AN HISTORICAL REVIEW OF THE DEVELOPMENT OF RURAL EDUCATION IN THE UNITED STATES IS PRESENTED ALONG WITH SYMPTOMS AND DEFINITIONS OF UNDER-DEVELOPED OR DEVELOPING ECONOMIC SYSTEMS. COMMON EDUCATIONAL CHARACTERISTICS ARE DISCUSSED, AND A COMPARISON IS DRAWN BETWEEN THE PROBLEMS THAT MAY BE ENCOUNTERED IN THE DEVELOPMENT OF EDUCATION IN THE UNITED STATES (OR ANY OTHER DEVELOPED COUNTRY) WITH THE DEVELOPMENT OF EDUCATION IN UNDER-DEVELOPED COUNTRIES. SOME POSSIBLE DIRECTIONS FOR RURAL EDUCATION TO TAKE IN THE FURTHER STUDY OF COMMON PROBLEMS ARE SUGGESTED—(1) EDUCATIONAL NEEDS SHOULD BE EXAMINED IN LIGHT OF A COUNTRY'S SOCIETAL DEMANDS AND ECONOMIC DEVELOPMENT, (2) ATTEMPTS SHOULD BE MADE TO ENCOURAGE AMERICAN ASSOCIATIONS OF RURAL EDUCATION TO SEEK FURTHER OPPORTUNITIES TO BECOME COOPERATORS AND COLLABORATORS WITH RURAL EDUCATIONAL DEVELOPMENTS ON THE WORLD SCENE, AND (3) THE ECONOMIC EFFECTS OF EDUCATIONAL INVESTMENT SHOULD BE INVESTIGATED, NOT ONLY IN AMERICA BUT ALSO IN DEVELOPING ECONOMIES. THIS SPEECH WAS DELIVERED AT THE ANNUAL AASA LUNCHEON OF THE RURAL DEPARTMENT AND DIVISIONS (WASHINGTON, D.C., FEBRUARY 19, 1962). (DK)
It is common knowledge that, of all social institutions, the school is the most malleable, although at times it has demonstrated the ability to be the most rigid of institutions. A school is intrinsically an incomplete and artificial institution. It is designed to complement the educational influence of other institutions and of life itself. Accordingly, it must necessarily be adaptable and its adaptability must be a reaction to its physical as well as its social environment. It is both the custodian and the purveyor of the national culture context. As such it cannot be easily transplanted, nor can it serve any function as an object of admiration. It must be created or recreated in each culture to serve its unique functions.

Rural education has encountered its own special problems and barriers in every country in the world. At the same time there are common elements and common problems in rural education that transcend the barriers of culture and geography. These common elements shall be a point of emphasis in this paper. First, it may be useful to examine the historical uniqueness of rural education in our own country.

America has never experienced a land reform that is in any way analogous to the problems of land reform in other developing countries. As a new country our problem was one of land settlement, of assuring private ownership and maximum productivity. Our land policies coupled with our faith in education gave rise to our rural schools.

Two pieces of legislation joined forces, unwittingly, to give America its early pattern of rural education. The first was the ordinance of 1785 which specified the rectangular pattern of land survey and also stipulated that
section 16 and 36 in each township shall be reserved for the maintenance of public schools in said township. The second was the Homestead Act of 1862 which provided that land could be pre-empted by occupying and improving it for a period of 5 years. The five year period was crucial since it assured that a natural course of events would produce an abundant crop of 5-year-olds to carry their dinner pails to whatever kind of school building could be built on sections 16 and 36 in each township. Rural schools, therefore, came to the American scene as a mutation that resulted from two pieces of legislation neither of which was intended to have a primary influence on the structure of education.

But the influences growing out of this structure were even more important. The rural school serving 80% of the population was initially responsible first of all for an almost wholly literate population. True enough, most of the immigrants were literate when they arrived but the majority were not literate in the English language. The rural schools must be credited with the creation of a monolingual literacy within the time period of a single generation. The rural schools therefore became the agents of what may have been the most important political decision made in the United States - the adoption of English as the official language. This decision was made at a time when the official language in the British Parliament was French.

A second influence of the mutation was the assurance that education would have a decentralized tax base - the basic determinant of local control and environmental adaptability in education. Anyone familiar with education in developing countries will recognize the importance of the relationship between land tenure and education. Landlords have rarely been happy with the burden of tax necessary to educate the children of their tenants. Education is most frequently the victim of a centralized tax base or one in which the land operator does not become a full beneficiary of the tax proceeds. In the historical development of rural education in the United States, the farm
operators became full educational beneficiaries of tax proceeds as a result of a decentralized tax base along with decentralized administrative control.

