching problem of matching people and resources a growing one.

The essence of the problem is simply that resources and people are not in appropriate proximity. It is a problem of mismatch requiring solutions which can improve the match. One of the


5
most useful and theoretically the most mobile resource we have is education. The purpose of this paper is to examine the way in which vocational education can and should interface with the problem of matching resources and people and to suggest some areas of research and development that may aid in signaling the role of vocational education in the matching process.

In order for jobs to exist, there are two essential elements. One is the supply of job seekers; the other is the demand for them. Only one is reasonably independent. The demand for jobs requires the existence of jobs and its natural precursor—job creation. Vocational education has concentrated largely on creating a supply of job seekers. The demand side has been viewed only as a source of information—albeit an imperfect one—to guide vocational educators in planning programs and in evaluating the effects of their efforts.

The question to be answered is how can vocational education leave the comfort of a detached view and begin to operate effectively in the arena of job creation and job saving.

The Vocational Education/Job Creation Organism

Nature has a handy way of determining the role of all living organisms. Heredity defines the physical characteristics; environment shapes the adaptation of the characteristics to permit survival.

The general question of the role of vocational education in job creation has similar elements of heredity and environment.

Unfortunately, the hereditary nature of the relationship has been treated in much the same way as an illicit offspring. The role of vocational education in job creation is not mentioned by the parent (legislation). It is not included in the family plans (state plans for vocational education). It does not find its way into the annals of family history represented by the data compiled about vocational education. Even when the accomplishments of vocational education in job creation and job reservation are dramatic as evidenced by programs in small business and farm management education, the accomplishments are not highlighted anywhere in official evaluative data. As a result, job creation as a role for vocational education is not prominently recorded on the family tree.

It is interesting to note that the Vocational Education Act of 1976, its subsequent amendments, and the legislation creating CETA, are devoid of the mention of real job creation activity. While CETA provides for public service employment, it is a stop-gap employment activity designed to alleviate unemployment while the private sector generates new jobs. When the private sector has jobs available, the authorization for public service employment declines. It has been assumed that jobs will be created, but there is no thrust in either of the legislative mandates to aid and abet the job creation process.

We could, in fact, draw the conclusion that the role described for vocational education and CETA is not one of creating employment, but rather a role that concentrates on the redistribution of unemployment. We need to ask ourselves if we are comfortable in that role.

Aside from the hereditary nature of vocational education's role in job creation, it is important to examine the environment. As with any organism, the environment plays a key role in its survival and adaptation. It is almost axiomatic that one must recognize that the nature of job creation requires a complex interaction within the environment.

To create or preserve jobs requires the known impact of integrated planning, longer time lines for adaptation, and creative people. There is much about job creation that is not yet known or understood.
The need for integrated planning is complex. Examine the climate for job creation and job preservation in your own state. Look at all of the laws which have an impact on the opportunities and incentives for expanding the work force. The tax laws, the regulatory agency rules, the educational opportunity, and restrictive employment opportunity prompted by some labor management agreements are but a few of the forces that must be considered in the process of integrated planning. They are part of the fabric from which the environment for job creation is made.

Job creation activities are favored by an environment that allows easy modification of the schedules and time lines employed in skill training approaches to vocational education. Job creation is often thwarted by short-term, intensive training, and nurtured by programs which build momentum with a long and continuous association with instructional activities. Creating an interest in activities that will create or save jobs, developing the skills and attitudes required to participate in job creation activity, and finally, providing the follow-up training that will hasten success are not tasks that can be done in a short term, intensive school setting. They require longer time lines and a different approach to instruction.

If job creation is an ultimate outcome of entrepreneurship, then we need to examine the itinerary one follows to engage in entrepreneurship. What effect does the environment have on encouraging or discouraging adventure into entrepreneurship? How and when can vocational education intervene in the appropriate environmental setting to trigger the consideration of entrepreneurship as a career? What can vocational education do to sustain that interest and assist the aspiring entrepreneur in attaining his/her goals? These are questions that vocational educators must ask if they feel uncomfortable with their current role of redistributing unemployment.

