It is suggested that the American system of formal education be included in discussions of problems of productivity, both as a contributor to the problem, and as an instrument to be used in seeking solutions to the problem. Career education, in particular, is viewed as being capable of making contributions toward increasing productivity. Two basic assumptions are made: (1) Problems of productivity have a long history of development and will require a long time to cure, and (2) while the changes called for by career education are clearly only part of the needed solutions, each can help to some extent. The major part of the discussion centers on the U. S. Office of Education policy paper, "An Introduction to Career Education," which contains a listing of 11 current conditions calling for educational reform. Ways are suggested in which these conditions have contributed to lack of productivity, and changes called for by career education are outlined which would lead toward correction of the conditions and so to an increase in productivity. (TA)
INTRODUCTION

Productivity - expressed as output per person hour - has become a matter of national and international concern. It is commonly seen as one of the root factors involved in the inflation-recession problems currently facing us. Problems affecting productivity have been discussed, from time to time, in terms of such major events as the energy crisis, changes in technology, American policies in fiscal, monetary, international relations, etc., and in many other areas as well. From time to time, blame seems to have been assigned such diverse groups as the Administration, the Congress, big business, big Government, big Labor, and the major oil producing countries of the world. It seems probable that valid relationships - casual or otherwise - do exist justifying the claims of those who argue such directions.

My concern here is that the American system of formal education be included in such discussions, both as a contributor to the problem of productivity, and as an instrument to be used in seeking solutions to the problem. A small, quiet revolution has already begun that operates under these simultaneous assumptions of cause and cure. It is known as Career Education. The United States Office of Education recently published an official policy paper on this topic entitled AN INTRODUCTION TO CAREER EDUCATION. That paper contains a listing of 11 current conditions calling
for educational reform. Each of these 11 conditions can, I believe, be related to problems of productivity. The changes called for by career education, with reference to each of these 11 conditions, can, in my opinion, be viewed as making some contributions toward increasing productivity.

Here, then, I would like to name each of the 11 conditions, suggest ways in which it can be said to have contributed to lack of productivity, and outline briefly changes called for by career education leading toward correction of the condition and so to increase in productivity. The two assumptions with which I begin are: (a) problems of productivity have a long history of development and will require a long time to cure. There are no immediate "cures" that will change things suddenly or dramatically; and (b) while the changes called for by career education are clearly only part of the needed solutions, each can help some.

Condition 1: Too many persons leaving our educational system are deficient in the basic academic skills required for adaptability in today's rapidly changing society.

Condition 2: Too many students fail to see meaningful relationships between what they are being asked to learn in school and what they will do when they leave the educational system. This is true of both those who remain to graduate and those who drop out of the educational system.

There can be little doubt regarding the importance of mastering the basic academic skills for those who would seek to work in today's world of paid employment. Unless such skills have been mastered, people have difficulty learning the job specific skills many are asked to acquire once they are employed. They have even greater difficulty successfully completing various forms of postsecondary education that many need to
enter today's labor market. Finally, they have great difficulty, when, as adults, their specific jobs become obsolete and they are faced with problems of learning new vocational skills.

Similarly, there is little doubt but that many of today's youth are not learning the basic academic skills very well. Educators have observed thousands of small children who begin school as eager learners and who are completely "turned off" prior to the fourth grade. Many seem basically lacking in motivation for learning. They see no good reason for going to school other than so they can go on to still more schooling. Moreover, the schooling they have had has alienated many of them from their primary work roles as students.

Career education seeks to correct these conditions in two ways. First, it seeks to motivate students to learn through using a "success," rather than a "failure," approach to education. That is, instead of emphasizing to students what they failed to do or how others did better, we seek to give each student credit for what she or he actually accomplished. We think that, if the student is made aware of the fact he or she did something, it will motivate the student to do more. Second, career education seeks to show students, beginning in the early elementary grades, why it is important they learn the basic academic skills - that such skills are essentially prerequisites to success in most occupations today. By showing students why such skills are needed and used in the "real world" by adults, we hope to motivate them to try harder to master these skills.

