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WORLD BANK

September 1971

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FOREWORD

This is the first in a series of World Bank pamphlets dealing with those sectors (e.g. education, agriculture, power, transportation, population, etc.) to which the Bank directs its development lending. These Sector Working Papers were not initially written with any thought of publication. They began as an internal exercise to gain better perspective on the characteristics of the fields of activity covered by the Bank's projects and to describe the size and philosophy of the Bank's lending program in each field.

The original instructions were to prepare papers that would describe the distinctive economic, financial, and institutional characteristics of each sector; outline the role played by each sector in the general process of economic development; review the scale and approach of World Bank operations in the sector; and summarize the Bank's philosophy about how its own operations, together with the activities of other aid donors, can contribute to building up each sector — physically, financially, and institutionally — in its member countries.

Although Bank loans are usually for specific projects (e.g. a dam, a group of schools, a power system) we are convinced that their merits can only be judged within a broad assessment of their relation to the development of the sector and of the whole economy. The fixing of priorities among individual projects, and the reform of policies and institutions to best serve a country's development needs, can only be done if individual projects are considered in this wider context. Thus Bank projects are derived from an analysis of the larger economic systems into which they must fit. In conducting this "systems analysis" as a foundation for its project lending, the Bank places primary reliance on field-based country economic studies and sector surveys.

The Sector Working Papers have served a useful function at all levels within the Bank; we now feel they may be of similar interest to people beyond our own staff and management. They are therefore being published over the next few months in a series of pamphlets that will deal with the individual sectors in which the Bank is operating.

September 1971



EDUCATION

SECTOR WORKING PAPER

● This sector working paper considers World Bank lending programs over a perspective of five years and lending policy over a period of approximately a decade. It consists of three parts: (a) a brief review of trends in educational development; (b) a review of Bank policy and operations during the fiscal years 1963-1971; and (c) a projection and recommendations for Bank policy and operations responding to the changing situation of the '70s. All references to the Bank in this paper are to be deemed to refer also to the International Development Association (IDA) unless the context otherwise requires.

TRENDS IN EDUCATIONAL DEVELOPMENT

General

Since about 1950, the movement for political independence, the quickening pace of economic development in the less developed countries with its concomitant emphasis on science and technology, and the related population explosion have provided a powerful impetus and demand for education. The resulting expansion of education systems all over the world has been without precedent in history. The achievement is remarkable although far from complete.

The popular demand for education continues without slackening but there is mounting evidence, on the one hand, that this rapid expansion has created a new set of formidable problems and, on the other, has failed to achieve many of the benefits which were confidently expected of it. Many persons have agreed with Philip Coombs' characterization of this situation as a world crisis.¹ On all sides it is accepted that the continued development of education during the 1970s must be along very different lines from the largely "linear expansion" of the 1950s and early 1960s. The description of the educational development sector which follows attempts to define not only the salient characteristics and problems of educational development at the present time but also to describe them as continuing trends, to which Bank policy must continue to respond and adapt.

¹ Coombs: *The World Educational Crisis*, Oxford, 1968.

Quantitative Expansion

The increase in school enrollments at all levels and among almost all the less developed countries is the most dramatic feature of educational development over the past decade and a half. For the period 1960-1966 in developing countries as a whole enrollment growth rates were 42% at the primary level (reflecting an earlier start), 80% at the secondary level and 93% at the higher (mostly university) level (Annex Table 1). In absolute terms this growth added nearly 55 million primary students, 15 million secondary students and 2 million students in higher education, or an average of 12 million additional students each year. One result of these increases was to achieve in 1968 primary and secondary enrollment ratios, respectively, of 40% and 15% in Africa, 55% and 30% in Asia, and 75% and 35% in Latin America (Annex Table 1).

Two major forces lie behind this dramatic increase in enrollments. First is the strong social and political demand for education. Education is now universally accepted and demanded as essential to participation in the development process and to improvement in the condition of individual life. The fact that the individual economic payoff is often illusory does not diminish the demand since there are important social benefits and in any case education is essential to maintaining one's relative position in the social order. Because most curricula are designed to advance the students to the next level, there is an additional escalating force within the educational pyramid. As enrollments grow at one level, the demand increases for accommodation at the next level.

The second force pushing up enrollments has been the growth of population and, more particularly, the relatively recent increase of population in the developing countries which has resulted in an extraordinarily high proportion of young people. The United Nations estimates that in 1970 the percentage of total population under 15 years of age was 27% in the advanced countries and 41% in the less developed countries. One begins to see here the roots of the dilemma which developing countries face.

Two significant features of this expansion should be noted. First is the narrow concentration by governments and also by external assistance agencies upon the improvement of human resources for the modern economic sector and therefore upon formal education systems. Conversely, all too little attention has been given to the needs of rural populations living in the traditional or transitional economic sectors who, for some years to come, will be the majority in most developing countries. In this connection, President Julius Nyerere has noted of Tanzania:

"Although only about 13% of our primary school children will get a place in secondary school, the basis of our primary school education is the preparation of pupils for secondary schools . . . The same process operates again at the next highest level, when entrance to the university is the question at issue."

It is relatively easy to diagnose the problem and enumerate the obstacles to educating rural populations; more difficult, but imperative, is to determine more clearly the characteristics of different learning clienteles, the content of learning which will produce quick and substantial returns and the most appropriate ways to reach hitherto inaccessible learning clienteles.

Secondly, despite the very impressive gains in the numbers of young people enrolled in school, enrollment ratios (percentage of the relevant age group enrolled) remain low in a number of countries. Among 39 countries in which the Bank has had recent lending operations in education, the median primary enrollment ratio is 70%; the range is 8% (Somalia) to 98% (Greece). At the secondary level for the same group of countries in the mid-60s the median enrollment ratio is 13% and the range is 2% (Tanzania) to 70% (Ireland). Twenty-five percent of these countries have less than 7%.

Moreover, the composition of these enrollments remains seriously unfavorable from the point of view of economic development. At the secondary level in 50 countries for which data are available, the median percentage of total students studying vocational courses is 11% and in higher education the median enrolled in courses of engineering, medicine, science and agriculture is 21%.

Since almost all countries have a public commitment to achieve universal primary education by no later than 1980, it is likely (whether they achieve it or not) that the '70s will witness a continued pressure for increase at this level and, as a consequence, at the secondary level as well. Hopefully, there will also be a shift toward higher percentages of students following pre-vocational and vocational courses, although as indicated below, there are limits to the ability of the modern sector to absorb the output of technical schools.

Problems of Quality: the efficiency and productivity of education systems

As enrollments have expanded, it has been difficult, and more often impossible, for education systems to maintain the levels of quality and efficiency of the pre-expansion era. Facilities—classrooms, equipment and teaching materials—have not kept pace with the expanding number of students. Teacher training has lagged and the qualification

and experience of the teaching force have declined. The most serious gap, affecting everything else, has been in the management capability—organization, planning, evaluation, supervision—needed to meet the challenge of expansion.