In view of the historical pattern in rural education that insured a decentralized tax base, it is almost paradoxical that rural educators are presently taking the leadership in the struggle toward Federal Aid. The obvious reason is that a variety of tax bases have emerged with multiple collection agencies and a vigorous competition to expand, shrink, or squeeze the tax bases that exist. The obvious result is that rural education has been the prime victim. The important point here is that the early development of rural education may have necessarily depended upon fortuitous circumstance, albeit a most important principle in any developing country.

A third influence of the historical mutation was one that allowed agriculture to feed the capital requirements of the nation's industrial expansion. The industrial revolution had already begun in Europe and the industrialization of America depended upon exports to obtain the capital requirements of its own expansion. Agricultural exports provided these capital requirements. A literate and alert agricultural economy was a prerequisite to this expansion, a condition attributable in no small measure to the early emphasis given to education in rural areas and supplemented later by the famous Land Grant or Morrill legislation.

This excursion into history serves to remind us of the importance of rural education to our early economic development. It also allows us to draw some lessons from history as we turn our attention to other developing countries whose problems of rural education are large, formidable, and urgent.

SYMPTOMS OF UNDERDEVELOPED OR DEVELOPING ECONOMIES

As we examine those parts of the world that are called underdeveloped, we search for definition. What is an underdeveloped country? What yardsticks are employed to measure the criteria that will allow the conclusion that a country is underdeveloped? What are the criteria themselves? A number of them have been proposed. I shall list them and describe them briefly:
1. Low levels of literacy and education.
   It is estimated that about 40% of the people in the world are absolute strangers to the written word. A significant number of those called literate are functionally illiterate - their possession of knowledge is too meager to be economically or politically useful.

2. Low values in the measures of output and production.
   Gross national product is the term usually employed in developed countries. In underdeveloped countries, this value is low as well as uneven in its distribution among the population.

3. Important health and sanitation problems.
   The prevalence of disease, the absence of preventive medicine, high mortality, and a general disregard for the importance of these questions is a common characteristic of underdeveloped countries.

4. Unstable currency.
   The need to acquire stable foreign currency is paramount in all developing countries. Many of the ingredients of economic development need to be purchased abroad. In addition there is need for an understanding of the fact that money is worth no more than what it will buy, and, in the long run, no more than it will buy in the country of its origin. Hence the need for stability of currency to encourage the rewards of trade.

5. Widespread unemployment or underemployment.
   Migration from rural to urban areas is prompted initially by underemployment. This problem is compounded when there is unemployment in urban areas. Most of the underdeveloped countries have a larger population than can be absorbed into the labor force in either the rural or urban areas. Accordingly, unemployment and underemployment is widespread.
6. **Low nutritional levels.**

Subsistence stage economies are common among the underdeveloped countries. At worst there is starvation and at best there is frequently an imbalance in calorie intake that reduces the potential energy and creative output of the population. Nutritional levels are low in underdeveloped countries and the degree of nutritional restrictions may be used as a gauge in the degree of underdevelopment.

7. **High percentage of persons working in agriculture.**

This may be the most imperfect of measures when comparing various countries or regions of the world. The circumstances assuring a peasant prosperity and a full stomach may delay the movement out of agriculture and it is difficult to ascertain the conditions or the pattern of timing that will favor such a movement. The more highly developed countries have a small percentage of the population employed in agriculture and in general, the underdeveloped countries have a very high percentage in agriculture.

Each of the foregoing may be used in measuring the degree of economic development and as a symptom of underdeveloped economies. In combinations they allow some precision to the determination. Our interest, however, is in the degree of development in their educational programs as well as in the common educational characteristics of underdeveloped countries.

**SOME COMMON EDUCATIONAL CHARACTERISTICS**

Compulsory education laws are not uncommon in underdeveloped countries. The United Nations Declaration of Human Rights has included education among the rights of every man. By legislation or by decree, Member States have conformed to the Declaration. But legislative acts or executive decrees do not necessarily result in schools or teachers nor do such decisions offer any assurance of quality in education. In many underdeveloped countries, the compulsory education period
extends for only 3 or 4 years at the primary level. All underdeveloped countries have a shortage of schools and all have a shortage of qualified teachers. On the entire continent of Africa, for example, there exists no institution for the training of agriculture teachers even though 85% of the population is employed in agriculture.

School enrollment figures are illusory even if reliable in underdeveloped countries. In some of the underdeveloped countries as much as 50% of the population is under the age of 16. A full range of compulsory education to the age of 16 with a high percentage of attendance would be almost prohibitively expensive in such countries.