In short, we are trying to make the work of the student - namely, the mastery of academic skills - both more satisfying and more meaningful to the student. In so doing, we have simply adopted a basic principle of
worker productivity that says productivity will increase if workers are rewarded for what they have accomplished and if workers can see the importance of the work they are asked to do. By taking this approach, we hope to increase educational productivity - i.e., academic achievement.

Condition 3: American education, as currently structured, best meets the educational needs of that minority of persons who will someday become college graduates. It fails to place equal emphasis on meeting the educational needs of that vast majority of students who will never become college graduates.

Condition 4: American education has not kept pace with the rapidity of change in the postindustrial occupational society. As a result, when worker qualifications are compared with job requirements, we find overeducated and undereducated workers are present in large numbers. Both the boredom of the overeducated worker and the frustration of the undereducated worker have contributed to growing worker alienation in the total occupational society.

When almost 80% of America's high school students are getting ready to do what almost 80% will never accomplish (i.e., become a college graduate) there seems little doubt but that something is wrong with our system of education. The "something," as I see it, is the irrational worship of the educational truism that holds "more education makes one better prepared for work" which, if followed blindly, leads to the obviously erroneous conclusion that those who have spent the most time in school are the most prepared for work. This, in turn, has led to an almost universal acceptance of the parental assertion which says "I'd rather have my son be a college graduate than compete with one."

Unfortunately, in terms of today's youth labor market, that parental assertion carries with it a substantial amount of validity if the only question faced is employment versus unemployment. That is, unemployment
among college graduates remains substantially lower than that for high school graduates which, in turn, is lower than that for high school dropouts. The trouble obviously lies in equating the phrase "most prepared for work" with the phrase "those least apt to be unemployed."

When many more youth are looking for jobs than the number of jobs that are available, it is certainly true that employers have tended to employ those who have gone to school longest. They do so, I am sure, using the assumption that, given two applicants, neither of whom has the specific skills the employer seeks, the employer is better off taking the one who has gone to school the longest because that applicant is probably more adaptable to the employer's needs and, in addition, has demonstrated more perseverance. It is hard to argue with this employer assumption.

The result, however, creates a tragic educational "Catch 22" situation for youth. The unemployed youth is led to a conclusion that, if employment is the goal, then more education is the surest route to that goal - no matter what the kind or quality of education. The employed youth, on the other hand, often finds the work less challenging and demanding than his or her education has prepared them to do. With no great intrinsic satisfaction coming from the work itself, the productivity of such youth often declines while their demands for higher wages (which represents the only tangible benefits derived from their jobs) goes up. This reinforces the "school for schooling's sake" syndrome and is, in my view, a direct contributor to current productivity problems in our society.

Career education seeks to turn this situation around by emphasizing the goal of education, as preparation for work, at all levels of American
education for all who teach and for all who learn. It seeks to eliminate
the question many high school seniors ask which is "Should I go to
college or should I go to work?" - as though those who go to college do
not go to work. More importantly, career education seeks to bring equal
emphasis to adaptability skills and job specific skills as considerations
in youth employment patterns. We seek to eliminate the false notion that
a degree will be sufficient to find a job and to place greater emphasis
on vocational skills the job applicant possesses - whether those skills
are learned in a university, in a community college, in a high school, through
apprenticeship, or in an on-the-job training situation.

This country must face up to the fact that, while the need for workers
trained at the postsecondary school level is increasing, the need for
liberal arts graduates with no specific vocational skills is not. We
cannot afford to continue to glut the labor market with college graduates
far in excess of the number of jobs that require a college education. Our
educational system, when compared with occupational requirements, is
"out of kilter" today. Career education seeks to correct this imbalance
through emphasizing BOTH adaptability skills and job specific skills as
student goals.

Condition 5: Too many persons leave our educational system at both the
secondary and collegiate levels unequipped with the vocational skills,
the self-understanding and career decision-making skills, or the work
attitudes that are essential for making a successful transition from
school to work.

One of America's ideals have always been freedom of choice - including
freedom of occupational choice - for all of its citizens. In seeking to
help protect freedom of occupational choice for youth, we have traditionally
combined efforts to increase student self-understandings with efforts to
help youth understand the world of paid employment. It should be apparent
to all of us that we have not succeeded very well in this effort.