The effects of all these factors are reflected in the dropout and repeater rates. In perhaps half of the developing countries, less than half of the students who enter primary school complete the cycle. The resulting inefficiency can be seen in selected cases drawn from the analysis of Bank project appraisals. In the Ivory Coast it requires an average of 12.5 pupil years to produce one graduate of the 6-year primary cycle and 21% of the total primary budget is spent on students who drop out in Grades 1-3. In El Salvador the comparable figures are 15 years and 37% ; in Ethiopia they are 14 years and 32% (Annex Table 2).

Of equal importance has been the persistence of institutional forms, school system structures, teaching methods and curricula derived largely from European practice of an earlier era and to a great extent irrelevant to present day needs. In different ways, but with comparable effect, both the former colonies and the historically independent developing countries suffer from a lack of responsiveness to changed conditions. Both types of country have inherited or adopted educational systems designed for an elite—in the historically independent countries usually a landed or commercial upper class; in the former colonies a cadre of civil servants. In both cases, with the change to a mass learning clientele, a substantial proportion of the students in school are being miseducated. The content of primary and secondary courses, heavily dominated by the questions on qualifying examinations, is still drawn to a great extent from the developed world, which is remote from the experience of today's student, especially the rural peasant child, still living in a primitive condition of life. The heavy reliance on examinations encourages rote learning of irrelevant information. Even in technical courses adherence to standards and practices set in the developed countries inhibits the education of students to solve the problems of their own environments in more appropriate ways. The fact that these practices are often the choice of local people does not diminish their bad effects.

Education and the Labor Market

Matching educational growth with the manpower needs of developing economies is likely to become more complex in the '70s. Aspirations of the younger generation and the related expansion of school systems have often greatly exceeded the opportunities for productive employment in the modern sector of the economy, re-

sulting in growing unemployment of the educated. With hardly 10% of the age group in secondary schools and less than 1% in universities, some education systems are already approaching the point of producing graduates in numbers exceeding the effective demand of employers. A long-term development strategy would no doubt call for a continued expansion of the education system to raise the very low educational attainment level of the working population although the short-term reality of increasing unemployment in the rapidly growing younger age group often reduces the economic benefits of such expansion.

When the unemployment problem is of a cyclical or temporary nature, it should be ignored in the development of long-term educational growth targets. Persistently growing unemployment among the educated at progressively higher levels, however, would seem to indicate structural imbalances, which cannot be ignored. In such cases, continued investments in the expansion of education systems without major reforms could become both economically and socially unprofitable. The situation calls for three kinds of action: a continuous reassessment of the economic development, potential and effective manpower demand of the countries concerned, improvements in the functioning of labor markets (particularly the system of incentives and disincentives) and reorientation of the education and training systems. Our knowledge of the problem of unemployment amongst those with advanced education and training (which is of recent origin in a number of countries) is spotty and inconclusive; research in this field deserves high priority and is described in more detail at the end of this section.

Closer attention to the functioning of labor markets is particularly important because the vexing unemployment problem is compounded by labor market imperfections which obstruct the effective utilization of a country's available manpower resources. Often, unemployment among the educated is accompanied by persistent shortages of qualified manpower in fields where work incentives are unattractive. Examples of such pockets of "scarcity in the midst of plenty" are industrial technicians, agricultural extension workers and teachers.

Educational development in the '60s was no doubt imbalanced when compared with these specific manpower needs. Even in those cases, however, where attention was paid to industrial, commercial and agricultural training the result frequently failed to meet employers' needs. Formal technical education and training in schools were often out of step with informal, on-the-job training and employment opportunities. The systems of wages and other incentives are often

not conducive to an optimum deployment and utilization of manpower. Public sector salaries, for instance, are normally insensitive to demand and supply. In Africa the high level of these salaries, combined with budgetary constraints, has resulted in a situation where the number of civil service posts expands slowly but at the same time stimulates a demand for education and training for these posts beyond the saturation point of effective demand. In Latin American and Asian countries the low level of public sector salaries may ease the budgetary constraints but it has often made the civil service, including the teaching professions, unattractive to able and qualified school and university graduates and sometimes created an oversized body of less qualified staff. Within the public sector, the rigidity of salary scales often prevents adjustments for those occupations where scarcities persist, particularly for jobs where working conditions are unattractive or competition for specific technical skills is severe.

A reorientation of the education and training systems, with greater emphasis on vocational education and on non-formal training for agriculture and industry, will be required to redress present imbalances. A frequent objection against public investments in vocational training is the fact that most public training schemes have been poorly adjusted to employers' needs and have failed to guide students into the vocations for which they were trained. Since vocational training is considerably more expensive than general education, this situation can therefore lead to misinvestment. From this the conclusion is often drawn that vocational training should be left entirely to in-plant training by industry. There is considerable validity in this view but in many countries it is unlikely that the need for vocationally trained manpower could effectively be met by industry itself. The small scale of the majority of industrial undertakings in developing countries, often working with outdated equipment and without adequate know-how of modern production techniques or interest in staff training does not provide the proper basis for modern vocational training schemes. Industrial development would therefore require that the supply of technically trained manpower, which is greatly inadequate in many countries, be strengthened by institutional public training. To avoid the mistakes of the past, however, there is an urgent need for close cooperation between public training institutions and private industry, e.g. through the establishment of apprenticeship training schemes. Examples of such cooperation are the SENA and INACAP industrial training schemes in Latin America.¹

The basic causes of rising unemployment in the developing coun-

¹SENA: *Servicio Nacional de Aprendizaje (Colombia)*.

INACAP: *Instituto Nacional de Capacitación Profesional (Chile)*.

tries are of course not to be found within their education systems and the recommendations given in the preceding paragraphs would do little to solve the fundamental problem of the traditional (low income) sector of the population aspiring for a place in the modern (high income) sector, with its narrow employment opportunities. Education can help to reduce the unemployment among certain categories of educated at secondary and tertiary levels but otherwise the unemployment problem requires a concerted inter-sectoral approach to rural and urban development.

To guide the long-term strategy of Bank operations in this field, the Bank's research program includes a study of the functioning of labor markets in developing economies, which should throw more light on the recruitment, employment and utilization of educated manpower, with particular reference to the unemployment problem. The study, which will be closely linked with research undertaken in the framework of the ILO World Employment Program, is expected to be initiated in fiscal year 1972.

Financial Constraints

As indicated previously, rapid school-age population growth and the persistent demand for education mean that enrollments inevitably will increase. In addition, there are upward pressures on unit costs (costs per student). These are largely determined by staff costs, which in most developing countries make up over three-quarters of total recurrent expenditures in education. Teachers' salaries, in competition with wages in the modern sector, tend to rise regardless of productivity. Needed improvements in teacher qualifications, the advance toward seniority by young teachers, who often constitute the majority, and the tendency to raise teacher:pupil ratios are other factors which will act to increase staff costs, and unit costs, in the future.

In the past, public expenditures on education generally have grown at a faster rate than either total public expenditures, public revenue or national income. A comprehensive study of 30 developing countries showed that between 1960 and 1965 the share of education in public expenditures increased, on the average, from 13% to 15%. Similarly, for the same period public expenditures on education rose from 3% of national income to 4% (Annex Table 3). A representative sample of 10 recent Bank appraisal reports indicates that this trend has continued in most cases between 1965 and 1970. Given that both enrollments and unit costs are likely to increase, future increases in expenditures on education are virtually inevitable.