Education is a highly centralized governmental activity in most of the underdeveloped countries. It is centered in the Ministry of Education with syllabuses prescribed as a governmental function. Education competes for resources at the level of central government with few, if any, local resources employed. The tax base for education is not decentralized and the teachers are paid by the central government.

Teaching is a profession occupied almost solely by men. Although efforts have been made to employ the talents of women in the teaching profession, it remains largely a male profession. North America is the only region of the world that has an overwhelming preponderance of women in the teaching profession.

Education is essentially for boys and the enrollment of girls is usually a small proportion of the enrollment of boys. In some underdeveloped countries this is the result of cultural or religious tradition. It cannot be defended on economic grounds. Such traditions are not likely to build a desirable climate for education nor are illiterate mothers likely to provide a family setting that encourages educational achievement or intellectual curiosity.

Education is most frequently regarded as preparation for employment in Government.

In most of the underdeveloped countries the Government is the Chief employer and
it offers the most rewarding employment. The anticipation of government employment has prompted an imbalance between manpower needs and educational preparation. It has resulted in a large oversupply of economists in Latin America and the Philippines. In the newer countries it has resulted in unrest among those with meager preparation but who flood the gates of government service.

Language is a serious problem in most of the underdeveloped countries. They are characterized by multiple mother tongues as well as the necessity to acquire a western language as a second, third, or fourth language. Language, moreover, is both politically and culturally oriented. The internal conflicts of India and many of the tribal wars in Africa have arisen from language difference. The adoption of a western language of instruction (usually English, French, or Spanish) is a culturally weighted decision. Such language choices are not unrelated to international travel, currency exchange, patterns of trade or models for educational development. In addition, language problems confuse and retard the process of education and at the same time they offer unduly large rewards to those whose sole possession is language skill.

Multiple institutional frameworks for education are common in underdeveloped countries. A variety of limited range school systems may be present in a country at the same time. Educational responsibility may be vested in the ministries of education, agriculture, labor, development, and cultural affairs, all at the same time. Frequently there is little thought given to coordination among the various types of schools or to the possibility of progression from one school to the next. Occasionally, this multiplicity of structure grows out of the competitive endeavors of various technical assistance programs.

In the stages of educational development, primary education is usually the first to appear and it is followed closely by higher education. The middle or secondary level is usually the last to arrive and when it appears it is the most controversial, the least coordinated, and the most proliferated as a result of multiplicity, overlap, and lack of planning.
To further examine the complexity of education in the developing countries of the world, it is useful to probe the problems that may be encountered in comparing the development of education in the United States (or any other developed country) with the development of education in underdeveloped countries. There are both risks and advantages in the attempt to adapt the educational models of highly developed countries to the underdeveloped world. The risks are minimized if the problems of comparison can be analyzed as an early step. There are a few that need special mention and I shall list them with comments.

1. **Combinations of economic resources during development.**

   The combinations of land, labor, and capital is important to economic development and, accordingly, to educational development. In the early stages of America's development there was abundant land, a shortage of capital was alleviated through the sale of agricultural exports to Europe. The shortage of labor required continuing efforts toward labor efficiency in agriculture as well as in industry.

   Underdeveloped countries of the 20th century do not have the good fortune to possess such a combination of resources. More often they have a surplus of labor, a shortage of land, a desperate need for capital and only a meager opportunity to acquire capital through the sale of agricultural exports.

   The only other areas of the world that have combinations of resources similar to those once possessed by the United States are Canada, the U.S.S.R., Australia, and perhaps Brazil.

2. **The role of institutions and traditions.**

   Institutions and traditions are important to education in three ways. First of all, it is necessary to acknowledge that education cannot develop in the absence of institutions and traditions. In a democracy they become a part of the time dimension of educational growth. The mutation
that hastened rural educational development in the United States, the common school district, the Land Grant College—all of these are a part of the institutional and traditional structure of American education.

Secondly, institutions and traditions are both politically and culturally weighted. Their development depends upon the combination of economic resources in a country and upon the value system inherent in the political structure. They become the cultural baggage of education and at the same time they may contain the essential principles of democratic operation. With whatever else may be said about them, they remain as that part of education that is most difficult to transport to another culture. Institutions and traditions must emerge in each culture and must contain the cultural uniqueness of their place of origin.

Thirdly, it must be observed that economic and educational development occurs through a series of steps or stages. Institutions and traditions designed for the early stages of development may not be effective for continued development necessary in the later stages. It is necessary, therefore, to be sensitive to obsolescence in educational institutions and traditions. On this point, Americans have some difficulty matching their recommendations with their record. We still have far too many common school districts, a remnant of a previous stage, and far too few intermediate units, the appropriate unit for an intermediate stage.

