Report No. 561

Education Sector Policy

October 25, 1974

Education Department
Central Projects Staff

Not for Public Use

Document of the International Bank for Reconstruction and Development
International Development Association

TABLE OF CONTENTS

SUMMARY

i. The paper consists of three parts. The Introduction describes historically worldwide trends in educational development during the period 1960-1970. Chapter I summarizes the state of education throughout the world at the beginning of the decade of 1970's and sets forth issues and problems which confront developing countries, together with different policies which might enter into their development strategies. Chapter II deals with the Bank's educational lending policies and programs.

Introduction: Trends in Education and Development to 1970

ii. After rapid progress from 1950-1965 there has been a slowdown of the rate of educational expansion since the late 1960's. This decline in enrollment increases, which coincides in time with the peaking of the population surge at the school levels and will be felt until the mid-1980's, could lead to stagnation in the progress toward universal education. In a number of poorer countries where the already tightening financial constraints are made more severe, larger numbers and proportions of populations would be left without even a minimum education.

iii. Education systems have been irrelevant to the needs of developing countries during the last two decades because education policies were often keeping company with overall development strategies which were themselves irrelevant to the societies and conditions of developing countries. Emphasis on the development of the modern economic sector, providing employment to an intensively trained and numerically restricted elite, leads to the neglect of the 60-80% of the population living in the traditional lower productivity sectors. Consequently a large - often more than 50% - part of the resources is devoted to secondary and higher education, although the number of students at those levels is generally less than 20% of the total enrollment. Despite the substantial progress realized in both general development and education during these decades, the bright hopes of the early years are far from being realized.

Chapter I: Education Development Strategy for the 1970's

iv. The growing realization that equitable income distribution is not an automatic corollary of growth has helped to turn attention to a development strategy which is directed to sharing the benefits of growth as well as to the growth itself. Such a strategy, based on a different deployment of scarce capital throughout the economy means a fuller use of available human resources particularly in traditional and transitional sectors of the economy. Broadening development objectives implies that education also needs to adapt itself to the needs of people living in these sectors. A major implication is emphasis on mass education to ensure that all parts of the population receive education and training of some kind as soon as resources permit and to the extent that the course of development requires. This perspective sets the framework for the analysis of the major issues facing education systems and the policy choices to be considered.

v. Five basic issues are discussed together with related policies:

(a) Development of Skills and their Relevance

The importance of educational credentials in getting access to wage employment generates social pressures for the expansion of formal education beyond the absorptive capacity of the modern sector. This escalates the demand for increasingly higher levels of schooling and distorts the content of education by making each cycle only a step toward the next one. Education systems thus become dysfunctional both for the economy and the large majorities of school leavers.

Measures suggested to deal with the problems in the modern sector include increasing the demand for educated manpower, adapting education to job requirements, rationing secondary and higher education and changing the pattern of demand for education through suitable pricing. These measures require coordination of education, employment and labor market policies and cooperation of employers. A different set of recommendations for the rural sector includes ruralization of education in formal schools, development of non-formal schemes as parallel or alternative programs, and functional literacy schemes. Whatever the particular form adopted, rural education and training schemes should be designed as functional programs integrated into the broader system of education and coordinated with other sector activities in the rural scene. Training management personnel for rural programs is a high priority.

(b) Mass Participation in Education and Development

Despite considerable efforts made by the developing countries about half of their children and adults are without a minimum level of education and the prospects for the next decade are not promising. There will be significant increases in the total numbers of out-of-school children and illiterate adults if no remedial action is taken.

The provision of a minimum education is an essential condition for the effective participation of the masses in the development process. Low cost functional mass education is required. In countries with high primary enrollment ratios mass education can be provided by the primary schools supplemented by schemes designed to reach non-educated youth and adults. For poor countries facing serious bottlenecks in expanding primary enrollment, the concept of basic education is proposed as a more adequate approach to provide minimum learning packages. This could be effected by changes in the structure of the formal system as well as parallel and complementary schemes. Such schemes would be open to various age groups, offering programs of varying content and length adapted to their needs with corresponding changes in the training and role of teachers. Despite the controversy created around the issue of "duality", financial constraints may compel some of the poorest countries to adopt this approach if they are to meet the minimum learning needs of the masses within a reasonable time.

(c) Education and Equity

Education systems and policies have a regressive character favoring urban populations and middle and upper income groups which have a definite advantage in terms of access to and promotion within education systems.

Equalizing opportunities for access to education is a necessary but not sufficient condition to ensure social mobility through education. Providing equal chances for achievement in school and later is a more difficult objective, as factors which cannot be affected by educational policies play a significant role. Opportunities may be equalized somewhat by appropriate methods of selection and promotion such as "quota systems" or by improvements in the methods of educational finance. As a whole, however, equity through education can be achieved only within the context of broader social policies.

(d) Increasing Efficiency

Education systems are inefficient in using resources and often do not achieve their quantitative and qualitative goals. Failure to define objectives is a principal source of waste. The supply of good teachers and the design and efficient use of learning material are other major problem areas. Malnutrition and related illnesses also affect the performance of students. All these inefficiencies are first reflected in high dropout and repeater rates. In a number of countries one-fourth of the education budget is spent on students who drop out before reaching Grade 4 without any lasting benefit from education.

Better specification of the education and training objectives and performance standards is a first step which needs to be followed by the identification of factors most likely to affect efficiency. These include a number of school factors (methods of teaching and promotion, language of teaching) as well as non-school factors (poor health, family income). Most measures to improve quality have serious cost implications. It is important therefore to explore areas for cost reduction. Recent research indicates cost saving possibilities, for example, by some changes in class sizes which do not seem to be as closely associated with the quality of education as is traditionally assumed.

(e) Improving Management and Planning

New policies mean new challenges for educational management and planning. Inability of political decision makers and education managers to communicate with each other is a major source of confusion about objectives and programs.

A widened approach to planning is needed as the conventional practices based on manpower and rates of return analysis are inadequate to deal with

the issues of broadly-conceived education policies. "Cohort analysis" is suggested as an aid to planning. New education policies will require substantial changes in the organization and structure of the education systems, improvement in methods of educational finance and, finally, an adequate flow of information and research for use in management.

Chapter II: Bank Education Lending and Program

vi. A basic premise in the discussion of education lending is that the Bank's operations in this sector should reflect its overall policies including its increasing concern with the problems and needs of low income countries and the promotion of development strategies to improve the well-being of the lower 40% of the population through increased productivity and employment and improved income distribution. But these new features of Bank policy should not obscure the fact that the Bank will continue to assist countries which have moved to higher levels of development.

vii. The following principles will govern the Bank's effort to promote balanced educational development:

(a) That all members of the population should receive at least a minimum basic education as fully and as soon as available resources permit.

(b) That further education and training beyond the basic should be provided selectively to improve quantitatively and qualitatively the knowledge and skills necessary for the performance of economic, social and other development roles.

(c) That a national education system be viewed as a comprehensive learning system embracing formal, non-formal and informal education working with maximum possible internal and external efficiency.

