UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
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INFORMATION MEMORANDUM FOR THE ADMINISTRATOR

THRU: S&T (Acting), Leonard Yaeger

FROM: S&T/HR, Ruth Zagorin

SUBJECT: Discussion of Education Issues Raised at 7/11/83 Meeting

During our discussion on education last week, you asked for our comments on three issues that were raised in the meeting:

1. political and cultural sensitivity of education assistance

2. AID's comparative advantage in the education sector

3. investment pay-off from education

1. Political and Cultural Sensitivity

It is sometimes thought that education is an especially sensitive sector for AID assistance. The reasons usually given are that ministries of education are highly political, that curriculum content is a jealously guarded area and inappropriate for intervention from outside and that religious training dominates many school systems, especially in Asia.

While these characteristics may be true, they do not preclude work in education. In every country, parents are concerned about the education of their children and see it as the means of improving their lot in life. Governments respond to that concern and as a result any changes or improvements that are attempted in the education sector, whether with external assistance or not, will inevitably have political considerations. It is important to point out that education is generally much less sensitive than population or food policies -- both areas that AID supports as essential priorities in its program.

The only controversial element of education assistance that has arisen is curriculum. Developing countries, almost universally, reject foreign donors determining the curriculum goals for their children's education. The U.S. would do no less. Consequently, AID avoids involvement in any education

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assistance project that establishes curriculum content or priorities unless explicitly requested to do so by the host government. Our assistance concentrates, instead, on helping countries design instructional materials and techniques that increase both the amount that students learn and the number of students that can be taught.

Further, our future programs in education, such as the S&T/Africa Inititative, will concentrate on areas which are noncontroversial -- for example: improvement of resource use, data collection and analysis, management capacity and materials distribution systems.

2. AID's Comparative Advantage

Some critics have expressed the opinion that the U.S. in general, and AID in particular, does not have a comparative advantage in assisting countries develop their education systems. They believe this work should be left to the World Bank and the bilateral programs of the French and British.

The short response is "if the U.S. doesn't have a comparative advantage, who does ?" No other country has successfully designed and implemented educational systems that provide educational opportunity for all of its citizens, not just the elite few. Countries are looking for assistance from us to design such systems, analyze and assesse the quality of its education system and makes improvements based upon empirical evidence. The U.S. possesses more technical talent to design and manage such large scale operations and provide such assistance, than any other country. It has been estimated that 70-80 percent of the literature on education planning is in English, and at least half of the innovative research in education is initiated in the U.S.

The World Bank is the major donor in education at the present time. Last year the IBRD made education loans totaling $900 million. However, close to 80% of that amount was spent on building construction and equipment. There is a strong interest in the Bank in collaborating with AID on major projects and we have actively pursued this connection in regard to the Joint S&T/Africa Initiative in Education.

The primary focus of the major bilateral donors, especially those with historic ties to the developing world, has been to supply teachers and, to a lesser extent, school administrators. The United States, in sharp contrast, has made the technical assistance of education experts and advisors the

backbone of its program. France, the largest contributor of teachers to the developing world, has begun to cut back drastically on its education assistance program. The U.S. is in a position to supply important leadership to other education donors about effective and efficient means of expanding and improving education systems in developing countries.

3. Investment Pay-off from Education

a. Investment in basic education is not only consistent with, but essential to sustaining rural development.

The technical literature on agriculture, economic growth and rural development, stresses the crucial role of developing human capacity. In 1979, Finis Welch wrote "...it is meaningless to discuss development without focussing on people, people not only as benefit recipients but as agents of change". Starting with T.W. Shultz in 1961, human capital has been considered a crucial investment for economic growth. In 1975, Schultz argued that education might be critical in allowing farmers to respond to new incentives in modern, technically dynamic environments. Thus it would lead to a greater liklihood of the adoption of new techniques. This hypothesis has been supported by much empirical work - in the U.S. (Griliches, 1963; Welch, 1979) and in developing countries (Jamison and Lau, 1982; Jamison and Moock, 1981).

Other research has shown that education has important effects on farmers' productivity. In a review of 37 studies estimating the relation between farmers' education and farm output, Jamison and Lau (1982) found that with all other factors of production controlled for, farmers with four years of education increased output on average, 9.5% over those with no formal education under modern or modernizing conditions.

There is empirical evidence that education also has many other desirable effects as well. Education of mothers is positively related to children's nutritional status and inversely related to infant mortality (Cochrane, O'Hara, and Leslie, 1980). When the general level of literacy is low, women's education leads to better health and better ability to conceive and bear children. When the level of literacy is higher, even a few years of education for women leads to a lower birth rate (Cochrane 1979).