3. Independence preceding literacy.

In the highly developed countries of the world, widespread literacy preceded independence. The countries of Northern Europe enjoyed widespread literacy for almost 300 years before they achieved independence. History has demanded nothing of Americans with respect to this problem. Literacy came to America on the Mayflower and it continued as an essential
element of every move in the course of American history.

It is difficult to find an underdeveloped country where literacy has preceded independence. It is also difficult to find one where this fact has not weighed heavily in educational development. Where independence precedes literacy it is difficult to maximize uncoerced choice, to allow public power to arise from the people and to avoid a politically centered educational system. It thrusts education into the arena of politics and it thwarts the responsiveness of schools to local conditions.

4. The concept of education as an investment.

All investment requires saving or delayed consumption. This principle is the same whether its methods involve a production quota system as in communist countries or a voluntary system combined with taxes as in the western nations. As an investment, education involves a present sacrifice and a future return in the same sense as other investments.

No modern society, developed or underdeveloped, is sensitive or even alert to the future returns from educational investments. In the United States there is a positive relationship between extent of investment and entrepreneurial opportunities present. Our current allocations allow $23 Billion for education, $12 Billion for research and development and about $60 Billion for plant and equipment.

Underdeveloped countries cannot afford to be casual with respect to educational investments. Their shortage of capital is absolute as well as relative. Their investments in education must be planned in view of an expected return and a return that will achieve balance in the various sectors of their economy.

On the question of the investment effects of education, underdeveloped countries should be able to expect a great deal of help from developed countries but thus far the educational leaders in advanced countries have rarely bothered to ask this question in their own setting.*

* See accompanying chart on Investment and Education.
SOME POSSIBLE DIRECTIONS FOR RURAL EDUCATION

In offering some modest suggestions for action by an organized profession of rural educators, it is necessary, first of all to acknowledge some good work that has been done. The World Scene Committee of the Department of Rural Education has been an active and productive committee. Their support and participation in the rural program of the WCOTP has been outstanding. The plans for the joint action of the Rural Department and UNESCO in producing an international bibliography of rural education is a significant development in the mustering of rural education resources.

Secondly, there is need to make special studies of the nature and degree of rural education problems that are common throughout the world. These may be pathological problems or they may be problems involved with certain stages of rural development in the international setting. For many centuries, agriculture has been the motion element within economic systems. During the last several decades this priority has been snatched away by industry and its related services. This has occurred first in developed countries and its existence has forced it upon the underdeveloped countries. The traditional chain has been broken and while this may now be studied as a historical fact, it may also be viewed as one of the primary intentions of modern society (though not always admitted). The farmer, therefore, may become the symbol of contradiction in the modern world, a stranger on his own soil reacting to forces outside of his control and in custody of few of the forces that will shape his own future. Independence and individual responsibility may not characterise the farmer of the future as they have in the past. He may discover that independence and freedom are achieved by migrating to the urban setting, a decision he may take that is quite apart from its economic considerations. In this connection it is necessary to study economic development as a process as well as a condition and to assure that educational development like economic development occurs by steps and stages. It is necessary, therefore, to give special study to the institutions and traditions that may best serve each stage and prepare for the next.
Thirdly, there is urgent need for American Associations of rural education to seek further opportunities to become cooperators and collaborators with the rural education developments on the world scene. These developments are numerous. At the meeting of the Latin American Governments in Santiago (5-19 March; 1962), the United States International Cooperation Administration reported that their most numerous requests for cooperative education programs were in the area of rural education.* At their previous conference in Washington, (1958) the Latin American Governments identified primary and rural education as their chief bottleneck to development. The Asian Governments meeting in Karachi in January, 1960 identified primary education as their priority sector (70% rural). The African Governments meeting in Addis Ababa in May 1961 decided that second level education—general, technical and agricultural—constitutes their bottleneck to economic growth. Eighty-five per cent of the African population is rural. The Arab States came to similar conclusions at their Beirut Conference in February, 1960. These are plans and developments in rural education. Professional rural educators in developed countries can ill afford to be uninformed of these developments and the instructive opportunities they provide. Cooperative and collaborative projects will serve the mutual interests of rural educators in all countries regardless of their stage of development.

Finally, it must be argued that rural education on the world scene is becoming a discipline worthy of special study. With respect to the investment effects of education, rural education occupies a crucial role. The absence of attention to the investment effects of rural education in the United States should not obscure its importance elsewhere. Eventually, it may become the primary concern of education everywhere.