An environment in which jobs will be created requires creative people. Education has not been extremely successful in teaching people to be creative. Education has been even less successful in recognizing creativity and capturing that special quality to solve the problem of improving the match between people and resources.

To date, job creation and job saving have not been recognized as the legitimate offspring of vocational education. Are we willing to recognize that vocational education has a legitimate role in the process? Can we proceed to modify the environment in which such activity will grow and mature? Until vocational educators address both of these questions, vocational education will continue to find itself only on the supply side of the jobs equation while critics will continue to judge the effectiveness of vocational education by how well it has modified the demand side of the equation. In periods of high employment, vocational education will get high marks. In periods of high unemployment—as we are now experiencing and will continue to experience for some time to come—vocational education will be judged harshly regardless of the effectiveness of the training program for those who succeed.

Alternative Scenarios

There is no inherent danger in mounting program alternatives which strongly emphasize job creation. In fact, our congressional mandate (PL 94-482) invites state planners to create "and where necessary maintain" programs of vocational education. Nothing could be more creative than lively programs focused on the creation of jobs. It may be a responsibility to hold tenaciously to the concepts of vocational education that have proven their effectiveness, but the responsibility is unfinished and incomplete until job creation is accepted as the unfinished business of vocational education.
We must be willing, therefore, to examine and pursue some of the alternatives vocational education may have for interfacing with the problem of job creation and job saving. While there may be many alternatives, some stand out as likely choices for an expanded role for vocational education in this difficult task. I address the remainder of my paper to these alternatives. They do not represent new ideas for this seminar. They are, in fact, with some modification and additions, the basic scenarios presented at the national jobs conference sponsored by the AVA. The purpose of the scenarios, however, is to point to the areas of research and development that the staff of this National Center might consider in examining its role in the job creation process.

The New Urban Renewal

To examine a new concept of urban renewal, one must first examine the past policies for renewing depressed urban places. It would be accurate to classify the past efforts at urban renewal as chiefly cosmetic. Large areas of urban communities were simply removed. Blighted dwellings and tenements fell to the wrecking ball and bulldozer to be replaced by new dwellings and a new kind of tenement that were more pleasing to the eye and less available to the poor. The physical neighborhood was renewed. As occasionally happens, the planners forgot a minor detail. The people had not been renewed. Those who returned to the neighborhood were the same people with the same jobs and the same education, and many difficulties. They found other places to live after finding that they could not afford the new cosmetically renewed neighborhood. Some of the new neighborhoods are now veritable wastelands with neither a sense of community nor a hope of betterment. The returnees probably found also that the small shops and stores to which they were accustomed were left out of the renewal plan. They were left with only a bedroom community—not a community with vitality and business activity.

Thus it is necessary to rethink the process of renewal and rekindle the concept of self-help. Confronting the causes rather than concentrating on the symptoms is a key to reversing urban stagnation and decay. It may not be accomplished by merely building schools with goals of achieving some level of average daily attendance. It may be accomplished, however, by programs of education and training which accommodate the most creative instruction in the least restrictive environment.

The new urban renewal should concentrate on building up, not tearing down. If the school were to join in partnership with a neighborhood, the building up could concentrate on developing the people resources as well as the physical resources. But to do that task the school must look for new ways of thinking about economies of scale and new ways to justify its existence. It must think of a way to match one instructor with a small segment of the neighborhood. The plans to implement such a system in Tacoma, Washington, are worth noting. Their plans call for a small business management instructor in each five-block area of the depressed center city. The instructor will be officed in the five-block area and all instruction will occur within the neighborhood. The instruction will emphasize job creation and job saving. The instructor’s responsibility will be to work with the small businesses in the five-block area to improve their ability to survive and their ability to create and save jobs.