However, the increase in educational expenditures cannot con-

tinue indefinitely at a faster rate than that of national aggregates. In 1967, of 50 developing countries for which data were available, 18 devoted more than 20% of total public expenditures to education, compared with just six in 1960. It will be increasingly difficult to obtain an ever greater share of a country's budgetary resources for educational purposes.

Solutions to this dilemma will have to be sought in four inter-related areas. These will include:

- searches for forms of education which will make a more direct and less costly contribution to rural development;
- attempts to improve internal efficiency and increase productivity;
- attempts to identify new sources of educational finance; and
- efforts to help governments plan and control the size and shape of school and university systems.

Dilemma for the Government: how to allocate resources

The above analysis of the quantitative expansion and the problem of quality represents in some respects an outsider's point of view. In the borrower's calculation social, cultural and psychological considerations are merged with the economic to create ultimately a political formulation of the issues in which short-term solutions and benefits sometimes are more heavily weighted than long-term.

The public has increasingly come to consider education as a right and a school place as the entrance ticket to a better life in the monetary sector of the economy. Parents are generally well aware of the growing unemployment among school graduates, but the gap between the subsistence and monetary sectors is so wide that they may still consider that it pays to provide secondary and higher education for their children on the off-chance that one may secure a job that will enable him to help his less fortunate brothers and sisters. To a very large extent these views have been accepted by the governments and are reflected in their education policies.

Cultural and ethnic demands may furthermore force the borrower to establish educational institutions—secondary schools as well as university departments—in areas which for a long time to come will lack the economic resources and the population necessary for a satisfactory development. In some instances schools may be seen as a device for keeping young people out of trouble.

Innovations, which are seen by outsiders as necessary to remedy qualitative and financial problems, may often be resisted by the developing country—and particularly by teachers and ministry officials

—as changes which would downgrade the system and endanger vested interests. They may refuse to participate in experiments which they feel should be tried out in other countries which could better afford failures. They are particularly sensitive to proposed changes in examination systems since these may seem to imply a retreat from accepted world standards. This demand for international equivalence in examinations is undoubtedly hampering the adjustment of secondary and higher education to local needs but it represents a politically vocal requirement which most African and Asian governments find difficult to resist.

In the face of the surging demand for education of the masses as rapidly as possible, it is not surprising that very few leaders have stopped to ask, as President Nyerere of Tanzania has done—What kind of society do we wish to create? What can we realistically expect to achieve with our limited resources? How can we fashion our education system so as to maximize its contribution to these ends? Whom shall we educate, for what and how? Instead most governments have sought to replicate what was at hand as widely and as quickly as they could.

REVIEW OF WORLD BANK POLICIES AND OPERATIONS, 1963-1971

Policies

The basic elements of the Bank's education policy in the initial phase of our educational financing were elaborated in September 1962 when the first education project was presented to the Executive Directors and subsequently in a memorandum from the President on "Proposed Bank/IDA Policies in the Field of Education" of October 1963. In the President's Memorandum, the basic statement of policy with respect to types of projects to be financed reads as follows:

"The Bank and IDA should be prepared to consider financing a part of the capital requirements of priority education projects designed to produce, or to serve as a necessary step in producing, trained manpower of the kinds and in the numbers needed to forward economic development in the member country concerned. In applying this criterion, the Bank and IDA should concentrate their attention, at least at the present stage, on projects in the fields of (a) vocational and technical education and training at various levels, and (b) general secondary education. Other kinds of education projects would be considered only in exceptional cases."

The Bank would thus concentrate on high priority projects within the country's education development plan and fill the most crucial gaps in the system provided they fell within certain *a priori* defined areas of eligibility. Technical assistance and financing of software-curriculum reforms, education planning, production of teaching materials, etc. would comprise very minor parts of the projects, which would consist mainly of construction and equipment of school buildings.

With increased knowledge and experience, the Bank's approach to education widened in the late 1960s. In a Memorandum for the Executive Directors in July 1970, the President reaffirmed the first sentence of the 1963 statement quoted above, but added, "in applying this criterion in future we should broaden the scope of projects considered and we should determine priorities and select projects on the basis of a thorough examination of the education system as a whole rather than by a *a priori* designated areas of eligibility which may not relate to the particular country. We should continue to emphasize projects which, like vocational training, produce trained manpower directly but we should also consider for financing other types of projects . . . which should have important long-term significance for economic development." Such projects would be "designed to encourage changes which improve the relevance, efficiency or economy of education systems".

The Bank's education financing in the fiscal years 1963-1971 has thus developed from hardware projects in restricted education sub-sectors to mixed hardware and software projects based on sector analysis aimed at achieving qualitative improvements and meeting crucial manpower needs.

Operations

Up to June 30, 1971, the World Bank Group has approved financing of 57 education loans in 42 countries for a total amount of US\$ 431 million. Africa, including North Africa, has received 27 loans and 44% of the total lending volume; Latin America 15 and 22%; Asia 12 and 25%; and Europe three loans and 9% of the volume.

In the beginning most education projects were financed through IDA credits and only 10% of the projects in the fiscal years 1963-1967 were in countries with more than US\$ 200 per capita annual income (Annex Table 4). Subsequently, the income range of the borrowers widened and in 1970 and 1971 about 56% of the financing was in countries with more than US\$ 200 per capita income. The trend to include countries with a more developed economy has led to in-

creasingly complex education projects designed to meet the need of a diversified labor market in a larger monetary sector and it has often involved major reforms and innovations for the modernization of outdated systems.

So far 72% of the Bank's education financing has been in secondary education. About 23% has gone to universities and post-secondary education and 4% to adult training, while primary education directly (as contrasted to the indirect effect of teacher training) has received little more than 1% of the funds (Annex Table 5). The post-secondary non-university component has increased lately from 8% to 13% of the total. By curricula, general education, including pre-vocational options, comprises the most important project component both in number of student places provided and as a recipient of funds (Annex Table 5). The demand for general secondary education has, however, reached a saturation level in some developing countries during the last years, while important needs persist for teachers, technicians and engineers. Consequently, technical education and teacher training have received 48% of student places provided through the Bank projects in 1970 and 1971, as against a 28% average in the earlier period, while student places in general education are significantly reduced from 64% to 45% (Annex Table 6). The provision of student places for agricultural education has remained at 7-8% and most places have been in middle level agricultural institutes which have had a restricted enrollment and therefore a low output of graduates. Most agricultural graduates are being employed in government extension services and one of the reasons for the low output is insufficient budget allocations for such services leading to limited employment capacity.

As mentioned, Bank education projects have often made significant contributions to educational system building. Practical and pre-vocational subjects have been introduced in the general secondary education curricula on an equal basis with academic subjects in 21 countries. Science teaching has been strengthened and the ratio of science graduates to arts graduates will now be compatible with the market demand in countries such as Colombia and Uganda. The inclusion of curriculum reform studies in recent Kenya and Iran projects will hopefully lead to the practice of continuing reform similar to that in more advanced countries. The instructional television in the Ivory Coast project which is being introduced in the formal education system will be designed to constitute an integral part of the student's learning process as routine as the use of textbooks. The Bank's insistence on having full-time teachers in the Bank-financed schools is intended to discourage the unsatisfactory part-time teaching tradition

which is so prevalent in Latin America. It should be said that it is still too early to assess finally the outcome of the above reforms.