Education leads to a better acceptance of technical change and a different attitude towards entrepreneurial risk. It provides the basic skills which are essential for the growth of private enterprise. The expansion of schools in rural areas is an integral part of rural infrastructure development and in most countries has led to improvements in other aspects of community organization, administration and information systems. Thus the basic schooling system not only has a high return in terms of future earning power, either on the farm or off, but is an important prerequisite to behavioral changes in many other aspects of life, such as health, nutrition and childbearing.

It is important to note that all of the empirical research cited above was done, not by educationalists, but by agricultural economists, health economists, scholars in the fields of nutrition, rural development or sociology. They did not, therefore, have a prior commitment to education, but became aware of its importance through research and observation.

b. Education is not just a consumption good. The returns to investment in education in developing countries are consistently higher than returns to physical capital.

The internal rate of return on investments is the discount rate which equates the discounted present value of the benefit and cost streams. Investments in education can be compared to investments in physical capital which is the standard guide for profitability of investments in an economy. In a collection of studies, Psacharopoulos (see Table One) found that social returns to education were consistently higher than those of physical capital; in this case, returns to irrigation, hydroelectric and highway projects. The returns were higher in developing countries than in developed countries, and among the three levels, primary education had the highest returns. The rates of return for agriculture projects, by comparison, are much more diverse. While summary statistics are difficult to estimate, the overall average is not nearly as high as for education investments, from a social point of view.

c. Developing countries consider education to be a critical area of investment.

The public expenditures which developing countries devote to education is the same percentage of the GNP as what they spend on defense. In some cases it is much higher. This

is the same ratio as for developed countries, whose education systems are much more advanced (See Table Two). This ratio has also increased for most developing countries, between 1970 and 1979. Education also constitutes a very large part of the national budget in developing countries -- from 15 to 25%. It is often the largest budget item. In developed countries, that percentage is closer to 10 or 15.

d. <u>While there is little likelihood that LDCs will be able to increase their education budgets, there is ample room for improving the efficiency of these investments</u>.

There are still huge unmet political and social demands for education. Yet given the current economic situation facing most developing countries, there is little question of increasing expenditure for education. However, there are many areas where these expenditures are highly inefficient and could be improved significantly. Drop-out and repetition rates are very high, distribution of texts and materials is inadequate, fiscal accounting and management have serious deficiencies. There are also difficulties with the quality of instruction, the motivation of teachers and the equity of access. It is clear that measures to improve system efficiency and resource management would greatly extend the pay-offs of investments in education.

e. <u>AID can make a significant contribution to improving education even with the limited amounts of resources at its disposal</u>.

AID has already had a major influence on education in Nepal and other countries with annual commitments of $2 - $3 million in current dollars. The key appears to be the length of the commitment rather than the size of the financial undertaking. Furthermore, other donors such as the World Bank are now capable of providing the considerable capital funds required, and there is tremendous potential for collaboration and leverage where AID is willing to make a significant technical assistance commitment.

In conclusion, it must be said that the evidence for education as a critical component of any country's economic and social development is so overwhelming that those ruling it out of AID's program should be required to justify their positions.

Table One: Returns to Education (Social) and Physical Capital in Selected Countries (%)

COUNTRY	RATE OF RETURN			
	Education			
	Primary	Secondary	Higher	Physical Capital
Mexico	25.0	17.0	23.0	14.0
Venezuela	82.0	17.0	23.0	16.7
Chile	24.0	16.9	12.2	15.0
India	13.4	15.5	10.3	12.5
Philippines	7.0	6.5	8.5	10.5
Ghana	18.0	13.0	16.5	8.0
Kenya	21.7	19.2	8.8	18.8
Nigeria	23.0	12.8	17.0	23.0
United States*	--	10.9	9.7	9.7
DCs average*	--	10.0	9.0	10.5
LDCs average	27.0	16.0	13.0	12.8

* Not computable because of lack of a control group of illiterates.

Source : Psacharopoulos, George 'Returns to Education : An Updated Comparison', Comparative Education, Vol. 17, No. 3, 1981 and Psacharopoulos, George 'The Economics of Higher Education in Developing Countries', Comparative Education Review, Vol. 26, No. 2, 1982.

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Table Two : Educational and Defense Expenditures as a Percent of GNP in Selected Countries (1979)

Country	Defense Expenditures	Education Expenditures
Nepal	0.9	1.6
Burma	3.7	1.6
Malawi	3.8	2.2
Pakistan	5.0	2.0
Ghana	0.7	2.8
Kenya	4.8	6.1
Honduras	2.4	3.5
Bolivia	2.0	3.5
Thailand	3.5	3.2
Morocco	5.8	6.1
Ecuador	2.1	3.6
Brazil	0.8	3.6
Mexico	0.5	4.4
Malaysia	4.0	5.8
United Kingdom	5.4	5.7
Australia	2.3	6.0
United States	4.6	6.4
Germany	2.8	4.7

Source : IBRD, World Development Report, 1982 (defense) and UNESCO Statistical Yearbook, 1982 (education).

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