Career education seeks to correct this situation in several ways. First, we seek to help pupils, beginning in the elementary school years, to observe the world of paid employment, to gain some general understanding of its nature by such observations, and to gain some appreciation of the importance of interdependence of all kinds of work for societal survival. Second, career education seeks to increase student self-understanding through letting students try out various occupational roles and so gain, through doing, a better understanding of both their interests and their abilities. We seek to emphasize the fact that each of us is best known to ourselves and to others through our accomplishments.

Career education's prime emphasis is on meeting the human need of all human beings to do - to accomplish - to achieve something that will help the individual understand himself or herself. Equally important, such an emphasis helps the individual develop a personally meaningful set of work values - a way of answering the question "Why should I choose to work?" that goes beyond simply economic considerations. Too many people today continue to look for jobs rather than for work. Career education places equal emphasis on making work possible, meaningful, and satisfying to each individual.

Third, career education emphasizes directly career decision-making skills, job seeking, job getting, and job holding skills for all youth. These are skills that can be learned by almost all youth. They are among the most important of the adaptability skills that will be increasingly needed by persons in our society. Coupled with such skills, career
education emphasizes teaching youth good work habits consciously, conscientiously, and proudly. Such habits have, for many years, been among the cornerstones of productivity. We think it is time they are emphasized at all levels of our educational system.

Condition 8. Insufficient attention has been given to learning opportunities which exist outside the structure of formal education and are increasingly needed by both youth and adults in our society.

Condition 9. The general public, including parents and the business-industry-labor community, has not been given an adequate role in formulation of educational policy.

Condition 7. The growing needs for continuing and recurrent education of adults are not being met adequately by our current systems of public education.

For too long, educators have operated as though students could learn only from books, only in classrooms, and only from certified teachers. As a result, they have assumed that the best way to prepare students for the world of paid employment is to lock them up in a classroom and keep them away from that world. The business-labor-industry community has made a false assumption that readying youth for the world of paid employment is none of their business. The general public has made a false assumption that public schools exist primarily for the benefit of youth and that once youth have left such schools, their need for education will have ended.

Career education aims to correct each of these false assumptions in a variety of ways. First, we seek to join the "world of schooling" and the "world of paid employment" through providing observational, work experience, and work-study opportunities for students - and for those who educate students - i.e., for teachers, counselors, and school administrators. Many teachers who would like to show students career implications of subject matter cannot do so because they do not know what they are. We
seek to correct this through encouraging educators to visit and to gain some experience in the world of work outside of formal education and to encourage the use of resource persons from the business-labor-industry community in the classroom.

There are severe limits to what students can learn about work out of a book. Accordingly, career education seeks to make work experience—paid or unpaid—a general educational methodology available to all students beginning in the junior high school years and continuing through the college and university system. To the greatest extent possible, such work experience should be aimed primarily at career exploration as part of the career decision-making process.

To embark on a massive work experience emphasis will require the collaboration and expertise of the business-labor-industry community. Educators simply do not have sufficient expertise or resources to operate such programs by themselves. This means that the implementation of career education necessarily involves active participation in educational policy making by personnel from the business-labor-industry community.

An emphasis on career decision making that ignores parents is doomed to almost certain failure. Work values are heavily influenced by family systems of personal values. The school has no right to substitute the values of a particular segment of society for those held by individual families. Part of career education's efforts to help students view work favorably centers on helping them gain a greater understanding of and appreciation for work done by their parents. In so doing, the result is often an increase in the parent's own sense of personal worth and a greater appreciation for contributions the parent makes to society through
her or his own work. While, in many ways, a side benefit of career education, this effort alone may make some positive contribution to increases in productivity.

Finally, career education stands squarely behind the lifelong learning concept. The public schools are the public's schools. We have passed the time when they can be viewed as only daytime institutions existing only to serve youth. The needs of adults for both occupational retraining and upgrading and for assistance in finding productive uses of leisure time are growing and will continue to grow. If our schools could be kept open 6 days a week, 18 hours a day, and 12 months each year, it would do much to meet adult needs related to productivity. Additionally, it would allow much greater flexibility in career education's goal of providing, through work experience, a combination of a "learning-to-do" with a "doing-to-learn" for secondary school age youth and for college students.