Reflecting the Bank policy of relying on other agencies as the primary source for technical assistance in education, the Bank-financed technical assistance component has always been small and amounts to only 5% of the loans. The number of projects which include Bank-financed technical assistance is, however, increasing. Thirty percent of the projects approved in 1963-1967 contained a technical assistance component, while 90% of the 1970-1971 projects do.

Disregarding the small technical assistance component, two-thirds of the loans have been for construction of physical buildings and one-third for provision of equipment (Annex Table 5). Therefore, much attention has been given to the refinement of costing techniques in appraising the physical aspects of projects and improving cost planning measures in implementation of projects. As a result, norms for school construction and basic equipment lists for a variety of types and levels of schools have been developed. A recent preliminary study on unit costs in education projects should also prove useful in our future activities, even though firm conclusions cannot be drawn at this stage due to the slender data base (Annex Table 7).

With increased emphasis on technical education, the equipment component has increased and, consequently, the demand for foreign currency. The main reason for a drop in local currency financing from 40% of the amount of the loans in 1964-1968 to an estimated 18% in 1969-1973 is, however, increased financing of education in relatively more developed countries.

Annex Table 8 contains a complete list of education loans by country, type of project and amount as of July 1, 1971.

Organization, Procedures and Criteria

The organization, procedures and criteria for educational project financing by the Bank are the result of several main factors, from which have developed the length and pattern of the project cycle, the size and composition of educational projects, patterns of disbursement, and various other characteristics of financing in this sector.

Probably the most important of these factors is the character of the sector itself as described in the previous section. The education sector is made up of many elements which interact organically through their effect on the development of human resources and their common dependence on limited sources of revenue as well as on each other. In its organic aspect education is not entirely different from other infrastructure sectors, such as transportation, where intersectoral re-

lations and the "investment mix" are of basic importance. In its economic character, however, it does differ from these sectors in one or another respect. Not only is it not directly revenue producing; in the present state of our knowledge, its economic return is not accurately measurable. Moreover, educational investment carries with it an unusually high rate of commitment of recurrent expenditures by the government—perhaps 30 cents per year for each dollar invested. In determining project size and composition, therefore, the recurrent cost commitment rather than the investment cost is often the determining factor.

We have noted other constraints which may also limit the number of new student places which should be created at a given time—the ability of the labor market to absorb persons with different types and levels of training, the availability of qualified teachers and the need for curriculum, structural or management reforms. It is therefore necessary to view the sector as a whole, within the country's development as a whole, and put together an investment package which, at any given time, will help to meet that country's needs in a balanced and economical way without overcommitment of scarce resources.

In addition, even where agreement exists upon educational objectives and needs, there is far less objective and technical consensus upon how to meet those needs than exists in other sectors. In most sectors development assistance is essentially a process of selecting and applying proven technologies which have reasonably predictable results. The results of educational technology even in the advanced countries are difficult to predict and its relation to development is only beginning to be studied.

Our organization and procedures have been strongly influenced by the Bank/Unesco Cooperative Program established in 1964, very early in the Bank's history of educational financing. The program provides for cooperation by the Bank and Unesco in assisting member countries to identify and prepare projects for Bank consideration and in appraising, supervising and, when requested by the country, providing the technical assistance component of such projects. Under the agreement Unesco has "primary responsibility" for assisting countries in project identification and preparation, which it exercises through a separate Educational Financing Division, devoted exclusively to Bank project work. In 1969-71 this unit assisted borrowers in identifying 65% and preparing 80% of the Bank projects.

In the original agreement no provision was made for cost-sharing or other cooperation with respect to services that are closely related to project identification and preparation, such as educational planning, and which might therefore more directly contribute to the

efficiency of our operations. During the past year the Cooperative Program has been expanded to provide services of this kind, to be made available by Unesco's Division of Educational Planning and Administration and by its Department of School and Higher Education. These services will include the provision of country education profiles which should help to increase our knowledge of the requirements of this sector.

What then have been the most important practical effects of these factors upon the Bank's organization and procedures for educational financing?

(a) Reflecting its traditional role, the Bank has concentrated upon capital financing and has relied upon the cooperation of other agencies to provide the technical assistance related to the educational and institution building objectives of Bank-financed projects. About 90% of such projects have involved necessary technical assistance from bilateral or other multilateral sources. The Bank will continue to seek such cooperation. However, greater attention by governments to improving the quality and efficiency of their education will require, in the short run, larger inputs of technical assistance. The expanding volume of Bank activity has also, in some cases, exceeded the immediate funding ability of other sources of technical assistance. In such cases we have provided the financing through our loans, while other agencies, at the borrower's request, have arranged for the services.

(b) Educational project identification has depended from the beginning upon comprehensive reviews of the sector which could establish some relative order of priorities—quantitative and qualitative. These sector reviews have been carried on in some cases as parts of the Bank's economic surveys and more often under the Bank/Unesco Cooperative Program by Unesco project identification missions. Unesco identification reports have been useful to both the borrower and the Bank. While they vary in scope and depth and until recently have been largely confined to formal education, they have provided a valuable pilot exercise and example in project identification through a sector approach.

(c) Because of the constraints mentioned earlier and despite the packaging of a number of items in one project, the size of our education loans has been small in comparison with most other sectors. They have ranged from US\$ 1.5 million to US\$ 20 million and have averaged US\$ 7.6 million. The packaging process has also called for larger than ordinary missions made up of

a number of specialists. Preparation and appraisal missions, for example, require a number of specialized educators—general, agricultural, technical—as well as an architect and an economist.

WORLD BANK EDUCATION POLICIES AND OPERATIONS IN THE 1970s

Possible New Areas of Lending

Bank policies and lending operations have been adjusted in response to the trends in educational development described above. This adjustment will continue, but changes in the pattern of our lending will be gradual rather than radical. During the next five years the established areas of lending—technical, agricultural, teacher training and improved general secondary—will continue to provide the bulk of our projects. Particular attention will be paid to agriculture and to the close tie between the agricultural training, the agricultural extension activities and the application of agricultural research. We expect also to increase our activity in some areas where we have only recently begun, such as management training, and also to initiate lending in some wholly new areas. Our new and increased activities are likely to fall in the four interrelated areas mentioned above, i.e. the search for less costly education through non-formal training; more efficient and productive education by means of curriculum reform and the coordinated use of new technologies such as radio, television, programmed learning and related teaching materials; exploration of new sources of finance; and management studies to improve the planning and control of educational systems.