The concepts could be expanded to place other instructors who have a community oriented job responsibility into the same five-block area. If cooperative work experience is one of the viable concepts that vocational education should continue, what better place for the coordinator than in the student’s own neighborhood where the work experience stations exist. Being part of the community provides an identification of the community with the school—an identification that is sorely lacking in the urban areas, and has in part contributed to the high dropout rates from schools and the resulting social problems of the city’s youth.
We tend to think of the economy of an area as being tied to the major business or industry an area can attract. We fail to recognize the economic potential that can be gained by directing attention to the small businesses and services that abound in even the depressed areas of the urban city. More than 85 percent of the businesses in this nation are small businesses that employ fewer than twenty people. By directing some energy at the neighborhoods in which small businesses reside, and by taking the school to the people, we can do much to curb urban blight.

It is a concept that requires planners to think imaginatively. It requires planners to think in terms of “the long run.” It requires commitment on the part of schools to join with neighborhoods in a cooperative spirit of self-help. It requires a structure of incentives and rewards. Most of all it requires a matching of courage and wisdom that is sufficient to defy the present mismatch of people and resources. What can vocational education do to aid in the research and development of such a scenario?

Probably foremost is some research aimed at the business climate of such areas. What businesses now exist that could be revitalized to aid renewal? What kinds of businesses could people who reside in the area use? What people in the area have the incentive to become entrepreneurs? How can we provide assistance in becoming established and sustaining establishment in business and industry? What business establishment itineraries could be developed that could maximize the cooperation of state and federal agencies in the renewal process?

In general, the question is one of assessing the potential impact of a close marriage of school and community. Can urban renewal concentrate primarily on people and secondarily on physical resources? What is the long-run impact on jobs?

Decentralized Urban Renewal

Urban areas have no monopoly on degeneration. Vast areas of the country have no urban areas. But they have similar problems. Elements of the decay of business activity exist in rural as well as urban areas, but the elements are not as visible since they are dispersed among the business survivors. Obviously, the suggested plan for the new urban renewal cannot be implemented under conditions of sparse population. But the concept of taking the school to the people can. And it can create jobs.

Our personal experience in programs of farm management and small business management education for entrepreneurs is a good example of the process and of the benefits or effects of such an effort. The school serves as the parent agency for the effort. But instructors use the school only as a home base. Instruction is done for the most part where the student resides, either business or home. There are no rigid academic thresholds for entry. There is no rigid time frame for exit.

These programs exist in more than a dozen states. They all use the concept of decentralized economic renewal. The schools have created an environment in which the basic elements of job creation and job saving can flourish. The instructors are responsible to many communities and serve the scattered businesses and farms whose owners recognize the need for management instruction to improve the economic welfare of themselves and their employees.

The question is, does such activity stimulate business activity and in turn create or save jobs? The evidence speaks for itself. In the farm management program each dollar of educational expenditure is related to nine dollars in increased business activity; in the small business management program the ratio of increased business activity to program cost is even higher. Jobs are created when there is capital to invest in labor and resources. The job creation and job saving character of such programs is a matter of record.
While the record of success of these programs speaks for itself, what is being done to speak to the record? The National Center is in a position to work with the developers of such programs to test their national significance. This is an opportunity to concentrate some efforts on programs whose thrust is on development of the human resource through the planned use of capital investment. The legislative action to change the tax on capital gains is an effort to funnel more dollars into capital investment. The management programs for farmers and small business operators is a study in how the entrepreneurs can maximize the mix of capital and human resources.

Since we have no national programs for job creation, it seems appropriate that the National Center devote some effort toward working with, promoting, and disseminating programs that are shown to have national significance in creating and saving jobs. For example, there are about 400 full-time adult instructors of agriculture in the United States. There are about three dozen full-time small business management programs for adults. More than half of the farm management programs and almost all of the small business management programs follow the systems developed by and disseminated by the University of Minnesota. I ask only of the National Center, "Where have you been?"

The Bootstrap School

A vocational school can be the catalytic force that makes job creation happen. Such schools must have visionary leadership. They must concentrate on what could be, not just what is. They must be patient. They must be bold. Above all they must have a sense of community.

