This speech emphasizes a relatively new and important function of the university—equalizing educational opportunity. The need for education and its potential as human capital are examined in light of the rapid educational advancement. Universities must face this advancement and meet the needs of society. A review of Negro development reaffirms the need for equalization of educational opportunity. The opening of educational opportunity is seen as an effort to create human capital. Human capital is expected to create additional income, thus, to raise the standard of living and promote family stability. (AJM)
Education, Universities, and Economic Development

by FRANK BOLES
Mr. Bowles is advisor on International Education to the president of the Ford Foundation. The following is from a commencement address at the Trinidad campus of the University of the West Indies, January 29, 1966.

A list of other Foundation publications may be obtained by writing the Ford Foundation, Office of Reports, 320 East 43rd Street, New York, N.Y. 10017.

A note on Foundation-assisted programs in education for developing countries and in improved educational opportunities for American Negroes is found on page 8.

SR-15
The founding and growth of a university where there has been none before can be very moving. Men and women who have never known opportunity come to see the university and to caress it with their thoughts. For they see clearly that a new university represents the door they could never enter now opened for their children. They see it as a symbol of hope. And so it is. But what lies behind the symbol and the hope?

A university is a very special kind of social institution. The first universities were founded to select and train the professionals who manage our society, and they did it very well for five hundred years. They still do, but they have now added a larger function which in time will overwhelm the older one.

The new function is that of equalizing educational opportunity. It is very difficult, very costly, and very exciting.

The entire concept of equalized opportunity is an expression of the philosophy of human development. This philosophy holds that there are many individuals of superior ability who are in circumstances where they can never hope to enjoy the quality of education that their native ability warrants. It further holds that every such person who is not properly educated represents a loss to the community in terms of earnings not achieved and contributions not made. A money value—estimated at $100,000 or more—can be put on each such person over a lifetime—money not earned and therefore not going into the figures for Gross National Product, or per-capita earnings.

It is further assumed that in most educational systems the number of individuals the system “misses” and therefore fails to educate to full achievement is at least as large as the number who go all the way through the system and obtain their university degrees.

The philosophy of development, as its final postulate, holds that there is only one way to avoid the economic catastrophes which come from missing these talented individuals. That is to provide, for everyone, the maximum of education that he is capable of receiving. In other words, the philosophy would
require every school child to be provided with continuing educational opportunity for so long as his interest and abilities continue to carry him forward.

This is the most controversial educational point of our time, and I predict that it will be the determining factor in future educational development.

**Education as Human Capital**

The point that every person should have opportunities commensurate to his ability is a fifty-year-old educational idea that was never acted upon until it became a political idea. That has happened during the last twenty years, and a number of countries have now accepted it, specifically Sweden, England, Russia, and the United States.

The great importance of the idea lies in its application to developing countries because it can be tied to another and closely related theory. This can be called the human capital theory, which holds that every educated man is a capital asset to his nation, and that it is the education that makes him valuable. Hence, even though a developing country may lack capital as well as trained management, both can be supplied by building an educational system which brings maximum opportunity to everyone from elementary school to university.

Naturally this is a doctrine with tremendous political appeal. It is an exciting idea to the people of a newly independent country, for it suggests that what they have most wanted—a chance for education and knowledge of the world—is the very thing that will bring them prosperity. Political leaders in every nation are well aware of the value of this appeal, and in some form each of them has used it.

The electorate is beginning to sense that educational opportunity is a political idea. Once this awareness is widespread we may expect it to become the most popular political slogan of all time. It is a very sophisticated idea. This is evidenced by the fact that the most rapid expansion of educational opportunity has taken place in the countries where the educational systems are already large and
the opportunities for continued education are already liberal. The greatest expansion of all has taken place in the United States, where it now appears safe to predict that the educational system will be lengthened to a required fourteen years of education for all students. Since in America all grades beyond the twelfth are considered higher education, this development will mean tremendous changes in the meaning of higher education.

Equalization of Higher Education

Americans face these possibilities with equanimity, for we have been redefining our higher education ever since the Colleges of Agriculture and Mechanic Arts were introduced by the Land Grant College Act one hundred years ago. Since then we have experimented with diversity of standards until we have colleges and universities of every conceivable level of quality. So, we will meet the demand to double our enrollments over the next twenty years. And we will further liberalize our standards to admit students who will in reality be following vocational and technical studies.

We must do so, for the equalization of opportunity has become government policy, and the most determined democratization of education the world has ever seen is well on its way. We are now founding colleges at the rate of twenty or more a year; I believe that within ten years we will be founding them at the rate of one a week.

It is not surprising that universities are instinctively opposed to taking on the function of bringing about equalization of opportunity. They have good arguments on their side. Their function, they say, is to select the leaders, to train the indispensable professionals in law, medicine, government, and engineering, and to propagate culture and transmit it from generation to generation. If universities must accept tremendous burdens in planning education for everyone, they cannot properly do their main job. And if, in addition, they have to administer universal education, they will become so swollen that they will lose their real purpose.
But their eminence at the apex of the educational structure overshadows these arguments. The universities are expected to be wise and powerful and to know how to perform the miracle of equalizing educational opportunity at the same time as they carry on their usual tasks.