(d) That in the interest of both increased productivity and social equity educational opportunities be equalized as fully as possible.

viii. A flexible response adjusted to the variety of conditions in the developing countries will guide the Bank's activities in education. The differences between the lower income countries and the relatively more developed ones will determine the proportion or "mix" of different areas and kinds of assistance. In the poorer countries, basic education and rural training are expected to receive emphasis together with selective support to further skill development. The development of second and third levels of education would take a more central place in the education strategies of the middle and higher income countries.

ix. Basic/Primary Education. The Bank's interest in basic education is closely related to its efforts toward the promotion of a broader approach to development. In countries where mass education can be achieved through the expansion of the primary system, the Bank will give particular attention

to curriculum and other reforms which take into account the needs of the large numbers who will not continue beyond the primary cycle. A review and revision of education structures will be encouraged to provide low cost minimum mass education in poor countries with low primary enrollment ratios. A variety of programs for youth and adults will also be supported as a follow-up or, when necessary, as an alternative to primary.

x. Skill Development. Assisting the borrower in meeting the need for critical skills for economic development continues to be a major objective. The Bank will continue the policy of assisting not only training institutions but also the educational system as a whole. Project related training is another method increasingly used by the Bank to meet skill requirements in specific areas. It is expected that during the period of 1974-1978 training components in other than education lending together with school construction in urban and rural development projects will total about $350 million.

xi. Efficiency. Effective and cost conscious management, internal and external efficiency will receive continuous attention throughout all phases of the dialogue with the borrowers with particular emphasis on policies which can be more directly linked with the Bank's lending operations.

xii. Equity. Equity will be used as a criterion which should suffuse all Bank operations. In its analysis of education systems and policies the Bank will be concerned with such questions as where the funds go, who benefits most and how the burden is distributed. Information on specific target populations will be sought during project identification and design, to assess the equity implications of education programs. More specifically, a guidance and monitoring system will be developed to determine the beneficiaries of education projects.

xiii. Will developing countries be willing to accept the kind of general and specific policies suggested in this paper and what might the Bank do to encourage their receptiveness? Experience suggests that relatively few countries will undertake the radical changes which many observers consider necessary. At the same time there is a widening recognition that significant changes are needed and willingness to consider selective proposals for reform. Awareness of financial constraints may be a powerful inducement for change. If this is so, then in some countries the unfavorable effects of the recent economic changes may encourage a critical and objective review of the existing systems. Sector studies carried out by the country itself are major vehicles through which countries may come to grips with the critical issues raised in this paper. The Bank will assist an increasing number of these financially and technically.

xiv. What are the risks involved in these policies? Will countries have sufficient management capacity to carry them out? It must be acknowledged that the risks involved in highly innovative action are substantial for the

Bank and even more for the borrowers, especially in such uncharted areas as rural and poverty-oriented policies. But when foreseeable effects of continuing to neglect to act are more costly, a prudent, but active, course seeking to identify and minimize risks should be preferred. Improving management is, of course, a major priority.

xv. Do the Bank's own current policies, procedures and lending programs give effect to the direction and proposals put forth in this paper? How should they be changed or improved? On the quantitative side the allocation of $1.075 billion in constant prices covering 80 projects proposed in the lending program for 1974-78 is reasonable in view of the rapid expansion of education lending in recent years and the experimental nature of some of the new emphases of lending. This program would permit the necessary "tooling up" for a substantial expansion beginning about 1978. Qualitatively the answer is mixed. The distribution of lending by areas (substantial increase up to 27% for primary/basic and a proportional decrease for intermediate and higher education) reflects the new policy directions. The distribution by countries' income levels is less reassuring. Thirty-three countries with GNP per capita over $250 and less than 40% of the population would receive 58% of the lending, while 35 countries under $250 (not including India) with over 60% of the population would receive 42%. There are, admittedly, many possible explanations in particular cases for these disparities but since this distribution is considerably worse in the education sector than for Bank lending as a whole, regional lending programs must be restudied with a view to improvement for the education sector.

xvi. Implementation of the policies and programs proposed will require greater use of flexible procedures which already exist in the Bank but have not been fully utilized in the education sector. In order to give momentum to experimentation in such areas as basic education the Bank can lend an appropriate part of the total costs of an experiment - both capital and operational - over a stated period of time. The capital and operational costs of training of teachers and administrators should be financed by the Bank to ensure the development of an adequate human infrastructure for educational change.

xvii. Bank lending operations in any sector are part of a continuing relationship with its member country which is rooted in agreement upon an overall development strategy and upon individual sector strategies such as education. Such strategies take their direction from the country's own definition of its development objectives and aspirations. In the context of a constructive dialogue with each of its borrowers the Bank desires to contribute to policy-making by clarifying the choices that the countries face. Through such a dialogue, it is hoped that there may emerge for each country a unity of purpose and plan between it and the Bank.

EDUCATION SECTOR POLICY PAPER

INTRODUCTION

1. This paper consists of three parts. The introduction describes historically worldwide trends in educational development during the period 1960-1970. Chapter I summarizes the state of education throughout the world at the beginning of the decade of the 1970's and sets forth issues and problems which confront many developing countries, together with different policy choices which might enter into their development strategies. Chapter II deals with Bank educational lending policies and programs. It indicates the objectives the Bank will seek to foster and the criteria it will apply in its educational lending, and raises for the consideration of management and Executive Directors some questions of Bank policy and programs for the future.

Trends in Education and Development to 1970

2. The first World Bank Education Sector Paper of 1971 noted the effect on educational expansion since 1950 of the movement for political independence, the quickening pace of economic development and the population explosion. These three forces continue at work although the rate of educational expansion has slackened since the late 1960's. Throughout the expansion period of the 1950's and 1960's there had been increasing concern in developing countries about the relevance of the education which was being widely replicated and the quality of learning provided by the largely borrowed, formal school systems.

3. In addition to the continuing concern for relevance and quality there is now the problem that the decline in enrollment increases (for reasons of financial constraint, difficulty of reaching rural populations, perhaps disenchantment with the benefits of formal education) coincides in time with the peaking of the population surge at the school age levels. Until the mid-1980's, when some relaxation is expected, the population pressure will be felt most sharply between the ages of 6 and 15. As a consequence, there is a prospect not only of stagnation in progress toward universal education but even of a retrogression which would leave larger numbers and proportions of the populations of many countries without even a minimum education.

4. In a number of the poorer countries the already tightening financial constraints are made more severe by the changes in the world economy associated with rapid increases in petroleum prices and other movements in the terms of trade. As already stated in Bank Report No. 477 on Prospects for the Developing Countries, "800 million people - whose per capita income average less than $200 per year - are likely to receive a severe setback." These are the people of the "least developed" countries, where education enrollment ratios, like other social services indices, are still low and the rural populations still least affected by development forces. For them the "setback" in education could be severe.

5. The challenge posed by these circumstances is heightened by changes in the definition of development itself during recent years. Questions of employment, environment, social equity and, above all,

participation in development by the less privileged now share with simple "growth" in the definition of the objectives and hence the model of development toward which the effort of all parties is to be directed. These changes have their counterpart in the education sector, where the need is being felt for new education policies responding to new objectives of development.

6. In general, new education policies are less a sharp break with the past than a shift in emphasis and a broadening of benefits and beneficiaries. In this sector of limited resources and unlimited demands we will continue to ask the same questions, namely, "Who shall be educated?" "How?" "For what?" "At whose expense?" and "At what expense?" No single answer to any of these questions will serve for all or even several of the developing countries. We will find similarities among them and we will explore these common features to discover typologies which might ease the work of analyzing problems and proposing remedies. But because of the conformation of factors within the education sector or the relation of education to all other sectors we continue to see each country as unique and requiring its own individual strategy for development.

7. In recent years there has been wide discussion - not excluding the first edition of this paper - about the lack of consistency between education policies and systems and the development objectives they are assumed to serve. In almost all cases it has been assumed that it was educational policy that was irrelevant. We are no longer certain that such was always the case. In many respects it seems that education policies were simply keeping company with overall development objectives which were

irrelevant to the societies and conditions of developing countries. For this reason and in search of a broader perspective we begin this paper with a historical review covering roughly the two decades from 1950 to 1970.