(a) Non-formal education and training

As indicated above, the vast numbers of uneducated and miseducated young and older people in the less developed countries, principally in the rural areas, will constitute a major challenge to development for several decades to come. It is true that universal primary education in the 1980s is a major educational policy objective in many developing countries. There is, however, a long way to go before the goal is reached as 46% of the age groups in the developing world are still left outside the formal education system. An illustrative case is East Africa where about 70% of the new entrants to the labor force have had either unfinished primary education courses or no primary education at all. Most of those 70% will remain in the labor force in the year 2000 as unskilled, illiterate subsistence farmers or as equally unskilled, semi-employed urban dwellers, unless major

efforts are made to provide non-formal training opportunities. The Bank is therefore concerned to find alternatives to formal primary education and this will include suitable forms of functional literacy programs. The Bank has supported a few projects in non-formal education, notably farmer training centers in Kenya and Tanzania, mobile training units in Somalia and Tanzania and an industrial training scheme in Chile, and we are supporting accelerated vocational training centers in a number of countries. We have also commissioned a research study designed to discover other types of non-formal education which might be assisted by the Bank. We expect therefore that the next five years will see a significant expansion of the Bank's activity in this area and two main categories of programs are envisaged: (a) for children and youth outside the formal system, (b) for adults. The objective and content of those two programs would be similar but the teaching methods, structure and financing would differ. The new mass communication media may have a very high potential for non-formal education.

(b) Educational radio and television

Prudently used as an integral part of the education system, these media can be highly effective in the introduction of new curricula, in upgrading of teachers and in the most efficient use of the best teachers for the mass of students. They do not hold out the promise of lower costs per student but because they can be highly effective innovating forces they can, in some cases, provide a much greater educational return for a moderate increase in expenditure.

Two educational television projects which the Bank has considered—in the Ivory Coast and Niger—bring out sharply the characteristics of this type of development and why the Bank should not rush headlong into it. In the Ivory Coast educational television is being introduced as part of a multi-faceted program of curriculum reform, pre-service teacher training and in-service teacher upgrading. Existing transmission facilities will be used, obviating the need for major investment for transmission, and the expected number of students and teachers to be reached constitutes a sufficiently large market to keep unit costs at an acceptable level. In Niger most of these favorable circumstances do not exist. Although an experimental project in television for 20 classrooms in the city of Niamey had success in exploring new teaching techniques and reducing dropouts, expansion of the project for the education system as a whole would require substantial capital and operating expenditure for a small and widely dispersed market which will not be economically justifiable for some years to come.

A serious danger in educational television is that hardware installation will precede the program planning and production, organization and teacher training and equipment maintenance which are essential to the effective utilization of hardware. This danger is being heightened by the promotional efforts of suppliers and by the tendency of governments to view these media as easy short cuts to educational development, which makes them susceptible to high pressure salesmanship. Wherever it participates in these projects the Bank will exert a counter influence to the emphasis on hardware.

(c) Programmed learning

Programmed learning is a method of organizing the content of a course in progressive steps so as to permit a student to proceed at his own speed with a minimum of guidance by the teacher. It is being used in a number of ways in advanced countries, primarily as a means of freeing the quicker and the slower students from the lock-step pace required for an average class. In the advanced countries programmed learning has often been associated with a high degree of mechanization and automation. Therefore, it has been considered inappropriate for developing countries. Recent research and experience, partly through a Unesco project in Lebanon, indicate that the educational benefits of programmed learning can be delivered through inexpensive workbooks. There may be equally important financial benefits. Although programmed learning requires a substantial investment at the outset for programming and other start-up costs, it promises to reduce the recurrent costs of instruction by allowing higher student:teacher ratios. If applied on a wide scale, this approach conceivably could ease the financial burden of education in many developing countries. Thus, programmed learning might lend itself well to Bank financing, especially in more populous nations.

(d) Teaching materials and equipment

A better and cheaper supply of locally produced textbooks and simple teaching equipment is another of the needs in many developing countries. It should be emphasized that successful production of teaching materials requires more than printing facilities and workshops. A major effort of this kind requires, first, an appropriate curriculum and course syllabi for which teaching aids are to be prepared. On the production side, consideration must be given to the selection and training of textbook authors, equipment designers and audio-visual materials producers. On the consumption side, a market and marketing procedures must be established. In some developing countries it appears that most of these prerequisite conditions exist and

that Bank initiative and assistance could provide the catalyst for the solution of a major problem. In a recent loan to Turkey, for example, assistance has been provided to expand and improve an existing center for local production of inexpensive science teaching equipment which will in future reduce the country's dependence on costly, often unsuitable, imported equipment. Although in many countries, it may require time to prepare the way for this kind of development, this type of lending may be expected to increase during the next five to 10 years.

(e) Business administration and management

Only a few institutions in the developing world offer training in business administration and management. A rapid industrialization in some countries, an important development of export and import trades in others, and a replacement of expatriates by nationals in private and public enterprises in most of the former colonies have increased the demand for skilled middle level and high level managers. The Bank expects therefore to finance formal as well as non-formal training institutions in business administration and management, of which the Institute of Management in the aforementioned Turkish loan provides the first example.

(f) Management of education systems

As indicated throughout this paper, perhaps the most pervasive weakness of the education systems is their management. We have already financed within a number of projects the creation or strengthening of educational planning units and we propose now to broaden this approach to include improvement of the full range of management functions at national and provincial levels as well as in the individual schools. This involves the training of supervisors, school principals and other administrative personnel in planning, scheduling, budget and accounting techniques, etc. This type of assistance is appropriate for the Bank and would bring important benefits to whole educational systems.

Project Design, Sector Analysis and Project Sequence

Of major concern in the design of education projects for Bank financing is the need to make education and training systems more responsive to the borrowing country's economic and social needs. The ill-adapted and costly nature of existing education systems, the

persistent imbalances between demand and supply in the labor market and the severe limitations of financial and human resources often require fundamental and broad reforms. Projects should therefore not be designed exclusively in terms of meeting manpower needs by expanding and improving specific sectors of the education and training system but should also engender such reforms. While continuing its policy to finance educational investment designed to meet the borrowing country's immediate and most pressing manpower needs, the Bank will encourage more long-term, comprehensive and incisive objectives. Projects will, more and more, be selected on the basis of a thorough examination of the education system as a whole and as part of well designed, comprehensive education plans and reform measures. In some cases this may require projects of longer duration—perhaps eight years for the working out of institutional changes. In other cases we might finance long-term educational programs through repeater projects planned in advance to implement successive stages of the program.

The sector approach was applied at an early stage of the Unesco/Bank Cooperative Program but the methods have varied and will vary depending on the circumstances and on our knowledge of the specific country's education system. Any program of action must furthermore distinguish between:

- sector analysis with the limited objective of serving as a basis for Bank operations only; and
- sector analysis with the widest possible objective of offering solutions to basic national policy issues.

In the first instance our analysis may be based on a number of sources: information gathered through previous Bank projects, Bank economic missions, preinvestment studies, Bank in-depth reconnaissance missions, Unesco and FAO project identification missions, Unesco's collection of country data, reports from bilateral and private agencies, etc. In the second case the in-depth analysis must heavily involve the government of the country if it is to be successful and lead to appropriate follow-up actions. The exercise might be financed through a UNDP grant, a Bank loan or other means. A recent study in the Philippines and forthcoming sector studies in Ethiopia and Northeast Brazil exemplify such comprehensive in-depth analysis.

