In the increasingly troubled national and international outlook--social, economic, and political--which calls for more not less knowledge and more and better professional and management skills, the deterioration of higher education in this nation can only lead to the exacerbation of chronic and acute problems and adversely affect our international position. With respect to institutions of higher learning there is a need to do a variety of things such as: (1) re-examine the role of higher education in the light of the needs of our contemporary and anticipated situation; (2) modify curricula so as to incorporate training in the saleable skills; (3) make more explicit provisions for career counseling and guidance; and, (4) recognize as passe the traditional conflict between a liberal education and training for work in favor of providing a whole person possessing both. The impact of the mass society and the role of government in the lamentable financial crisis in higher education are also discussed. Various strategies for remediation are proposed, among which are the following: the provision for more central planning of the economy as a whole, adequate and consistent funding of higher education by federal sources, and strengthening of career counseling.
EDUCATION AND CAREERS--CONCORDANT OR DISCORDANT?

Highlights of Address by Philip M. Hauser, Lucy Flower Professor of Urban Sociology and Director, Population Research Center, University of Chicago, to the National Meeting of the College Placement Council, Washington, D.C., May 28, 1975.

The relation between post-secondary school education and careers has in recent years become increasingly discordant rather than concordant. Moreover, the outlook for the remainder of the 70s and for the 80s is one of increasing discordance. That is, it is becoming painfully clear that college graduates and holders of graduate degrees, including Ph.D.'s, are experiencing great difficulties in finding suitable employment; and that there have arisen serious imbalances between supply of and demand for the output of higher educational institutions with great variations among specific fields and sharp short-run maladjustments.

Moreover, colleges and universities are confronted with increasing financial pressures which undermine the quality of education, which have forced many to shut down, and which threaten the survival of many more. Simultaneously, students are faced with unprecedented increases in tuition and other costs reflected in decreasing enrollments and severe personal financial crises. In brief, higher education in the United States is in serious trouble which threatens to become much worse before it gets any better. In the increasingly troubled national and international outlook--social, economic and political--which calls for more not less knowledge and more and better professional and management skills, the deterioration of higher education in this nation can only lead to the exacerbation of our chronic and acute problems and adversely affect our international position.

Higher education has become a disaster area for a large number of reasons traceable to the educational institutions themselves, to irrational dependence on our inherited frontier ideology and laissez-faire policy in respect not only to our economy but also in respect to the social and political orders; and to the growing erratic and uncoordinated role of government.
In all three areas, the post-secondary educational institutions, in the
general ideology embracing the social, economic and political orders, and in govern-
ment, we have failed fully to grasp the implications of the 20th century demographic
and technological world. We have failed to innovate to meet contemporary
requirements in social policy and action, in general, as well as in respect to
higher education. More specifically, we have failed to understand that our urban
industrial "mass society" has a greater need for central planning and management
than did early rural, agrarian "little community" America. Unless and until we
recognize the need to increase planning and management mechanisms to supplement our
market economy and laissez-faire ideology to cope with the problems of our highly
interdependent and vulnerable society, we shall continue to exacerbate the problems
which affect our nation, including the problems of higher education.

What then, more specifically, is called for?

Higher Education Institutions

First of all, in respect of institutions of higher learning--community colleges,
four-year colleges, and graduate and professional schools, there is need to:

1. Reexamine the role of higher education in the light of the needs of our
   contemporary and anticipated situation. With the exception of recently created
   community colleges, our institutions of higher learning are more the products of
   the past rather than current needs and developments. Much overdue change was
   initiated by the junior faculty and student revolt of the late sixties but much
   more remains to be done. My colleague, Professor of Education Cyril O. Hesule, has
   stressed the importance of preparation for the "third era" of higher education.
   He sees the difficulties which confront higher education today as pointing to the
   need for the third era. Although he concedes it is impossible to depict all of the
   characteristics of the third era, he holds that one important element is that con-
   tained in the Edgar Faure report, "Learning to Be." It contains 21 principles--
two of the most important of which are:

a) Every individual must be in a position to help learning throughout his life

b) The dimensions of learning experience must be restored to education by redistributing teaching in space and time.