8. For much of the developing world during these two decades, the transcendent event was achievement of independence. There followed a slow process of nation-building, which in many cases sought to recast the diversity of ethnic, religious and cultural traditions into a new national formulation. And since political independence is more easily achieved than economic or cultural reconstruction, the practices and institutions chosen to replace the existing diversities were frequently those previously established by the colonial powers.

9. These changes in the political scene of developing countries were expected to be accompanied by a modernization process yielding a general and dramatic rise in the standards of living of the populations concerned. In many cases the difficulties of transforming a traditional society into a modern one were underestimated. In already independent countries, similar great expectations were awakened. The idea of "catching up with rich countries" exerted a preeminent influence on the thinking of the leadership of the developing countries. To a certain extent, it prevented that leadership from elaborating original and viable models of society for their countries. Perhaps nowhere more than in the sphere of education was this demonstration effect more pervasive and successful in dampening local initiatives to adapt to the socio-economic realities.

10. In economic activity, for both industry and agriculture, investment has tended to flow toward a modern, capital-intensive, export-oriented subsector which provides employment to a relatively small portion of the labor force, the major part of which is engaged in traditional subsistence farming or suffers increasingly from unemployment. Thus in both the urban and rural sectors relatively sophisticated technologies called for more intensive education and training of a numerically restricted, elite working force.

11. Conversely, the traditional, lower productivity sectors comprising 60 to 80% of the population are characterized by reliance on indigenous resources and little investment. Enterprises are small scale, often self-employing and family-owned except in agriculture, where some form of landlord-tenant relationship may persist. The technology is labor intensive and primitive, requiring ostensibly less education and training.

12. In their haste to modernize, many developing countries in collaboration with bilateral and multilateral donors of development aid, focused too exclusively on increasing the overall national income and paid insufficient attention to the equitable distribution of that income as well as to the social and cultural aspects of development.

13. Education was considered a major instrument for the political, social, cultural and economic modernization of the developing world in the 1950's and 1960's. Political and cultural leaders were convinced that a well-supported, easily accessible educational system was an efficient means to make people politically and socially conscious, and active participants in nation building and cultural processes. The education sector was

enthusiastically, often simplistically, supported as the major supplier of skills for the economy. The more optimistic expected that education would of itself stimulate the creation of jobs and thus generate economic development.

14. However, the education systems of the developing countries did not offer a good base for national development, either quantitatively or qualitatively. In many developing countries the education system was simply an expansion of those of the former colonial rulers. In countries which have long been independent, such as in Latin America, they were still largely bound by tradition to an earlier European model that is no longer an effective instrument for development.

15. Regional conferences of education ministers which were held more than a decade ago established quantitative goals that were sometimes over-ambitious and financially unrealistic and set back by the population growth. Nevertheless, they lent support to an unprecedented expansion of school enrollments, shown in the following Table 1. As one moves up the ladder from primary through secondary to tertiary education, the net increases over the past two decades are impressive. The aggregate increases were 211%, 465% and 511%, respectively. However, if one divides the decade of the 1960's into two halves, early and late, a more precise and significant pattern emerges. The pattern across levels is a decreasing rate of increase, the momentum of the first 15 years having been dissipated.

Table 1: FIRST, SECOND AND THIRD LEVEL STUDENT ENROLLMENTS AND ANNUAL INCREASES IN DEVELOPING COUNTRIES 1/

	1950 Stud. (Mil.)	1950-60 Ann.Inc. (%)	1960 Stud. (Mil.)	1960-65 Ann.Inc. (%)	1965 Stud. (Mil.)	1965-70 Ann.Inc. (%)	1970 Stud. (Mil.)	1950-70 Agg.Inc. (%)
First Level	64.7	+ 6.4	118.9	+ 6.0	159.6	+ 4.8	201.4	+ 211
Second Level	7.5	+ 9.3	18.2	+ 9.9	29.3	+ 7.6	42.4	+ 465
Third Level ++	0.9	+ 8.9	2.1	+12.4	3.7	+ 8.4	5.5	+ 511

1/ See also Annex 1.

16. During the 1960's education planners began to take their cue from manpower studies - often crude and superficial - which tended to emphasize the kinds of highly skilled manpower which only secondary and higher education can provide. A large - often more than 50% - part of the resources for education was devoted to these levels of formal education, although the number of students at those levels was generally less than 20% of the total enrollment. An increased number of better educated people were needed but high percentages of the graduates were in low priority fields from a development point of view and had no readily employable skills. Thus, in the countries in which the Bank has financed education projects, the median percentage of students in vocational education has only been around 10% as compared with close to 30% in the most developed countries (Annex 2).

17. In summary, general development strategies and their educational components during this period have been more closely related than was commonly supposed. It should also be recognized that substantial progress has been made in both general development and education. But the bright hopes of the early years are far from being realized. An enrollment stagnation has occurred, in some countries original problems remain and in most of them new problems - sometimes the consequence of achievement - are emerging.

CHAPTER I: EDUCATION DEVELOPMENT STRATEGY FOR THE 1970's AND BEYOND

Towards a Poverty-Oriented Development Strategy

18. Many developing countries are concerned that the relatively high economic growth rates recorded during the last decade have brought little benefits to the poorest strata of society. The growing realization that equitable income distribution is not an automatic corollary of growth has helped to turn attention to development strategies which are directed to the sharing of benefits of growth as well as to the growth itself.

19. Central to this new approach is the widespread inability of the modern sector of developing economies to make full use of the resources available and, above all, of the human resources. A number of countries are considering, therefore, a strategy based on a different deployment of scarce capital throughout the economy and a fuller use of available human resources. Translated into development objectives, this means that the creation of productive employment is being recognized as an economic goal just as important as the growth rate of GDP.

20. Fuller and more productive employment could also mean a more equitable distribution of income to the extent that the main beneficiaries, namely, the unemployed and underemployed, are usually found among the less privileged strata of society. As the overwhelming majority of the very poor are engaged in subsistence farming, a poverty-oriented development strategy assumes that an important proportion of the new productivity will be created in rural areas. Such a change in income patterns would increase the demand for such goods as basic foodstuffs, clothing and cheap housing,

which are usually produced locally (with low import content) by labor-intensive techniques.

21. Broadening development objectives also implies significant changes in educational policy and practice. If the education sector is to contribute to the development of rural and non-modern sectors of the economy, it will have to adapt itself to the needs of these sectors.

22. An important educational implication of this expanded development strategy is that mass education will be an economic as well as a social necessity. Education and training systems will need to be designed to enable masses unaffected by the growth of the modern sector to participate in the development process as more productive workers and to play their roles effectively as citizens, family members, leaders and members of groups involved in cooperative community action and in many other ways. This ultimately means that all parts of the population must receive education and training of some kind as soon as resources permit and to the extent that the course of development requires. The benefits of mass education will of course be greater in situations where other conditions of development are present. Emphasis on the education of the masses, particularly in rural areas, will first require a better distribution of educational opportunities between geographical areas, between urban and rural regions and between social groups and the sexes. Instances of disproportionate distribution are common: in Kenya the relative primary school enrollment varies by as much as a factor of nine between the provinces; in Colombia the urban schools have relatively ten times as many successful primary school finishers as the rural schools, mainly because few of the latter schools provide complete courses. Despite improvements in female

school enrollments during the 1960's only 38% of the students in primary education and 28% of those in secondary education are girls in the poorest countries. (See Annexes 7-9.) The new emphasis must also take account of diverse learning clienteles and, consequently, of alternative delivery systems. Education cannot be restricted to school-age youth. Other target groups such as adults, and especially women, must be included. Given the diversity of target groups and educational tasks, it would be advisable to make effective use of non-formal and informal education in addition to the formal school system.

23. It is evident that the need to respond to poverty-oriented development strategies introduces important new dimensions into education policy.