In order to come to grips at an early stage with the complex problems of an in-depth examination of the education systems and of projects of longer duration as described above, the Bank staff expects to devote more time to sector analysis and other pre-appraisal work.

Projections of Lending Operations in FY 1972-1976

Our projections for the five-year period 1972-1976 envisage the financing of some 95 projects in 60 countries and a total lending of about US\$ 800 million.

A comparison between the actual and projected lending during the five-year periods of 1964-1968, 1969-1973 and 1972-1976 is shown below:

	FY 1964-1968	FY 1969-1973	FY 1972-1976
Aggregate number of projects	21	67	95
Total lending (US\$ million)	157	534	800
Total project cost (US\$ million)	266	945	1400

Analysis of loans by country categories

The content of the projected lending will of course reflect many factors including, most importantly, the borrowers' own investment priorities. On the basis of the approach to educational financing outlined in the earlier sections of this paper, however, the pattern of the Bank's educational financing might be expected to consist of four broad categories of loans.

(a) About 40 loans at \$3-6 million each for projects in smaller countries—many of them new borrowers. The projects would form packages of differing items with the objective of meeting overall quantitative as well as qualitative manpower demands. General secondary education of an improved type might be a project item, together with expansion of technical and agricultural education and teacher training. In the poorer countries projects in non-formal education would have a high priority. Construction of physical facilities would continue to form an important part of the projects. Technical assistance for planning, improvement of management and project implementation will often be necessary.

(b) About 35 loans of \$7-9 million each to medium-sized countries, for the most part where the Bank has previously been active. In some of these countries, as previously explained, further expansion of the general secondary education system may

be questionable because of low employment demand and financial constraints. Projects would be more concerned with qualitative improvements or with special sectors of the education system, such as rural education, use of new media and non-formal vocational training, which would require substantial technical assistance. In many of these countries the strengthening of planning and management capability is urgent.

(c) 10-14 loans of \$15-25 million each to countries with large populations. Because of the size of these countries and, in most cases, their federal structure, individual Bank projects would probably not attempt to finance large-scale national building programs or comprehensive education reforms intended to cover all important aspects of, e.g., secondary education. To achieve impact our lending would have to concentrate on three major types of projects. One type of loan might finance country-wide projects in instructional radio or television, programmed learning and production of teaching materials. Such projects require a large market of the type available in populous countries to justify the investment. The second type of loan might go to construction of institutions related to specific parts of the labor market such as teacher training schools, polytechnic colleges, agricultural institutes or farmer training centers. The third type might involve the financing of diversified education projects in specific states or provinces with particularly urgent needs.

(d) 6-8 loans of \$10-20 million each (or in some cases considerably more) to less developed European countries. Countries which see their future within the framework of a common market, urgently need to bring their education and training systems up to the standards of other European countries. Bank lending for this group would point towards rationalizing and modernizing education in the interest of economy and greater output of qualified workers and managers.

Analysis of loans by mode and outlay

A further analysis by mode and outlay of the above lending indicates that more than one million new or improved student places might be provided through the Bank-financed projects. Approximately 60% of those places might be in technical and agricultural education and in teacher training, compared with 42% in the past, while the number of places in general education might be reduced from 58% to 40% of the total. The shares of the lending for non-formal education and for technical assistance might increase from current 4% and 5% to approximately 15% and 10%.

Research and Project Evaluation

Useful research is being undertaken outside the Bank which needs evaluation and adaptation to our operational needs. Within the Bank, a case study of cost-benefit analysis in education (Kenya) and a recent survey of educational financing methods have helped to clarify significant questions involved in our operations. Ongoing studies are: a case study of the external and internal performance of a secondary education system, the use of education planning models and a study of student loan fund schemes. A contract was signed recently between the Bank and the International Council for Educational Development (ICED) under which the latter is undertaking an assessment of existing experience in non-formal education for rural development. ICED is conducting this research with substantial cooperation by Unesco, FAO, ILO and a number of bilateral and private agencies.

A plan for future research, developed last year, covers a wide range of important topics. Important new areas of research which are proposed, in addition to the ongoing studies mentioned above, are:

- evaluation of the functioning of labor markets in developing countries;
- cost/effectiveness of alternative learning technologies;
- improved techniques for project implementation and evaluation.

The proposed labor market study would investigate existing patterns of recruitment, employment, utilization and in-service training of educated and trained manpower in developing countries in the context of existing labor market characteristics: systems of wages and salaries, hiring and in-service training practices, employers' criteria for employment, information deficiencies, job preferences, labor (im)mobility. The objective would be to identify labor market factors which prevent the effective utilization of the output of the education and training system for productive employment. The study would thus form a segment in our knowledge of the design of education for economic development and supplement the manpower forecasting technique used so far. The weaknesses of manpower forecasting are well known and the proposed study would deal with at least one of these weaknesses: that training for correctly assessed manpower needs does not guarantee that students will ultimately be employed in the fields for which they were trained.

Two major technologies are currently used in vocational education: training in vocational schools and on-the-job (in-plant) training. The Bank has so far financed the first category although it has been increasingly felt that the second category might also merit Bank support. In relation to such support the cost effectiveness of the two tech-

nologies should be studied and compared. Such comparison would also cover the different teaching methods used, particularly programmed learning, which was originally developed for vocational training and has been widely used in industry, the military services, etc.

Considerably more attention will be given to the evaluation of Bank projects than was possible in the past. This is not only because more of our projects will have become operational in the near future but also because of growing awareness of the need to integrate evaluation mechanisms into the process of project implementation. So far, our practice has been to postpone evaluation until a project has been completed and has become fully operational. To measure the full educational effect of a project as much as eight years may have to pass after its inception. In many cases, however, certain elements of a project (e.g. the results of technical assistance, the training of teachers and other staff) could be subjected to evaluation at an earlier stage. Continuous feed-back of information in the stage of implementation could provide early warnings about the need for project modifications. The proposed third major research project would thus provide the Bank with a methodology to evaluate the education projects of the 1960s and define the frames of reference necessary for a proper and continuous evaluation of future projects.

CONCLUSIONS

A deeper and more continuous dialogue between the Bank and the borrower is necessary if we are to encourage in the borrower a greater willingness to reform and innovate and if we want to succeed with the projected financing of education as indicated in this paper. On the Bank side, more intensive sector analysis, particularly with a longer time perspective, can improve the Bank's understanding of the sector and the credibility of its advice. On the borrower's side, improvement in management and planning practices should lead to a better appreciation of priorities and readier availability of soundly conceived projects. Unesco's present effort to strengthen its planning services for member countries should contribute to this end as well as financial assistance for planning and management analysis for which the Bank has begun to provide financing in selected cases. In all these activities the prime objective is to develop local capability and self reliance.

From this combination of factors, we hope to develop a better basic strategy agreed between the Bank and the borrower within which we can identify a phased sequence of projects covering a period of up to

10 years. In this phased sequence we would expect to find capital and technical assistance financing interspersed so as to constitute a rational and orderly application of resources for development of the sector.