The vocational school at Staples, Minnesota, is a good case in point. The casual observer years ago would have marked the town as destined for decay. The railroad, which had provided a job base for many of its inhabitants closed down a major base of operation. Agriculture, the basis for most of the rest of the economy, was at best, marginal. But the casual observer would have missed the vision and sense of the superintendent of schools. He sensed what could be. If agriculture was a base for the remaining economy, then programs in vocational agriculture at the secondary, postsecondary, and adult levels could add to the soundness of that base. Educational opportunity in management and technology in agriculture was advanced by adding to the instructional staff until it was adequate to serve the needs of the community. But the vision did not stop there. He again asked the important question of what could be? The marginal character of the land could be improved if one could supply the missing ingredient—water. But using water requires people who are skilled in irrigating. Thus a special training program to train irrigation technicians was developed with training opportunities for both youth and adults. Irrigating in the superintendent's community requires wells. A program was initiated to train well drillers.

To assume that the only job creating effect of this chain of events was the improvement of the water management skills of farmers and the establishment of well drilling entrepreneurs is a short-sighted view. The increased productivity of the agricultural resources prompted a long chain of interrelated events. More water generated the need for more materials for the agricultural production process—seeds, fertilizers, chemicals, machines, technicians. Increased productivity expanded the marketing dimensions—more transportation, more storage. Each service of goods required people. The general increase in the affluence of farmers and the conveyors of related goods and services affected all of the community. The multiplier effect of this new income helped to transform the town and the countryside into a thriving economy.

The venture into agriculture was only one of the thrusts that contributed to the impact of the vocational school on the community. Mr. Lund, the superintendent with vision, can more ably describe the true, bootstrap effect of this school on the Staples area.
It should be noted that during this bootstrap process, the school concentrated on the human resources. It built no homes, no businesses or factories. But homes have been built, factories have been constructed, and businesses have been started by the people (human resources) who now have the skills and affluence to help themselves. The farms and businesses were a source of new jobs. Jobs that otherwise might have faded away had been saved.

Certainly this is not an unfamiliar scenario. Have we studied the process? Do we know how a vocational school should be developed in order to maximize the multiplier effect of its education? Such questions will not be answered by a casual study nor will they be answered in a short span of time. It seems that communities where vocational schools will be built should be identified and followed closely to determine the impact educational opportunity has on community growth, job creation, and the creation of wealth. It is not enough to be able to recite the number of new machinists or chefs who have been trained, but it is important to be able to document the effect that these opportunities have had upon the sociology of the community. It is a matter of joint concern among those who foster and promote the educational system and those who chart the changes that occur in the community life. The National Center is perhaps better equipped because of its stability to mount such a long-term study than any other institution.

Part-Time Job Creation

Another dimension of job creation and saving is the need to create part-time jobs. This element has several facets that should be more thoroughly explored. Part-time jobs are not only essential to the economy of the country, but they are the only kind of jobs that satisfy the requirements for some persons who are already in or for some who hope to get into the work force. The availability of part-time jobs is an essential element in the whole concept of cooperative work experience education programs. Without part-time jobs there are no work stations. Without work stations there is no opportunity for the school and business to join in this cooperative effort to train effective workers. We should not assume that agriculture, business, and industry will continue to be sources of part-time employment for cooperative education without the willingness of vocational education to help make it happen.

Other people besides students need and seek part-time employment. Certainly some high school youth would welcome the opportunity to use their skills on a part-time basis if meaningful jobs were available. Many senior citizens who have a wealth of talent also would welcome the opportunity to remain in the work force but have no desire to be saddled with a forty-hour week responsibility that allows no opportunity to enjoy their well-deserved golden years.

The movement of women into the labor force has again accentuated the demand for part-time meaningful employment. While many women seek full-time jobs, there is a growing number whose transition to the work force can best be served by opportunities for part-time employment responsibilities.

In our efforts to attend to this task, we must be careful to avoid concentrating on the creation of low-level, low-paying jobs that have short or nonexistent career ladders. The part-time jobs must be thought of as parallels to the other jobs that exist in agriculture, business, and industry. Perhaps business and industry should be encouraged to think of the model used by the armed forces in the reserve units where almost all jobs are part-time, but all jobs have the prospect of job promotion with its attendant benefits.