In the long run, I predict, they must do exactly this. The fact that they have been created in one form to serve the purposes of one form of social organization cannot protect them against the demand, once it is strong enough, that they take on another form to serve different purposes of another form of social organization.

Warnings should be issued about a world-wide educational revolution which the universities will be required to manage. And warnings in terms of the American system have certain applicability to other systems.

**Higher Education for Negroes**

In the United States, there have been, ever since the close of World War II, efforts to open greater educational opportunities to Negroes. These began with a few private individuals, were picked up and expanded by schools, universities, and foundations and in the last five years have received strong government support. On the level of higher education, more opportunity and more openings are presently available for Negroes than can be filled from the present supply of candidates.

This is an effort to deal with the problems of 20 million people who form, in effect, a nation. It is a nation with a tiny upper class; a very small professional class; a small, but not negligible, middle class; a skilled worker group perhaps slightly smaller than the middle class, and a very large unskilled or semi-skilled worker class. As an estimate, 90 to 95 per cent are unskilled or semi-skilled; 5 to 10 per cent are in the skilled class or in the white collar category. About half of this "nation" lives in cities, about half in the country. Most of the unskilled and semi-skilled are below the national average income.

Generally speaking, this nation has its own school system. In southern areas the schools are segregated by custom, with Negro teach-
ers and Negro principals, though the law, when it can be enforced, prohibits segregation. In the northern cities, most schools are segregated in fact by the patterns of city housing. There are many white teachers and most of the principals are white.

There is a Negro system of higher education of 120 colleges and universities which is fed largely from the southern high schools. Outside of the South, colleges are not segregated and a good many thousands of Negro students are in public and private colleges and universities; no one knows how many, since figures are no longer kept by race. Somewhere between 5 and 10 percent of Negro youth of college age are in college. By contrast, somewhere about 30 per cent of white youth of college age are in college.

We wish that the Negro enrollment were higher and have made efforts to increase it. It is increasing, but it is not increasing very rapidly.

Let us state the nature of the problem in terms of economic development of this nation within a nation. The per capita income of the Negro in America has gone up in recent years, but the per capita income of the average American has gone up much more rapidly during the same period. In other words, after some years of effort to improve economic opportunities for Negroes, the average Negro is now worse off, in relation to the average white, than he was when the effort began.

This problem is a familiar one to students of development economics. In general, the developing nations of the world are losing ground in their efforts to draw equal to the already developed nations.

Our American effort to open economic opportunity to our own developing Negro nation has followed the philosophy of human development mentioned earlier. By opening educational opportunity we have attempted to create human capital. And the human capital is expected to create additional income. This added income is to raise the standard of living and promote family stability. It is to wipe away cultural poverty and economic poverty and in time bring Negro and white to social and cultural equality.
Beyond the Plateau

This theory has worked up to a point. Negroes are entering the American middle class much more rapidly than ever before. But the rate of entry, to put it in economic terms, is not keeping up with the birth rate. As long as this remains true, we will continue to lose our battle.

There is no genetic reason, and no economic reason why we must lose this battle. The human raw material is of good quality, and the opportunity is there to be used. The fact is that we have come to a plateau of effort in which we cannot find and develop the human material to use the opportunity which our colleges and universities offer.

The problem is deep in our schools. The Negro schools, urban in the north, rural and urban in the south, bring only a small fraction of their students to the level of readiness for higher education. The rest of the pupils—a terrifying majority—finish their schooling without skills, without education for modern life, without hope of advancement. Many leave school in spirit long before they leave it in fact. Often they are semi-literate, and many are illiterate.

From this great majority we must find those who will seek education instead of rejecting it. If we do not, our effort and the brave efforts of emerging Negro leadership will fail. The problem is one that the theory of development economics has not yet faced. It raises hard questions for any developing country:

1. How many children who enter school complete the first cycle of education?
2. What skills and what knowledge do these children possess when they have finished this cycle?
3. How many children finish their appointed years of schooling without any real gain from their schooling?
4. How many children do not go to school at all?
5. How many children of real ability and promise are permitted to leave school because their teachers cannot interest them in remaining?
6. How many teachers know how to find children of unusual ability and help them on into the next stage of education?

7. What are the measures which the educational system takes to locate and nurture talent?

8. What are the opportunities for further education for the child of good average ability who does not enter the university?

9. What are the opportunities in the poor areas of the nation—the shanty towns of the cities and the tiny villages at the end of dirt roads—for the child of promise?

10. What are the aspirations of parents for their children? How are these aspirations formed? Whose business is it to aid in their fulfillment and by what means?

Such questions are part of an endless list that is embraced within one large question, "How do we bring to all the people of a nation an understanding of the nature and the urgency of education?"

Any nation which seeks the answers to these questions will in a surprisingly short time find an aroused interest in education that will demand a sweeping change in the nature of opportunity.