Major Issues Facing Education Systems and Related Policies

24. The analysis of issues facing the less developed countries will be made within a broad perspective, taking into consideration the major objectives pursued by education policies and the critical factors determining the development and functioning of education systems. In this framework (1) skill formation, (2) participation, (3) equity, (4) efficiency, and (5) planning and management will be the focal points of discussion.

25. In attempting to discuss education policies account should be taken of the variety of conditions observed in different less developed societies which include countries with per capita income ranging from $70 to $1,500, populations from less than one million to 500 million, and literacy rates from 5% to over 90%. These countries also differ in social stratification, cultural and political traditions and physical resources. As a basis for the discussion some characteristic data and trends are shown and analyzed in Table 2, which relates enrollment ratios to levels of GNP per capita.

Table 2: SCHOOL ENROLLMENT RATIOS

GNP per Capita 1/	No.of Countries	Total Pop. (Mil. 1970)	Enrollment Ratios 2/ First Level 1960	1965	1970	Second Level 1960	1965	1970	Third Level 1960	1965	1970
I - Up to $120 (Excluding India, Indonesia, Pakistan, Bangladesh)	25	168	34	39	43 (31)	4	5	5	0.3	0.3	0.4
India, Indonesia, Pakistan, Bangladesh	4	802	43	56	71 (63)	9	11	18	1.7	2.6	4.3
II - $121-250	23	287	67	79	83 (68)	9	14	19	2.1	3.0	5.6
III - $251-750	38	433	73	83	97 (77)	11	17	25	1.9	3.3	5.3
IV - $751-1500	9	112	90	93	97 (80)	33	44	49	6.2	8.4	10.5
V - Over $1500	24	623	100	100	100	58	65	83	17.0	23.7	30.2

1/ Countries in each group are as follows:

I - Afghanistan, Bangladesh, Botswana, Burma, Burundi, Chad, Dahomey, Ethiopia, The Gambia, Guinea, Haiti, India, Indonesia, Lesotho, Malawi, Mali, Nepal, Niger, Nigeria, Pakistan, Rwanda, Somalia, Sri Lanka, Sudan, Tanzania, Upper Volta, Yemen Arab Republic, Yemen PDR, Zaire

II - Bolivia, Central African Republic, Cameroon, Equatorial Guinea, Egypt, Ghana, Kenya, Khmer Republic, Korea, Liberia, Malagasy, Mauritania, Mauritius, Morocco, Philippines, Senegal, Sierra Leone, Swaziland, Thailand, Togo, Tunisia, Uganda, Vietnam

III - Algeria, Bahrain, Brazil, Republic of China, People's Republic of the Congo, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Fiji, Gabon, Guatemala, Guyana, Honduras, Iran, Iraq, Ivory Coast, Jamaica, Jordan, Lebanon, Malaysia, Mexico, Nicaragua, Oman, Panama, Papua New Guinea, Paraguay, Peru, Portugal, Romania, Saudi Arabia, Syria, Turkey, Uruguay, Yugoslavia, Zambia

IV - Argentina, Chile, Cyprus, Greece, Singapore, South Africa, Spain, Trinidad and Tobago, Venezuela

V - Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Israel, Italy, Japan, Kuwait, Libya, Luxembourg, Netherlands, New Zealand, Norway, Qatar, Sweden, United Arab Emirates, United Kingdom, United States

2/ The enrollment ratios have been obtained by dividing the total enrollment at each level with the appropriate age group. These "gross" enrollment ratios are inflated by overaged students. For 1970 it has been possible to exclude the overage students and estimate "net" enrollment ratios at the first level. The net ratios are indicated in parentheses and show that the overage students form 10-20% of the total student body at the first level.

26. There are important conclusions to be drawn from Table 2. Despite the enrollment increases at all education levels during the 1960's in the developing countries, the gap between the poorest and richest countries has increased at the secondary and tertiary levels. Twentyfive of the poorest countries have increased their enrollments at those levels by 1.0 and 0.1 percentage points, respectively, during the decade; a middle group including the populous nations of India, Indonesia, Bangladesh and Pakistan and the countries in the $121-750 bracket have increased their enrollments by approximately 11 and 4 percentage points, while the most affluent countries increased their enrollments by 25 and 13 percentage points.

27. Other questions follow from the difference between enrollment ratios at lower and upper levels of education. Countries in Group I have 43% enrollment in primary and only 5% in secondary education. That means that in comparison with others, these countries will have to absorb a higher proportion of the primary school leavers in the society and the labor market. Such facts should be reflected in the curriculum of the first level of education.

28. Countries in different income categories show significant variations in their expenditure patterns as can be clearly seen in Table 3. The table shows the increasingly widening difference between what the governments in the poorest and richer countries spend for the education of a student. This gap does not reflect differences in the educational profiles of countries, namely, relative proportions of lower and higher levels, as the differences of per student expenditures at primary level are in fact even greater. The table also indicates that, in the poorest countries, there was only a negligible increase in public expenditure per student which, if measured in constant prices, corresponds to an actual decline.

Table 3: PER STUDENT PUBLIC EXPENDITURE IN EDUCATION[1/]

(US Dollars, Current Prices)

Countries Grouped by GNP per Capita	1960	1965	1970	Net Change
I Up to $120	16	21	18	+ 13%
II $121-250	33	40	49	+ 49%
III $251-750	43	58	57	+ 33%
IV $751-1,500	114	165	179	+ 57%
V Over $1,500	338	504	749	+ 121%
Group V amount as a multiple of Group I	21	24	42	

1/ Annex 10 contains additional data on education expenditures.

29. In the previous paragraphs differences between groups of countries were explored. It should be emphasized, however, that wide divergencies also exist between countries in the same income groups both as regards educational efforts and outcomes. Among countries in Group I, for instance, Rwanda allocates 10% of its national budget to primary education and has achieved an enrollment ratio of 60%, while Mali allocates 12% of its national budget to the same level but has a primary school enrollment ratio of only 18%.

Formation of Skills Corresponding to the Needs of Developing Countries

(a) Major Issues

30. Serious imbalances are observed between the skills generated by education systems and actual needs of most developing countries. In some areas the output of graduates surpasses the absorptive capacity of labor markets, while in others critical skill shortages continue to create bottlenecks. These discrepancies between supply and demand of skills are caused by a complex set of social, cultural and political conditions and aspirations conditioning the development of education systems. The failure of the systems to respond to countries' needs is accentuated by the fact that educational institutions have been borrowed from developed countries and have not acquired an indigenous character.

31. For consideration of policy alternatives open to a particular country it may be useful to describe briefly the principal conditions which affect these issues. Not every one of the following propositions is wholly applicable to every developing country. But they do apply in large measure to most LDCs.

(i) Since incomes for modern sector (wage) employment tend to be substantially higher than for traditional (non-wage) employment and since wage employment is often allocated on the basis of formal education credentials, there is a strong and constant pressure for expanding enrollments.

(ii) For many types of work wages and wage employment (especially in the public sector) are commonly based on the amount of

education and the level of the credentials held rather than the type of education and its relevance to job requirements or the individuals' demonstrable proficiency.

(iii) As primary enrollments increase, competition for wage employment intensifies and the demand for education escalates. Employers choose job seekers with more education and they in turn demand fuller education opportunities.

(iv) The upward push of demand reinforces the built-in tendency of education at any level to be preparation for the next level. As a corollary the content becomes more theoretical and abstract and less practical; experience drawn on is more universal and less local; and cognitive or purely mental skills are emphasized over attitudes and manual, social and leadership skills.

(v) This education is dysfunctional for most types of employment - wage or non-wage - and for playing other roles needed in a developing society.