Although we anticipate that the volume of Bank lending will continue to increase rapidly as it has done since 1968, it is a major point of this paper that the success of the Bank's efforts in the education field is not to be measured primarily by the amount of money we lend but rather by the effectiveness with which Bank and country resources are deployed to meet crucial needs. We expect the Bank to become the largest financier of educational assistance and to continue in most cases to finance projects of such size that a qualitative and quantitative impact is secured. However, since all external assistance to education will probably continue to be less than 10% of total expenditure by developing countries, the motivating and multiplying effects of external assistance will be the principal test of success.

ANNEX TABLES

Table 1

Enrollment Growth Rates by Educational Levels and Regions (1960-1966)

Number of Pupils (Thousands)

	1960/61 Academic Year				1966/67 Academic Year				Percentage of Increase 1960-1966			
	1st Level	2nd Level	3rd Level	Total	1st Level	2nd Level	3rd Level	Total	1st Level	2nd Level	3rd Level	Total
Africa	18,931	2,115	192	21,238	26,748	3,893	334	30,975	+41	+84	+73	+45
Latin America	26,973	3,885	567	31,425	36,653	7,468	978	45,099	+36	+94	+72	+45
Asia ⁽¹⁾	74,645	12,186	1,432	88,261	111,986	21,421	2,911	136,300	+50	+76	+103	+54
DEVELOPING COUNTRIES	120,549	18,186	2,191	140,924	175,387	32,782	4,223	212,374	+42	+80	+93	+51
WORLD	248,486	63,927	11,174	323,587	311,700	96,713	19,992	428,405	+25	+51	+79	+32

Note: Figures may not total due to rounding.

⁽¹⁾ Excluding Japan, Mainland China, North Korea and North Viet-Nam.

Source: Office of Statistics, Unesco.

Comparative Enrollment Ratios at First and Second Levels 1967/68

(Percentage)

	Enrollment Rates of Primary School Age Population ⁽¹⁾	Enrollment Rates of Secondary School Age Population	Combined Primary and Secondary Enrollment Rates ⁽²⁾
Africa	40	15	28
North America	98	92	96
Latin America	75	35	55
Asia ⁽²⁾	55	30	45
Europe and USSR	97	65	85
Oceania	95	30	67
(Arab Countries)	(50)	(25)	(38)
TOTAL DEVELOPING COUNTRIES	54	23	44
WORLD	68	40	56

⁽¹⁾ Regardless of the School they attend. ⁽²⁾ Excluding Mainland China, North Korea and North Viet-Nam.

Source: Estimates of the Office of Statistics, Unesco.

Table 2

Inefficiency in Primary Education

	Years to produce Primary School Graduates		Primary Education Expenditures spent on Students who drop out in Grades 1, 2, or 3 (Percentage of Total)
	Ideal	Actual	
Latin America			
Venezuela	6	10	19
El Salvador	6	15	37
Africa			
Ethiopia	6	14	32
Ivory Coast	6	12.5	21
Kenya	7	8	6
Asia			
Malaysia (East)	6	7	4
Ceylon	7	10.5	10

Source: Bank Education Economic and Appraisal Reports.

Table 3

Public Expenditure on Education as a Percentage of the
Budget and National Income 1960 and 1965

	1960		1965		1960		1965	
	Percentage of Budget	Number of Countries ⁽¹⁾	Percentage of Budget	Number of Countries ⁽¹⁾	Percentage of National Income	Number of Countries	Percentage of National Income	Number of Countries
Africa	14.5	23	16.4	36	3.0	21	4.3	22
America, North	15.6	10	17.6	18	3.9	15	4.1	14
America, South	12.6	7	15.4	10	3.1	11	4.0	11
Asia	11.8	17	13.2	28	3.3	16	4.0	16
Europe and USSR	13.5	13	15.0	23	4.2	25	5.3	24
Oceania	10.4	4	15.7	10	3.7	2	4.4	2
WORLD	13.5	74	15.5	125	3.6	90	4.5	89

⁽¹⁾ Including territories.

Source: Unesco questionnaire on statistics of educational finance and expenditure.

F. Edding, *International Developments of Educational Expenditures 1960-1965*, Unesco.

Table 4

**World Bank/IDA: Education Loans by GDP/Capita at Time of Loan
FY 1963-1971**

GDP/Capita at Factor Cost	Number of Loans										Total	Millions \$	
	63	64	65	66	67	68	69	70	71	Total Amount		Average Size	
Below \$100		3	2	2	1	1	2			4	15	101.2	6.7
\$100 - 200	1		1	1	4	1	1	4	3		16	118.9	7.4
200 - 299						1	2	2	3		8	59.6	7.5
300 - 399							2	4	2	2	10	82.3	8.2
400 - 499				1	1				2		4	20.75	5.2
500 - 599										1	1	13.5	13.5
600 - 699													
700 - 799													
800 - 899								1	1	1	3	35.2	11.7
900 - 999													
1,000 +													
Total Number	1	3	3	4	6	5	10	11	14		57	431.45	7.6
Total Amount	5.0	17.6	29.5	33.95	51.8	24.2	81.8	79.9	107.7		431.45		
Average Size	5.0	5.9	9.8	8.5	8.6	4.8	8.2	7.3	7.7		7.6		

Table 5

**Analysis of World Bank/IDA Education Lending
FY 1963-1971**

A. By Levels	Million US\$	Percentage
Primary	4.90	1.1
Secondary	309.65	71.8
Post-Secondary	56.08	13.0
University	43.24	10.0
Adult Training	17.58	4.1
Total	431.45	100.0
B. By Curricula		
General ⁽¹⁾	190.77	44.1
Technical ⁽²⁾	126.48	29.3
Agricultural	63.03	14.7
Teacher Training	51.17	11.9
Total	431.45	100.0
C. By Outlay		
Construction	262.17	60.8
Equipment	148.16	34.3
Technical Assistance	21.12	4.9
Total	431.45	100.0

⁽¹⁾ Includes comprehensive education

⁽²⁾ Includes industrial and commercial

Table 6

World Bank/IDA Education Projects, FY 1963-1971
Student Places Provided or Improved

No. Student Places Provided or Improved	1963-1969		1970-1971		1963-1971	
	Number	%	Number	%	Number	%
General and Comprehensive	433,000	64	120,000	45	553,000	58
Technical	159,000	24	91,000	34	250,000	27
Agricultural	55,000	8	18,000	7	73,000	8
Teacher Training	30,000	4	36,000	14	66,000	7
Total	677,000	100	265,000	100	942,000	100

Boarding Places and Staff Housing

	1963-69	1970-71	1963-71
Number of Boarding Places Provided	82,000	35,600	117,600
Boarding Places as % of Total Places Provided	12	13.4	12
Total Education Project Costs (US\$ Millions)	429	245	674
Total Cost of Boarding and Staff Housing	100	38	138
Cost of Boarding and Staff Housing as a % of Total Project Costs	23	16	20

Table 7

World Bank/IDA Education Projects
Cost of Physical Facilities per Student
(Median Cost—US\$)