The university will be given part of the assignment of equalizing educational opportunity. The questioning of the bases of traditional education is not easy. It is not easy to plan a system which will educate for the twenty-first century, when most countries, including the United States, have barely ceased applying the educational values of the nineteenth century. Yet the child who begins school this year may expect to spend half his life in the next century.

The undertakings are within human capacity. A nation that seeks to industrialize must not fear to make education its largest industry. The broad aim of education is, in the last analysis, very simple. It is to make possible a life of dignity, of fulfillment, and of comfort for all the people. This is the ultimate meaning of the university—that it be the product of the common effort of all the people, that it be a possession of all the people, and a pledge of dignity and human worth to all the people.
Note on Foundation Activities

The following is a summary of Ford Foundation efforts in two fields discussed in Mr. Bowles' address—university education in the developing countries and expanding educational opportunities for Negroes in the United States.

In the developing countries, Foundation assistance has been concerned with the overall strengthening of universities and preparation of more skilled graduates and faculty members able to contribute to their countries' economic and social advancement. Funds assist curriculum development and administrative reform, fellowships for advanced training of faculty and students in the United States, introduction of new teaching methods and materials, expansion of library resources, and graduate research. The Foundation also provides visiting professors and consultants.

In Latin America, for example, major assistance to the University of Chile (the country's largest single source of trained manpower for government and the professions) includes an exchange of faculty and graduate students with the University of California. In Argentina and Brazil, the Foundation is helping strengthen the sciences as a major element in university development and in industrial and agricultural expansion. In Colombia and Peru, the Foundation is assisting universities in expanding their faculties and reorganizing academic programs.

The Foundation also supports university cooperation on a regional basis. Foundation funds are helping the International Association of Universities and UNESCO, with the cooperation of the countries concerned, to assess the role of higher education in Southeast Asia; Latin American cooperative activities through the Council on Higher Education in the American Republics have also been assisted.

Among institutions in Africa that have received Foundation support, Nigeria's University of Ibadan is working to advance its growth as a center of research and graduate instruction. In Turkey, grants have helped to strengthen the Middle East Technical University, a key center for higher education in
science in the Middle East. In India, universities assisted include those at Calcutta and Delhi; in addition, the Foundation has helped agricultural institutions strengthen their educational facilities and faculties.

The Foundation has also made grants to help advanced industrial nations participate more effectively in assisting higher education in less-developed areas. In Europe, grants have assisted the Organization for Economic Cooperation and Development in its efforts to develop Atlantic-area scientific and educational resources and training programs for less-developed regions. The International Institute for Educational Planning (Paris)—established by UNESCO, the World Bank, and the Foundation—assists in developing programs of training, educational planning, and financing in many parts of the world.

Directly and through the Fund for the Advancement of Education the Ford Foundation has provided some $80 million since 1953 for a variety of efforts at both school and university level to improve educational opportunities for Negroes and other minorities in the United States. Included are grants to some sixty predominantly Negro colleges and universities for increased faculty salaries; faculty development, graduate fellowships, and undergraduate scholarships; improved educational programs and curricula; programs of career education in public service, foreign affairs and international studies, and business; and for capital development. Funds have also supported a variety of projects, studies, symposia, and seminars in such areas as school desegregation, long-range planning for Negro colleges, use of programmed instruction and other new teaching aids, cooperative improvement programs between Northern universities and Southern colleges, enrichment of remedial programs, strengthening teacher education, and recruitment of talented Negro students.

Starting in 1960, a series of grants in ten major Northern cities supported school-community projects to overcome the effects of cultural deprivation of pupils in disadvantaged neighborhoods. Similar efforts are integral parts of comprehensive programs
launched with Foundation assistance in 1962 to improve the quality of life in the depressed urban neighborhoods, and now under way in Boston, New Haven, Oakland, Philadelphia, Washington, and the state of North Carolina.

Special attention to improving the education of disadvantaged pupils is also a major aspect of many comprehensive school improvement programs supported by the Foundation in more than a score of school systems or groups of systems throughout the nation. In addition, beginning in 1964, grants have been made to establish Southern school improvement centers—cooperative undertakings by Southern school systems and nearby colleges and universities to strengthen teaching, curriculum, and learning motivation—in Atlanta, Durham, Huntsville, Nashville, and New Orleans. Another grant was made to enable the Southern Association of Colleges and Schools, in cooperation with the College Entrance Examination Board, to conduct a college-preparation program for talented seventh-grade youngsters from deprived families in eight Southern states. In addition, support was provided for an experimental series of summer cultural-enrichment and remedial studies programs to increase disadvantaged pupils' success in school and their chances for college.

The Foundation enabled the National Merit Scholarship Corporation to establish the National Achievement Scholarship Program, which provides four-year scholarships to colleges of their choice to some 200 promising Negro students a year, over a five-year period; N.M.S.C. circulates to colleges the names of 2,000 runners-up annually as a pool of able Negro students considered likely candidates for admission.