Condition 6. The growing need for a presence of women in the work force has not been reflected adequately in either the educational or the career options typically pictured for girls enrolled in our educational system.

Condition 10. American education, as currently structured, does not adequately meet the needs of minority or economically disadvantaged persons in our society.

Problems of both race and sex stereotyping in occupational choice and occupational opportunities are currently attracting much national attention. It is too bad that they have not attracted a similar degree of action. We have learned that it is one thing to express yourself as being in favor of eliminating such biases through affirmative action programs and quite another to truly act affirmatively. To a considerable extent, failure to move more rapidly or dramatically in these matters has,
in fact, been due to lack of ability to find qualified women or minority persons to fill vacant positions. Such persons cannot be created where they do not exist.

Career education takes a long-run approach to this problem beginning in the early elementary school years. Part of this effort is a conscious attempt to remove both race and sex stereotyping from elementary school textbooks and career materials. A second part is devoted to providing adult role models of persons working in various occupations who have overcome such stereotyping in their lives. A third part of this effort involves frank and candid discussion of the problems involved in career decision-making activities.

Problems of protecting and expanding opportunities for freedom of occupational choice for low-income persons are still prevalent in our society. It isn't terribly traumatic to remain occupationally undecided if your father owns the factory. It is quite another thing if you don't know where the money will come to pay for your next meal. It is one thing to understand certain occupational opportunities may become available if you secure the right education, but it is quite another thing to find the funds necessary to secure such education.

Career education is committed to destroying the cycle of poverty that leads to personal feelings of helplessness and so to lack of productivity. We think it would be a good investment to assure low-income persons that sufficient funds can be made available to them, in some fashion, so as to enable them to make and implement career choices. The cost of crime, vandalism, violence, and drugs is far greater than would be the cost of providing sufficient funds to enable low-income youth to make and to
implement career choices. We cannot hope to increase national pro-
ductivity substantially if we fail to allow low-income people the means
to become as productive as their talents will allow them to be.

Concluding Statement

These, then, are the 11 conditions that the career education movement
seeks to alleviate. In summarizing, I have contended that career education
can make positive contributions to productivity problems in each of the
following ways:

1. Through making the work of the student - and so the concept of
   work itself - more meaningful and satisfying to students.

2. Through increasing student mastery of the basic academic skills
   essential for adaptability.

3. Through encouraging the process of making both the nature and the
   availability of educational opportunities more consistent with
   the needs and demands of the occupational society.

4. Through emphasizing education, as preparation for work, as a
   prominent and permanent goal of all of American education.

5. Through placing equal emphasis on adaptability skills and
   job specific skills in occupational preparation programs.

6. Through increasing the career decision-making skills, the job-
   seeking, job-getting, and job-holding skills of all students.

7. Through increasing student knowledge of the world of paid employment
   and the requirements for entering and succeeding in that world.

8. Through involving persons from the business-labor-industry community
   in helping students understand and capitalize on relationships
   between education and work.

9. Through encouraging the productive use of leisure time as part of
   one's personal value system and of one's lifestyle.

10. Through encouraging parents to participate more actively and more
    positively in career decisions made by their children.

11. Through reducing by a long-range program, both race and sex
    stereotyping as they affect occupational choice and opportunity.
12. Through encouraging and promising lifelong learning opportunities for adults and for out-of-school youth.

13. Through supporting and encouraging programs of educational financial assistance to low-income persons.

Career education is a concept whose effective implementation calls for action programs on all of these fronts. Some of these actions will require substantial funding, but the majority do not require great amounts of new dollars. Rather, the primary cost involved is that of the effort required to convert the goals into effective actions. Career education is a concept crying for effective action implementation.

There is no community in our nation that could not, if it chose to do so, move immediately toward implementing the career education concept. If all communities would take such actions, it is obvious that all problems related to productivity in our nation would still be far from completely solved. I hope it also is obvious that career education is a concept that can help, to some extent, in solving the problem of productivity. It seems to me it is a concept well worth trying.