Is the process of job creation for part-time jobs any different from creating full-time employment? In a general sense, the answer is no. Creating a job requires an increase in the prospect of
business activity. Almost all jobs in the private sector are added because of the prospect of helping the private entrepreneur attain his/her goal. Entrepreneurs most often measure goal attainment in dollars and cents. Jobs will not be created if there is not some likelihood that profit will result. It is an economic fact we should not forget.

Focusing attention on small business may be one of the more productive means for creating part-time jobs. Because small business is generally smaller than we think (for example, about half of the small businesses in Minnesota have five or fewer employees), expanding business activity to provide for a part-time employee is a more feasible goal than aiming for a full-time job position. The mechanisms for making job creation happen in the small business sector are already in place in some schools in the Midwest and West. The mechanism needs to be adapted by other states to meet this job creation challenge.

A Model for Job Creation

To suggest that there is a single model for job creation is deceptive. It has already been established that job creation is complex. Complex problems are not generally amenable to simple solutions. No single model could suffice to describe all of the many ways in which vocational education can have an impact on job creation and job saving. Vocational educators can, however, examine some of the alternative scenarios that will enhance the job creation process.

A number of assumptions must be made in order to develop alternatives for creating or saving jobs through vocational education:

- Vocational education has little capacity for direct job creation. Its influence on job demand can be felt only as it interacts with individuals or groups who have the opportunity to create jobs.

- There are basically only two kinds of jobs: self-employment and working for someone else.

- For job creation efforts to have a lasting positive effect on the economics of the nation, the job creation efforts must be concentrated in the private sector.

- Vocational education must dare to be different. There must be innovative programs that test the ability of vocational education to interface with the problem of matching resources and people.

- For both immediate and long-term effects on the problem of job creation, vocational education must zero in on the populations that have the potential capacity to increase business activity and consequently create jobs.

One model for job creation would concentrate on the positive aspects of cooperative work experience and youth entrepreneurial activity. These are accepted practices in vocational education which may require additional emphasis but require no major change in program direction. The impact of such activity on job creation should be carefully studied to determine if there is significant influence on job demand when programs are successfully implemented.

The new models proposed, however, require a different emphasis and a change in direction. Vocational education should take steps to establish demonstration model programs that use the new urban renewal and decentralized urban renewal concepts for job development. An instructional
model has already been tested in the small business management and farm management programs in several states. What is needed is to demonstrate the effectiveness of the model in helping to bring about a better match between people and resources in areas where the problem of mismatch is most severe.

The effectiveness of the models for job creation and job saving should not go untested. Because of the very nature of the instructional program design, the economic effects of the model can be readily measured. If jobs are created they can be counted. If the increase in business activity indirectly improves the match of people and resources, that effect can also be measured.

The unique position of the National Center—long established, stable, having access to funding agencies, and a collection of diverse talents—suggests that if vocational education is to direct attention to the creation of jobs, then the National Center is best suited as an institution to evaluate, disseminate, and contribute to the sustained development of job creating vocational education activities.

President Carter's urban policy provides for the infusion of large sums of money into urban areas with the greatest economic and social needs. If vocational education expects to have a role in this new policy thrust, then vocational educators must take the initiative to see that some of the funds are applied to programs that have promise of contributing to a permanent solution to the overarching problem of the mismatch of people and resources. Such an effort is not now part of the policy plan. It will not be part of the plan unless vocational education is willing to demonstrate its ability to human impact on the problem. The National Center can encourage an impact.

We have a problem. It has not gone away. But vocational education has a choice. It can continue to be a sideline observer in the struggle to create jobs or it can be part of the solution. The choice is ours.
QUESTIONS AND ANSWERS

Question: How can vocational educators be better trained to play a role in job development?