In brief, the third era of higher education will be characterized by at least a two-dimensional expansion: (a) in breaking down the sharp distinction between education and work and effecting increased integration with the world of work; and (2) in enhancing a much wider age spectrum of students to include older adults in residence as well as through extension facilities.

Higher education must increasingly become a life-long process and, therefore, a part-time activity with, as Houle points out, four kinds of study: basic learning, formative learning, continuing learning and recurrent learning. The last overlaps with the first three.

2. The establishment must seriously consider curriculum modification so as to incorporate training in the "saleable skills," as well as those which provide a liberal education, as a preliminary to the "third era" and to meet the immediate situation. In this respect they might well profit from developments in the community colleges with whose programs better integration and coordination is required.

3. Make more explicit provision, utilizing the services of such an organization as the College Placement Council, Inc., for career counseling and guidance with the necessary close integration of such services and curriculum planning and implementation.

4. Recognize as passe the traditional conflict between a liberal education and training for work in favor of providing a whole person possessing both.

Impact of the Mass Society

The United States has experienced and is still experiencing what I have termed "the social morphological revolution": explosive population increase--
the population explosion; dramatic population concentration in urban, metropolitan and megalopolitan areas—the population implosion; and increased population diversity which under the impact of the post-World War II "revolution of rising expectations" and "revolution of impatience" has led minority groups to become increasingly insistent on equality of opportunity in all spheres of life—the population dislosion. These population developments, together with accelerated technological change—the technoplosion—have transformed this nation from a "little community" society to a "mass society."

As elements in this transformation the division of labor and specialization has greatly increased, formal schooling has expanded in curriculum and become greatly prolonged as secondary and post-secondary, including graduate and professional schools have superimposed over primary schooling. In general, with some looseness of fit, prolonged schooling has become a prerequisite for professional and management employment, in addition to providing a "liberal education."

As our society and economy have grown more complex and technical, the proportion of the work force employed in professional, technical and administrative and management occupations has tremendously increased. Between 1900 and 1970 professional and managerial workers increased from 10.2 to 28.2 percent of the work force, and professional personnel alone from 3.4 to 14.0 percent. This almost tripling of the professional and managerial workers and quadrupling of professional personnel during the first 70 years of this century was fed in large part, of course, by the products of post-secondary school institutions. No data are available for measuring the relation of supply to demand for professional and managerial workers for most of this period, but as yet unpublished research which I am conducting with one of my graduate students, Teresa Sullivan of the faculty of the University of Texas, does contain statistics indicating that a surplus of highly educated manpower is developing.
Tabulations of the sample computer tables of the 1960 and 1976 censuses of the United States in a project designed to measure underemployment as well as unemployment indicates that the mismatch of occupation and education doubled from 5.4 percent in 1960 to 10.2 percent in 1970. Furthermore, during the seventies unemployment for professional and managerial personnel has greatly increased, suggesting that a new form of economic democracy is being achieved in this nation. That is, the probability of highly educated manpower becoming unemployed is rising toward the rates experienced by less educated and blue collar workers. Needless to say, a reversal in this direction is to be hoped for. In 1964 unemployment of professional and managerial workers averaged 2.6 percent compared with 6.3 percent for blue collar workers; in February 1975 unemployment for professional and managerial groups was 4.5 percent compared with 10.9 percent for blue collar workers.

As I have set forth elsewhere, much of our ideology inherited from the 19th and prior centuries is incompatible with the reality of our contemporary society. Among these shopworn values are such shibboleths as:

That government is best which governs least;
Each person acting in his own interest, as if guided by an invisible hand, acts in the interest of the collective;
Taxes are what the government takes away from people and should be kept to a minimum.

These and other social atavisms have generated or exacerbated many of the acute and chronic ills which affect the nation. Among these ills are our present bout with stagflation; the "urban crisis"; environmental degradation; increasing exhaustion of non-renewable resources; poverty, unemployment and underemployment; social and personal pathology, including crime, delinquency, alcoholism, drug addiction and family disorganization; sexism and racism; and corporate enterprise and political corruption. Appropriately added to this list is the disaster which has afflicted and is still afflicting higher education and its product of highly educated manpower.
Finally, it is to be emphasized that, by reason of our socially inherited sexism and racism, women and members of minority groups are still badly discriminated against in preparation for and admission to institutions of higher learning; and as graduates they are also inadequately utilized by the institutions of higher learning themselves as well as by our society as a whole. As a recent report of the Board of Graduate Education points out (January 1974), a recent survey of over 100 institutions of higher learning had but 5 percent of their graduate employment from minority groups (Blacks, Indians, Chicanos, Oriental Americans and others). Blacks received less than 1 percent of doctorates awarded. Women also remain underrepresented in higher education and especially graduate education. In 1970 women received 43 percent of awards of bachelor's degrees and only 13 percent of doctorates.