(vi) School enrollments in a developing country increase faster than modern sector job opportunities, giving rise to "educated unemployed" at increasingly higher levels of education.

(vii) Even with enrollments expanding beyond the absorptive capacity of the job markets the majority of students completing one cycle are not able to progress to the next. They feel a

strong sense of failure together with alienation from their environment of origin. For others, who are unable to find the job they expected after finishing a cycle, there is frustration which in some countries (for graduates of upper cycles) has reached explosive proportions.

(viii) In the poorest countries rapid expansion of education systems has been accompanied by rapid increases in the proportion of public expenditure devoted to education. While the acceptable percentage will vary from country to country, any proportion much over 20% begins to impinge upon the needs of other sectors and services and limits further increase of educational expenditure to the rate of growth of GNP and public revenue.

(b) Policies

32. Manpower planning has been a major preoccupation of educational planners during the last decade. Efforts have generally focused on increasing the supply of trained manpower in those categories in which shortages existed. A re-examination of the problem is now in order, given the increasing rate of unemployment amongst those who have been to school.

33. A number of policies are being advocated to solve the employment problems of school leavers. These policies reflect differences in the analysis of the causes of the problem.

(i) Increasing the Demand for Educated Manpower: This approach assumes that unemployment is the result of a failure on the part of the economy to harness the nation's skilled labor. It advocates creating productive job opportunities sufficient in number to absorb the output of the education system. Although positive in its choice of solution, the approach has limited applicability given the constraints on investment capital and the high cost of capital inputs required to create new jobs.

(ii) Adapting Education to Job or Role Requirements: Another view of the employment problem sees the issue not so much as a quantitative imbalance as a qualitative one. The argument is supported by the fact that skill shortages are observed in specific categories such as science and technology teachers, engineers, agronomists and managers, despite unemployment amongst school graduates. The observation suggests that the content of education must be reoriented to relate skills taught to jobs, thereby ensuring the employability of graduates. Emphasis on vocational and technical schools and centers, and attempts to "vocationalize" the curricula of academic schools are illustrations of attempts to achieve such a reorientation.

(iii) Rationing Secondary and Higher Education: A common response to the problem of employment of school leavers is to decrease or stabilize school enrollments. This response reflects the view that educated unemployment is the result of an over-expansion of the education system, particularly at the higher

levels. A policy of rationing education is proposed by those who hold this view. Measures involved might include the use of controls to limit access to certain kinds and levels of education, and selection of pupils based on assessments of ability. Safeguards to avoid discrimination against underprivileged groups are generally built into such measures.

(iv) Changing the Pattern of Demand for Education: Some analysts conclude that the employment problem is the result of high private rates-of-return to schooling. They point to large government subsidies to education and large income differentials between groups with different levels of educational attainment. Subsidies keep a pupil's costs low, while existing salary differentials offer him a promise of substantial benefits if he can stay in school. The result is an expected large private rate of return which generates demand for schooling. Analysts who espouse this view argue that a decrease in a pupil's benefit/cost ratio will result in a decrease in the demand for education and a subsequent reduction in educated unemployment. They suggest transfers of some costs of schooling to pupils and reductions in earning differentials between groups with different educational attainments. They indicate that reductions in earning differentials are more difficult to achieve, but that in theory they are possible by means of changing pay scales and fostering recruitment and promotion based on job-related ability tests rather than on school certificates.

The armed forces and multi-national firms operating in developing countries sometimes offer examples of this latter practice.

34. Of these policies only rationing of education and increasing school fees can be pursued by education officials in isolation. Adaptation of education to job requirements demands some cooperation from private and public employers, such as cooperation in determining the skill requirements of jobs. More extensive cooperation is demanded from non-education sectors if demand for manpower is to be increased or wage scales are to be altered. Policy development in these domains is complicated by the absence of a central policy making body in the administration. Ministries of Labor usually have a limited impact on employment and wage policies, which are determined at various levels of both the public and private economic sectors. Central planning organizations also have a limited impact in those domains. The scope for coordination between education and labor market policies is perhaps greater in countries where the government is the major employer. But, too often, the government's willingness to alter the prevailing reward system is tempered by sensitivity to political issues, while economic constraints severely limit its ability to generate new employment.

Skill Development for Rural Areas

35. Most of the preceding discussion on education and employment is relevant to modern-sector-oriented and relatively higher levels of education. Policies for the rural setting raise a number of different questions. Among the approaches tried by the less developed countries to meet the education and training needs of their rural population are:

(i) Modification of the Content and Methods of Formal Education in Rural Areas: The "ruralization" of conventional schools to increase the relevance of rural education has been a traditional policy response. In most cases this has been an isolated action not supported by job creation for the absorption and productive utilization of school leavers. This explains why many of these efforts have been unsuccessful in retaining the school leavers in rural areas or improving their participation in productive activities. Ruralization of conventional schools may, however, prove efficient if conceived not in isolation but as part of an integrated policy of rural employment and development. This has been successfully tried on a small scale in Botswana in the Swaneng Hill and Shashe River Schools where academic subjects have been combined with practical skill training directly related to the creation of new self-employment opportunities for school leavers.

(ii) Non-Formal Schemes as Parallel or Alternative Programs to Formal Education: All less developed countries have a number of non-formal education and training schemes in rural areas. A recent Bank-sponsored study on non-formal education, Attacking Rural Poverty,[1/] shows the diversity of these programs

---

1/ Attacking Rural Poverty: How Nonformal Education Can Help: Coombs P.H. with Ahmed M.- Prepared for the World Bank by the International Council on Educational Development and published by The Johns Hopkins University Press 1974.

in terms of their purposes, target groups, coverage, institutional characteristics and educational technologies. These schemes are usually conceived in isolation and unfortunately are not designed as components of an integrated structure. Some schemes, such as the Rural Education Centers in Upper Volta, are closely linked with the national system of education as well as with the local economy by helping school leavers to engage in specific economic activities.

(iii) Functional Literacy Programs are another example of efforts in rural education. Unesco has played a major role in promoting functional literacy through projects in a number of countries (the World Experimental Literacy Program). Functional literacy, which teaches reading and arithmetic as part of skill training for a particular job, is essentially a sound concept although the results have been mixed. Some projects have suffered from organizational problems in relating particular literacy schemes to national programs, lack of guidance for experimentation, delays in evaluation and high costs. Some, however, have been established on more solid grounds. Such is the case in Mali where the functional literacy program may become a part of the national education system, and is closely linked with the groundnut and other programs at national and local levels. The programs which are conducted in national languages have generated interest and motivation at grassroots level. Some preliminary estimates indicate

that the cost of producing a literate person is lower than is the case for primary schools. Brazil's experience with the MOBRAL Project, although not conceived as an exclusively rural program, provides an example of a massive functional literacy movement. It is a nationwide scheme managed from a central office but relying on community organizations and local participation. In its first four years (1970-1973) MOBRAL has reached more than 6 million illiterates to produce about 4 million literate adults at low unit costs.

36. The Bank study on non-formal education and other surveys of rural education and training clearly indicate that many rural schemes are limited and small scale operations not integrated into nationwide systems. Uncoordinated proliferation of projects promoted by different agencies with different interests, approaches and methods is a common phenomenon. These experiments could be valuable sources of information in developing rural education. But their contribution would remain limited in the absence of an overall policy. The design of a coherent strategy for rural education should therefore be considered as a prerequisite for effective action in this field.

37. Some basic criteria for the design of rural education and training programs can be suggested.

(a) They should be functional. This means that they must serve well identified target groups (participants in particular crop or area development projects, health, population, nutrition programs, etc.) and meet their specific needs (improved production and management, adoption of

new methods of child care, etc.). The Tea Development Authority in Kenya has been effective in combining the organization and marketing of smallholder tea production with training the farmers in all relevant aspects of tea cultivation and marketing.