Nichols

When I look at the people that we have hired since I have been on the job, I see that one of the things we have to do is get students out of the classroom because the classroom becomes a sheltered community. We need to get them out for six or more weeks at a time so they examine as part of their curriculum development the activities going on in places other than those in which the students get employed. I hope that those experiences now are being transmitted to the students. Additionally, I see nothing wrong with establishing a competitive educational system within our own schools. Some people are saying, How many subjects can you develop within your curriculum area? How many people can you corporate with to build a program? We will have fifty-two programs going into this school. I would hope that after the fifty-two programs are nailed down and signs are put on the doors, and names and lists are placed in bulletins, we can mix and match to create about 600 or 700. That is going to require the in-service of those instructors by people in the business community. We no longer have seminars on how to become a better machinist. We now are conducting seminars on how to make a better business person, because it is the machinist who gets the skills from the business person. Thus we are selling it from that standpoint as well.

Question: How can we safeguard against conducting hard-nosed research that is considered “ivory-towered” by practitioners?

Nichols

Remember when I talked to you about the “Nichols’ Scientificless Research?” When I talk to groups and when I testify in Congress, I am asked, What is the basis for your research? Research doesn’t have to be ivory-towered. Research can be basic. If someone steps on your left foot, you don’t have to conduct research for a long time to see which foot hurts. I am saying that we may need to get into that same kind of research here in an institution such as this. I am not in agreement with you on the ivory-towered research if it means huge data printouts that only researchers can read. I will be perfectly candid. When I get some research materials that I can’t read and can’t find an assistant to read, translate, and summarize them, then they don’t get read. I am quite certain that most of you people here get more reading material than you can read. Thus we read the abstracts, and ivory-towered abstracts often don’t present information in a readable manner, so they don’t get used. Another question I have is, Is it necessary to have the ivory-towered research when you are dealing with people who are not in the tower? I guess that is one of the areas that, as a research organization, you should examine. Who is supposed to be the ultimate recipient of the research that you are doing? Additionally, it should be presented so that a person can read it, understand it, and benefit from it, or you are going to be out of business, too.
Question: Have we learned something from CETA and its programs in the last couple of years?

Nichols

I think I first used a phrase about CETA in this room with another audience—"CETA is the crab grass in the lawn of vocational education." Nothing has changed my opinion since then. First, I don't believe CETA is doing what vocational education can do. Second, I don't think CETA has any new approaches; It provides money, brings people in, and pays them. But when the people get up to a certain level, they are kicked out of the nest. And when they can't back it, they come back into a CETA program. That is just my perception of CETA. I could be wrong. Talking with a group similar to this one at the University of Minnesota I said, if you can point out one person out of 55,000 at this institution who was brought in under CETA, I will sing the praises of CETA for an hour. They couldn't show me one. You can't tell me that people are not competent enough to benefit from higher education under CETA.

Another important point I stress, though, is that unless CETA and vocational education get their act together, we might find out that these two organizations are fighting each other. As a result, neither one is going to be nearly as productive as the two of them could be. In spite of my feelings about CETA, I am on the CETA manpower board in Minneapolis. I feel it is better to fight from inside rather than from outside. I think CETA has a lot of potential, but the people that could develop that potential for CETA are vocational educators who act on past experience. They tend to stay with traditional customs such as always working from 8:00 a.m. to 4:00 p.m., having a set curriculum to teach a person to be a machinist, draft person, and so on; not looking into the future; or not finding out the needs of communities. Both CETA and vocational education are touching on the edge of this. If they could come together they could really excite our communities about getting better educational programs.

Question: How do we build an awareness of emerging occupations and jobs that are needed?

Persons

I think we are talking about job creations in different areas. I am not really talking about job creation in terms of creating a new kind of job, the way that the data processing occupation was started fifteen or twenty years ago or the way the whole energy industry is emerging today. I am not talking about creating new kinds of jobs, or creating new kinds of employees. I don't know how to get on the cutting edge of those sort of things. I suspect that the educational institutions are rarely on the cutting edge. Few of those things originate in educational institutions. I am talking about creating jobs in the businesses or industries we already have—the kinds of jobs that we know are there or could be there—another accountant, another bookkeeper, another salesperson, and so on. I guess I am simply saying that that only happens when there is some prospect that a person is going to create that job and has some prospect of aiming toward his/her goals. Most of those goals are tied in with profit. It don't know much about creating the kind of jobs you are talking about—ones that don't exist today.