The Role of Government

The federal government also has played a major role in the lamentable financial crisis in higher education and in the imbalance between supply and demand for the products of post-secondary education. As Freeman and Breneman have shown, the depressed state of the labor market for college graduates, including those with higher degrees, can be traced directly to the sharply decreased expenditures, mainly by the government, for research and development beginning in 1969. Greatly increased enrollments in degree-granting institutions between 1961 and 1972, in large part triggered by substantial increases in federal moneys available for training and research, increased the number of Ph.D. degrees awarded from a level of 10,412 in 1961 to 33,001 in 1972.

The increase of Ph.D.'s during the 60s, however, was followed by a decrease and plateauing of research and development expenditures beginning in 1969, and by a decrease in the demand for Ph.D.'s in academia which, although in part the result
of changing age structure, was also substantially the product of decreased training moneys as well as research and development funds. The number of graduate students supported on federal fellowships and traineeships increased from 11,591 in 1961 to a peak of 51,446 in 1968 and then plummeted to an estimated level of 6,600 in 1974.

As Freeman and Breneman point out, "from the late 1950s until approximately 1969, shifts in the demand for Ph.D. and related manpower were more pronounced than the corresponding increases in supply.... By contrast, the 1969-72 period was characterized by a continued increase in the number of Ph.D.'s... and a reduction in the rate of increase of demand."

Without further elaboration it is clear that government policy has significantly affected both the supply and demand side of college and university graduates; and that its sharp changes in policy and expenditures have added to the imbalances which have occurred and which now exist. To the oscillations in supply and demand for highly educated manpower generated by business cycles has been added the deleterious impact of uncoordinated government policy and programs. In this regard Freeman and Breneman reach a significant conclusion: "The fact that the labor market performs an allocative function for highly educated manpower does not mean that a hands-off, laissez-faire policy is desirable. Rather, the cyclical imbalances between supply and demand caused by the longtime training lags suggests a positive role for governmental policy in offsetting or counter-balancing the market's natural tendency to oscillate."

**Proposed Remediation**

In summary of the above considerations, what is urgently needed if higher education and highly educated manpower are not to become increasingly mired in disaster is the design and operation of innovative mechanisms such as:
1. Provision for more central planning of the economy as a whole to minimize the costly oscillations of the business cycle, fluctuations in the financial solvency of institutions of higher learning, and imbalances in the supply of demand for highly educated manpower.

2. Adequate and consistent funding of higher education by the federal government without strangulation by excessive and unnecessary government controls.

3. Strengthening of career counseling and guidance services through the cooperative participation of institutions of higher learning, the private business sector and the federal government.

4. More effective utilization of the College Placement Council by the mechanism recommended in "item 3" above and more effective national structuring of the College Placement Council. Its present regional structure and the fact that this is its first national meeting indicates that the Council, also, has not caught up with the realities of the highly interdependent world we have created and in which we are still learning to live.

5. Improvement of statistics relating to highly educated manpower and its utilization and, especially, improvement of projections of supply and demand. This is not likely to be accomplished until the central planning mechanism of the type recommended in "item 1" is established.

If it is not yet understood, then it should become understood, that the United States cannot afford to let its institutions of higher learning and its highly educated manpower remain in disarray. If it is contended that this nation cannot afford to provide the funding needed or that it cannot free itself from its frontier ideology and laissez-faire policies to deal with our higher educational crisis, it is in effect being argued that this nation cannot afford to remain a viable society. For it will become increasingly clear that without a well funded structure of
higher education and effective utilization of highly educated manpower this nation will not be able to deal effectively with its mounting internal problems nor to maintain a position of world leadership.