(b) Rural education projects should be designed as part of a total education delivery system. In Colombia the SENA program is responsible for providing skill training on a national basis for both adults and adolescents. It is governed by a council which includes the Ministries of Education and Labor, the National Planning Office and management and labor organizations. Education projects can also become the focal points of coordinated action through the use of multipurpose centers to serve other activities such as cooperatives, health and family planning services. This is being done in Tanzania at both the district and village levels through the establishment of Rural Training Centers and Community Education Centers. Teachers can also be trained and used as multipurpose agents.

(c) Education in rural areas should be integrated with other rural development activities at both the national and local levels. At the national level, development of a common policy framework for various rural development activities is essential, with emphasis on the complementarity of productivity and welfare-oriented activities. At the local level coordination or integration is necessary to ensure that education programs are functional and adapted to the needs and opportunities of the local milieu. They may be geared to other sector activities through functional literacy programs such as those developed by Unesco in a number of countries.

They may form components of integrated rural development programs such as PACCA in Afghanistan and the Comilla project in Bangladesh which have combined functional literacy, agricultural extension, cooperative marketing and the provision of agricultural inputs and services.

(d) Rural education projects should be replicable in terms of their costs and management requirements. The national vocational training schemes in Colombia and Thailand have reduced costs through the use of mobile training units. The Vocational Industrial Centers in Northern Nigeria have made evening use of existing facilities and drawn on the staff of other educational institutions on a part-time basis.

38. One of the critical areas where education and training can play an important role is the development of an effective organization and management capacity for rural development. Lack of an adequate management structure, at both national and local levels, creates a serious bottleneck for the implementation of rural programs. These programs require the support of a network of nationwide or regional institutions such as rural development banks and cooperative unions as well as strong local management and leadership. Thus, expansion of rural development programs creates new training needs. A special effort of training for rural development activities will be needed, especially in countries launching large-scale programs. Meeting manpower requirements in this field will necessitate crash programs for training or upgrading the staff of credit institutions, adult education schemes for training local leaders and use of teachers for cooperative management and accounting rather than the creation of completely new institutions.

Ensuring Mass Participation in Education and Development

(a) Major Issues

39. Despite the increasing burden they impose on less developed countries' economies, many education systems generally fail to achieve effective mass participation in educational opportunities.

40. The education sector has now become a major claimant of government and private resources. In the 1960's public expenditure on education increased at an annual rate of 11%. Despite a slowdown in this rate of increase, education continues to absorb a growing share of the total public expenditure and of the GNP. In 62 developing countries for which recent data are available the median government spending on education is above 18% of total public expenditure, and the number of countries spending above 20% is increasing. The median public expenditure on education is about 4% of the GNP. And, again, there is a significant increase in the number of countries allocating 5% and more of their GNP to education.

41. All these efforts have been insufficient to provide education for more than about half of the children and adults in the developing countries and the projections for the next decade are not promising. Twenty five of the poorest countries have only one-third of the primary age children enrolled. Although middle income countries have achieved much higher enrollment ratios the analysis shows that even there more than one-fourth of the appropriate primary age group (excluding over-aged children) does not attend school.

42. It is also important to realize that those not attending school and the number of illiterates would increase during the next decade if remedial actions were not taken. Unesco has estimated the expansion of existing primary education systems in the developing world for the period up to 1985 based on most recent enrollment and population trends.[1/] The projections of the in-school and out-of-school groups which are shown in Table 3 have drawn on this Unesco work.[2/] It shows that the school enrollments in the developing world would presumably increase from 260 to 350 million during the next ten years; in the lower income countries of Groups I and II it would increase by 60 million from 170 to 230 million. The out-of-school groups would, however, also increase from 290 to 375 million and from 220 to 280 million, respectively.

Table 4: PROJECTIONS OF SCHOOL ENROLLMENT IN DEVELOPING COUNTRIES

	1970	1975	1980	1985
5-14 Age Group Population in all Developing Countries (in millions)	481	550	630	725
Of whom in-school	212	260	300	350
Of whom out-of-school	269	290	330	375
5-14 Age Group Population in Groups I and II Countries (in millions)	340	390	445	510
Of whom in-school	141	170	200	230
Of whom out-of-school	199	220	245	280

1/ Educational Development, World and Regional Statistical Trends and Projections until 1985. A Unesco Background Paper for the World Population Conference in Bucharest 1974.

2/ The "out-of-school group" comprises those children in the age group 5-14 who have never attended school or who left school before completion.

43. While the overall literacy rate has increased during the 1960's from 41% to 50%, it is still as low as only 26% in Africa. The number of illiterates in the age group above 15 increased during the decade from 701 million to 756 million (excluding China). It is estimated that 470 million of those are in the Group I and II countries. The increase of the out-of-school group during the next decade will further increase the number of adult illiterates in the developing world by 12%.

44. The fact that a number of countries are now approaching the limits of their financial capability without having achieved even a minimum education for the majority of their population raises some fundamental questions related not only to overall resource allocation and efficient resource utilization but, probably more important, to the redefinition of priorities within the education system and to the consideration of alternative strategies to meet educational needs within the limit of available resources.

(b) Basic Education as a Policy Alternative

45. As has been discussed earlier (see paras. 18-23) some form of mass education is a necessary component of any development strategy based on fuller and more productive utilization of human resources. This is particularly important for lower income countries where the provision of a minimum education is a necessary condition for the effective participation of masses in productive life as well as in the social and political process. Mass education would also mean a step toward greater equity as it involves better distribution of educational opportunity to underprivileged groups.

46. In countries with high primary enrollment ratios, such as many Latin American and Asian countries, mass education will be provided by the formal primary school system, supplemented by schemes designed to reach non-educated youth and adults. The major problems for these countries are (a) to improve the quality and efficiency of the primary system, and (b) to increase its relevance for the majority of school leavers who will join the labor force. This may be a stage most developing countries will in time achieve. However, it would not be a feasible solution at present for many lower income countries and most of the least developed ones which face serious financial bottlenecks at the very early stages of the development of their school systems. For example, where a country has achieved less than 40% enrollment of the primary school age group but is already spending 15-18% of its total public expenditure on education, the expansion of the conventional formal systems may not be a viable proposition and governments should explore alternative approaches, at least as interim solutions.

47. Basic Education: The idea of basic education is a response to such severe resource constraints in the face of substantial portions of the population who are without even minimum educational opportunities. It is a supplement, not a rival, to the formal education system intended to provide a functional, flexible and low cost education for those whom the formal system cannot yet reach or has already passed by. Although in many countries the primary cycle may be its principal vehicle, it differs from the conventional concept of "universal primary education" in three major respects:

(i) The objectives and content of basic education are functionally defined in terms of "minimum learning needs" of especially identified groups and not as steps in the educational hierarchy (i.e. primary level);

(ii) The "target groups" of basic education are not necessarily school-age children. They may vary according to age (children, youth, adults) and socio-economic characteristics (rural-urban groups, women, participants in particular development programs);

(iii) The "delivery systems" of basic education will take different forms in different countries (restructured primary schools, non-formal programs or various combinations of the two) adapted to the needs of different clienteles and to resource constraints. The costs will play a predominant role in the choice of educational technologies of basic education programs.