Answer (Nichols)

I can think of one person that did some work in new and emerging occupations. He used two different examples of an institution that was getting involved with "off-the-shelf" technology, areas—areas we knew we had used but had slowly disappeared from view, and now suddenly were needed again. A perfect example of this is the old outdoor plumbing. It was heavily used years ago.
and then we moved to indoor plumbing. Then an enterprising young man came up with the idea of the little receptacles on construction sites and now he is a millionaire. He took an "off-the-shelf" technology and made a new business out of it. We as educators can take a look at some of the activities that have been happening on the back burners for years and make new technology of them. Another point to make is that we need to take a look at the lifestyle spinoffs of new technology. When we set up the space program in Kennedy space center we saw a whole new lifestyle arise with new kinds of businesses. Of course these new ideas need to be researched. I think that the patent office is granting something like 400 or 500 new patents a day. Every one of those new patents is a new business, a new location at which entrepreneurship can be developed. The person who has developed the patent would like to see somebody take that on as a business enterprise and make it work. Those are two of the things we are looking for.
LEADERSHIP SERIES
IN VOCATIONAL AND CAREER EDUCATION

Barlow, Melvin. Implications from the History of Vocational Education. 1976 (OC 15 — $1.00).

Bell, Terrel H. The Place of Vocational Education in Higher Education: Implications for Education R&D. 1976 (DL 4 — $1.50).


Bottoms, James E. Implications of the New Vocational Education Legislation for Program Research and Development. 1976 (OC 23 — $1.75).

Buzzell, Charles H. Productivity: Implications for Vocational Education. 1976 (OC 19 — $1.00).


Clark, David L. Research and Development Productivity in Educational Organizations. 1978 (OC 41 — $2.20).


Delacruz, Joseph B. Educational Programs for Native Americans: Implications for Vocational Education Research and Development. 1978 (OC 40 — $1.90).


Ellis, Mary L. Vocational Education: The Future Is Now. 1978 (OC 37 — $1.90).

Evans, Rupert. Vocational Education R and D in the Past Decade: Implications for the Future. 1976 (OC 18 — $1.00).


Gleazer, Edmund J. View on Community and Junior College Education. 1975 (OC 9 — $1.00).

Goldhammer, Keith. Extending Career Education Beyond the Schoolhouse Walls. 1974 (OC 3 — $2.00).


Hicks, Laurabeth L. Programs of Guidance and Counseling Becoming of Age: Implications for Vocational Education R&D. 1977 (OC 25 — $1.75).


Kottman, Roy M. *Building a Constituency for Research and Development*, 1975 (OC 10—$1.00).


McCage, Ronald D. *The Development of a Comprehensive State Capacity for Program Improvement*, 1978 (OC 34—$1.75).


Marland, Sidney P. *Career Education: Retrospect and Prospect*, 1974-75 (DL 3—$2.00).


Wallace, Bertran F. *Desegregation and Its Implications for Vocational and Career Education*, 1977 (OC 30—$1.75).

Wills, Joan. *Youth Unemployment: Implications for Vocational Education R&D*, 1977 (OC 32—$1.75)

Wirtz, Willard R. *Community Education Work Councils*, 1976 (OC 17 $1.00)

**ORDERING INFORMATION**

All prices include postage and handling. When ordering use series numbers and titles. Orders of $10.00 or less will be accepted on a cash, check, or money order basis only. Purchase orders will be accepted for orders in excess of $10.00. Please make check or money order payable to The National Center for Research in Vocational Education. Mail remittance and/or purchase order to National Center Publications, The Ohio State University, 1960 Kenny Road, Columbus, OH 43210. (Prices subject to change.)