	Academic and Communal					Boarding Facilities			
	Primary	Secondary General and Teacher Training	Secondary Agricultural, Technical and Vocational	Post Secondary General and Teacher Training	Post Secondary Technical and Vocational	Adult Educa- tion	Sec- ondary	Post Sec- ondary	Staff Housing
Sample Size (No. Institutions)	31	161	30	27	14	11			
Construction Cost/Student	365	475	641	661	1381	1164	538	1116	—
Furniture Cost/Student	39	58	46	81	96	62	86	123	—
Equipment Cost/Student	50	110	829	241	906	1073	—	—	—
Total Cost/Student	450	648	1400	1047	2416	2318	652	1258	14,283

Table 8

World Bank/IDA Education Projects Approved as of July 1, 1971

Fiscal Year	Country	Main Purpose	Total Project Cost	Amount of Loan (US\$ Million)	
				Bank	IDA
1963	1. Tunisia I	Secondary General, Technical and Teacher Training	9.2		5.0
1964	2. Tanzania I	Secondary General	6.0		4.6
	3. Pakistan I	University Agricultural, Post-Secondary Technical and Teacher Training (T.A.)	9.0		4.5
	4. Pakistan II	University Agricultural, Post-Secondary Technical and Teacher Training (T.A.)	17.0		8.5
1965	5. Philippines	University Agricultural	11.7	6.0	
	6. Afghanistan	Secondary Technical, Agricultural and Teacher Training (T.A.)	4.7		3.5
	7. Nigeria	Secondary General, Technical, Adult and Teacher Training	30.0		20.0
1966	8. Chile I	Adult Training	3.8	2.75	
	9. Morocco	Secondary General, Technical and Agricultural	16.2		11.0
	10. Ethiopia	Secondary General, Technical and Teacher Training	10.7		7.2
	11. Pakistan III	University Agricultural and Post-Secondary Technical (T.A.)	21.7		13.0
1967	12. Kenya I	Secondary General, Technical and Teacher Training	9.7		7.0
	13. Tunisia II	Secondary General and Agricultural	19.8		13.0
	14. Jamaica	Secondary General, Post-Secondary Agricultural, Technical, Adult and Teacher Training (T.A.)	19.4	9.5	
		Secondary Technical and Agricultural (T.A.)	21.0	6.0	
	15. Thailand	Secondary General	14.3		10.0
	16. Uganda	Secondary General and Teacher Training	7.0		6.3
1968	18. Malagasy	Secondary General, Technical and Teacher Training	7.2	4.8	
	19. Nicaragua	Secondary General and Teacher Training	8.0	4.0	
	20. Gabon	Secondary General and Teacher Training	3.6	1.8	
	21. Sudan	Secondary General, Post-Secondary Agricultural and Teacher Training (T.A.)	15.4		8.5
		Secondary General, Agricultural and Technical and Teacher Training (T.A.)	10.2		5.1
1969	23. Colombia I	Secondary General	15.2	7.6	
	24. Chad	Secondary Agricultural and Teacher Training (T.A.)	2.1		1.8
	25. Trinidad and Tobago	Secondary General and Teacher Training	18.8	9.4	
	26. Guatemala	Secondary General, Post-Secondary Agricultural and Teacher Training	12.6	6.3	
		Secondary General and Teacher Training (T.A.)	10.0	2.9	2.9
	27. Guyana	Secondary General, Technical and Teacher Training	36.2	17.4	
	28. Zambia I	Secondary General, Technical, Agricultural and Teacher Training	16.4	8.8	
	29. Malaysia	Secondary General and Teacher Training	7.2		5.0
	30. Tanzania II	Secondary and Post-Secondary Agricultural and Technical (T.A.)	26.8		14.8
	31. Korea	Secondary General, Technical and Post-Secondary Agricultural (T.A.)	8.4	4.9	
		32. El Salvador	Secondary General, Technical and Post-Secondary Agricultural (T.A.)	8.4	4.9

Table 8
continued

World Bank/IDA Education Projects Approved as of July 1, 1971

Fiscal Year	Country	Main Purpose	Total Project Cost	Amount of Loan (US\$ Million)	
				Bank	IDA
1970	33. Cameroon	Secondary General, Technical, Agricultural and Adult and Teacher Training (T.A.)	14.0		10.5
	34. Zambia II	University Technical and Teacher Training	7.4	5.3	
	35. Sierra Leone	Secondary General, Technical and Teacher Training (T.A.)	4.5		3.0
	36. Chile II	Adult Industrial and Agricultural Training	3.0	1.5	
	37. Ivory Coast	Primary, Secondary General, Technical, Post-Secondary Technical, Agricultural and Adult and Teacher Training (T.A.)	19.1	11.0	
	38. Chile III	Secondary Agricultural and Teacher Training (T.A.)	14.0	7.0	
	39. Kenya II	Secondary Technical, University Agricultural and Adult and Teacher Training (T.A.)	9.3		6.1
	40. Colombia II	Secondary General (T.A.)	13.0	6.5	
	41. China	Secondary and Post-Secondary Technical and Agricultural and Teacher Training (T.A.)	15.0	9.0	
	42. Pakistan IV	University Technical (T.A.)	12.8		8.0
	43. Spain	Primary, Secondary General and Teacher Training (T.A.)	24.0	12.0	
1971	44. Iran	Primary, Secondary General, Technical and Agricultural; Teacher Training; and University (education) (T.A.)	41.7	19.0	
	45. Indonesia	Secondary Technical (T.A.)	7.6		4.6
	46. Greece	Post-Secondary Technical (T.A.)	24.0	13.8	
	47. Dominican Republic	Secondary General and Teacher Training (T.A.)	8.1		4.0
	48. Tanzania III	Non-Formal Rural Training and Post-Secondary Agricultural (T.A.)	4.7		3.3
	49. Jamaica II	General Secondary; Teacher Training; Vocational Training; ITV (T.A.)	28.2	13.5	
	50. Congo (B)	Secondary General and Technical Teacher Training; Non-Formal Rural Education (T.A.)	4.1		3.5
	51. Ethiopia II	Secondary General and Secondary Technical and Agricultural	13.4		9.5
	52. Brazil	Secondary Technical and Agricultural, Post-Secondary Technical (T.A.)	21.0	8.4	
	53. Chad II	Secondary Technical and Agricultural	3.1		2.2
	54. Somalia	Secondary General, Technical; Teacher Training and Non-Formal Agriculture (T.A.)	3.7		3.3
	55. Turkey	Secondary and Post-Secondary Technical; Technical Teacher Training; Non-Formal Management and Adult Technical Training; Science Equipment Production; Mass Media (T.A.)	17.9	13.5	
	56. Senegal	Secondary General and Secondary Technical and Agricultural	2.3		1.8
	57. Uganda II	Secondary General and Technical; Post-Secondary and Non-Formal Agricultural; Health and Medical Training (T.A.)	10.4		7.3
		TOTAL	755.6	212.65	218.0
				<u>431.45</u>	

Explanatory Notes:

- Secondary General* = Includes Comprehensive and Pre-vocational Courses
- Technical** = Includes Industrial and Commercial
- T.A.*** = Technical Assistance

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