48. Minimum Learning Needs: A recent study prepared for UNICEF[1/] has defined "minimum learning needs" for individuals as a threshold level of learning required for participation in economic, social and political activities. These essential learning needs include functional literacy and numeracy, knowledge and skills for productive activity, family planning and health, child care, nutrition, sanitation and knowledge required for civic participation. They can be operationally defined as "minimum learning

---

1/ New Paths to Learning for Rural Children and Youth. Coombs P.H. with Prosser R.C. and Ahmed M. International Council for Educational Development, New York 1973.

packages" to be attained by all, comparable to "poverty line" referring to minimum family income. Minimum learning packages would vary according to the level and pattern of development and the resource position of each country.

49. The main features of the basic education programs for the low income countries are:

(i) Formal primary schools are considered only as one component of a delivery system designed to reach children and youth in the earlier stages of their education. Other parallel programs such as the Rural Education Centers in Upper Volta, which serve young people aged 15-20 years, can play an equally important role in providing education at that level. The use of traditional institutions is also possible, as in Mauritania, where the use of Koranic schools for basic education is being considered, or Ethiopia, where village priests are being trained for educational work.

(ii) Age of entry and length of study should be reconsidered both for primary schools and other parallel schemes. Late start for a shorter course is seen as a way of reducing costs in order to broaden participation in education.

(iii) New and diversified programs are designed to take into account the terminal character of lower levels of education for the large majority of the participants.

(iv) Parallel changes are also introduced in teacher training, through the simplification of methods and localization of content and recruitment.

(v) There are cases where mass media, particularly radio, are used effectively in support of basic education programs.

(vi) In countries where teaching takes place in foreign languages, mother languages are increasingly accepted as more efficient learning vehicles for basic education.

50. Such an approach expresses a major principle of the report of the International Commission on the Development of Education, Learning to Be, that education should extend over lifetimes and not be confined to particular levels.[1/] It will necessarily lead to significant changes in other parts of the education system. It will, first, require a systematic effort to link education and work life through relatively short, non-formal, vocational, youth and adult training schemes, particularly for traditional and transitional sectors. Second, post-elementary education will need to be reoriented in order to match the changes introduced at the basic level.

51. It must be recognized that this approach frequently gives rise to a controversy with important political and social dimensions. Objection is made that it creates a dual system, namely a standard primary school which provides access to higher levels of formal education and a second-rate parallel structure which is terminal. This is considered a violation of the principle of equality of opportunity. Shortening the primary cycle and other cost saving or simplifying proposals receive opposition on the grounds of educational quality. These objections are important, particularly since they are often supported by parents who perceive the primary school as the only avenue for social advancement of their children.

1/ Learning to Be. Faure E. et al, Unesco-Harrap, Paris 1972.

52. These views are based, however, on an assumption that conventional primary schooling can be achieved for all children within a reasonable time perspective. This assumption is unrealistic for low income countries which face a choice between a standard system serving only 30-40% of the children and an alternative which aims at providing some kind of education for all. Given this reality, the search for alternatives is justified and probably inevitable. It is important, however, to avoid rigid definitions of structures, particularly as they relate to access to higher levels of education. Adequate methods and criteria of selection can be designed which preserve the chances for selective educational promotion of children and youth receiving non-formal basic education in proportions not too different from those in the formal primary cycle.

53. As a practical matter as far as the primary school age group is concerned it may be possible to minimize or even eliminate the "dualism conflict" by structural adjustments. Thus a six year primary cycle might be divided into two sub-cycles of four and two years. The bulk of resources available for primary education would be devoted to the first sub-cycle thus increasing the percentage of the age group which receives the minimum. The residual resources would be applied to the second sub-cycle, in the measure needed to prepare a group from which students are selected with due respect for equity, for further education or training. As resources increased, enrollment percentages in this sub-cycle would also be increased until ultimately there was no rationing of opportunity at the primary level. It should be noted that in this example the content of the primary course would need to be revised so that each sub-cycle was substantially self-contained

The broad estimates of world needs and possibilities for primary basic education which follow are predicated on the possibility of modifying school structures in this way.

54. It was shown in para. 42 that the school enrollment in the age group 5-14 of the two country groups I and II with the lowest GNP per capita might increase from 170 million to 230 million during 1975-85 if the most recent enrollment trends would continue. But despite the increase, the out-of-school population would not decrease but increase from 220 to 280 million by 1985. It would be useful therefore to see the order of magnitude of a solution turning this trend around given two different assumptions.

55. Approximately 140 million new student places would be required in primary education in the group I and II countries to eliminate the out-of-school group by 1985 if the existing primary education systems of the world averaging about six years for the cycle were expanded without any change. If we assume a four-year cycle of primary education, it might be possible to achieve the same aim by the provision of approximately 60 million new student places. An expansion of the primary education system without a structural change might require average annual capital expenditure equalling about 18% of the 1974 total public expenditures on education in the Group I and II countries. A restructured, four-year system might require capital expenditure equalling 8% of the same total public education expenditures. The annual recurrent cost increases caused by the expansion would also be lower in a restructured primary system and possibly average 2% as against 5% in the traditional system.

56. Turning to adults, the number of adult illiterates in the age group 15-44 increased during the last decade and will continue to increase. Unless existing adult education programs serving this age group and enrolling about 5 million students are expanded, the number of illiterates among the Group I and II countries will continue to increase during the next decade from a current 355 million to 405 million.

57. Adult education is in its beginning in most Group I and II countries, but it is estimated that all illiterates in the 15-44 age group could have had an opportunity to participate in functional literacy or other basic education and skill training programs by the end of this century if programs for 12-13 million adults per year were organized in addition to those already in existence. The programs would require minor capital expenditures equalling only about 1% of the 1974 total public education expenditures of the Group I and II countries. The annual recurrent costs might equal some 6% of their total public education expenditures.

58. Available data on costs are scarce and they vary considerably between countries. The above estimates should, therefore, be considered as an illustration only of the efforts needed to reach the population groups outside the current development sector and the already existing education and training systems. They suggest that solutions are within the realm of possiblity.

Education and Equity

(a) Major Issues

59. The regressive character of education systems and policies is a prevailing feature of most systems, irrespective of the level of development of countries. Education systems not only fail to ensure mass participation, as discussed in the previous section, but also practice discrimination in their process of selection, promotion and future career determination. They show an elitist bias favoring urban upper and middle income groups at the expense of rural and urban poor. The appraisal of a recent site and services project in Zambia showed that half of the population of the capital was living in squatter areas, but all schools with one exception were located elsewhere in the capital. Consequently, the primary school enrollment was only 36% in this squatter area as against 90% in the rest of the capital. Dropout and repetition rates were also higher among the squatters.

60. Students of higher income origin have a greater chance not only of access to education but also of promotion within the system. This is seen in the socio-economic profile of the dropouts, repeaters and successful students and in the fact that middle and upper income groups are particularly over-represented in higher education. In some countries other factors such as sex, ethnic origin or religion play a role which is frequently combined with the effect of income levels. These inequalities are aggravated by differences in quality of teachers, educational facilities and other inputs between schools serving different geographic areas and income groups. (See Annex 8.)

61. The system of educational finance reinforces the regressive character term of education. Because of the combined effect of the tax systems and the pattern of distribution of education services, the concept of "free education" which is intended to assure equality of opportunity, in fact operates as a mechanism of income transfer from lower and middle income groups to upper income categories. This is particularly true at the higher levels of education where the public subsidy per student is particularly high. (See paras. 102 - 105 for a discussion of other implications of educational finance for such issues as demand management in education and ensuring regular flow of resources into the system.)

(b) Policies

62. How to reach neglected target groups and equalize educational opportunity? Policies directed toward these objectives have traditionally been conceived only in terms of access to education. It is now evident that equalizing access to education is far from sufficient to ensure equal opportunity.

63. Equalizing access is, of course, a necessary first step. The appropriate location of educational facilities is a simple but effective instrument, particularly for lower levels of education where physical proximity is a major factor in determining enrollments. At higher levels, scholarship schemes and boarding accommodation can be used to reduce the barriers for the underprivileged.

64. Equalizing the chances for achievement is a more difficult objective. The important question here is the assessment of the school and non-school variables causing inequity and the identification of the factors

which can be influenced by education policies. Non-school variables such as family characteristics cannot be directly affected by education policies. Schools, however, can be instrumental in providing to underprivileged children some of the elements lacking in their home environment. More good teachers, textbooks and reading and other learning materials would contribute to their success. Higher resource inputs, however, imply increased unit costs.

65. Methods of selection and promotion in education are among the school variables influencing student achievement. Examinations and diplomas are frequently criticized as factors reinforcing the regressive effects of education. Despite the progress noted in the use of more flexible aptitude and attitude tests and some experience with the controversial "quota system" (i.e, introduction of quotas to equalize promotion chances of students from underprivileged areas or population groups), fully practical alternatives are yet to be developed.

66. Socio-economic background of the student's family (income, parental attitude and level of education) which appears to be a very important non-school variable influencing achievement can only be partially affected except by changes in the overall income distribution pattern. Even so, it would be useful to explore policies in areas such as parent education or school and community action, compensating for the absence of an adequate home environment.

67. Education finance is a potent policy tool to achieve equity as it determines the distribution of the burden of education. Modification

of the regressive impact of the public subsidies is essential. Subsidies should be used to increase the participation of underprivileged groups and not, as they are now, to support children from middle and upper income families. An income-related system of subsidies and fees can thus be instrumental in equalizing educational opportunity.

68. Equalizing educational opportunity should not be considered only in terms of the needs of the school-age children. Such policies should address themselves also to people who are already in the labor force in a way which can go beyond the conventional adult training programs. There are methods to provide to working people a "second chance" to continue or complete their education through full-time or part-time studies.

69. The preceding paragraphs deal only with the question of educational opportunity and do not cover broader issues relating education to income distribution and social mobility. Recent research and experience have raised a number of serious questions challenging some of the traditional assumptions about the social mobility effects of education. Equalization of educational opportunity does not automatically generate significant changes in income distribution and social mobility. The impact of education on mobility appears to be essentially determined by the pattern of stratification and socio-economic reward system of each society. Knowledge about these relationships is fragmented and limited, particularly in the developing countries, since most of the research findings refer to the conditions in the developed countries. It would, however, be possible to state, as a general proposition, that in the absence of other

supportive social and economic actions, isolated efforts in education would have only a limited mobility effect, and to achieve significant results education policies should be formulated within the context of a broader social policy.

Increasing Efficiency in Education

(a) Major Issues

70. Education systems in most LDC's are inefficient in using resources and often do not achieve their quantitative and qualitative objectives. The provision of good teachers has been and continues to be a major bottleneck. The supply of primary teachers has been sufficient so far but their training leaves much to be desired. In secondary education the problems caused by the low teacher quality are aggravated by quantitative shortages, particularly in science and technology. Many countries face serious difficulties in developing teacher training schemes corresponding to changing needs. Efforts to upgrade the teachers are usually limited and fragmented. The school systems are frequently managed without proper attention to the effective utilization and supervision of teachers. This is a particularly important question since the teacher cost ranging from 75% to 95% is, by far, the most important single factor determining total education expenditure.

71. Recent research findings tend to challenge some of the assumptions concerning the relationships between class size, level of training of teachers and student achievement. In a study on student achievement in secondary schools in some 20 countries, including four LDCs, it has been

reported that there was no significant correlation between the class size, within reasonable ranges, and student performance in certain subjects.[1/] Another study in a Latin American country indicates that achievements at lower secondary level may not be significantly different whether students are exposed to teachers with university or normal school training. The cost saving implications are significant. These results should be interpreted with care to avoid hasty generalizations for less developed countries and other types of education, such as vocational training, not covered by the studies. They indicate, however, that the scope for improvement in cost-effective use of teachers may be greater than what was traditionally assumed.

72. The design and efficient use of learning material and equipment constitutes another problem area. Most of the problems here are caused by inadequate curricula and learning methods. There are, however, serious problems in the production, distribution and utilization of equipment. In many LDCs even the basic textbooks are still not made available in sufficient numbers to teachers and students. In 11 countries with per capita incomes under $250 per year the average annual production is less than one textbook per student (Annex 11). The few available textbooks are often irrelevant. In view of their importance in improving student achievement a more adequate local production of textbooks, especially in mother languages, is of high priority. The supply of other learning equipment is even more limited. The total spending for textbooks and other learning aids is often less than 5% of the education budget, while it might be about 10-15% to meet a minimum

---

1/ A survey organized by the International Association for the Evaluation of Educational Achievement (I.E.A.).

standard for effective learning. More complex school equipment which has to be imported is usually too costly and not adapted to local conditions. Even when available, it frequently remains idle because of lack of know-how for maintenance and utilization. The local design, economic production and effective use of various types of learning materials is a critical but neglected task.

73. One of the strongest self-reinforcements of poverty is the lack of adequate nutrition for both child-bearing mothers and children whose mental capabilities may be permanently impaired, in the very early years, by nutritional deficiency. School feeding programs are a valuable means to improve student performance. But they come too late to avoid this early damage. The major contribution of education may be through instruction of parents in matters of diet, food handling and other rudiments of household economy. It may be expected also that adult education for nutrition will be most effective when it is combined with food programs.

74. In school, also, malnutrition and related illnesses affect student performance by reducing the child's motivation and ability to concentrate and learn. In four Latin American countries, children miss more than 50 days of school a year because of illness which may be malnutrition related (25-30% of the scheduled school days) as compared with an average of 10 days or less per year in the developed countries.

75. These inefficiencies are first reflected in the performance of the school systems, in dropout and repeater rates. According to Unesco statistics the median dropout rate for first level education is 58% in

the Group I countries against only 10% in the Group V countries. In a number of countries it takes more than 10 years to produce one graduate of the 5-6 year primary cycle and about one-fourth of the education budget is spent on students who drop out in Grades 1-3. (See Annex 12.)

76. The performance of education systems is also assessed in measurements of student achievement. Most research in this area relates to developed countries. The IEA survey studies student achievement but covers only four developing countries. It is important, however, to encourage local research in developing countries measuring student achievement in relation to a range of socio-economic goals and conditions.

77. Inadequate structures create other efficiency problems. The education structure is often dominated by the chronologically-graded and age-specific formal system. Because of its hierarchical structure, formal education operates with rigid entrance and exit levels. To those who fail to enter at the specific levels educational opportunities may be lost forever and those who do not leave with proper certificates at the exit levels are considered failures.

(b) Policies

78. Thr first step towards improved efficiency would be a better specification of the education and training objectives and of the performance standards of formal as well as non-formal learning systems. For example, what is the minimum level of reading comprehension or numeracy skill needed for a specific role in rural development. What are the bases -

educational, social, psychological - which should determine what percentage of students, if any, should repeat a grade? What kinds of behavior should schools elicit in a developing society? Encouraging countries to provide answers to these types of questions would improve prospects for efficiency in education.

79. The second step is the identification of factors most likely to affect efficiency. What are the major factors causing high dropout and repeat rates? School factors such as the system of promotion, the distance to school, social tensions, the language of teaching, antiquated examination or testing systems or stultifying teaching approach? Or non-school factors such as poor health, inability to pay fees or other expenses or the need to work? It is essential for administrators to assess the causes of inefficiency in the particular social and educational environment of their countries and then to design cost effective measures to cope with them.

80. The level of training and remuneration of teachers is important because of its educational as well as financial implications. Over-qualification of teachers may not necessarily mean better education. Shorter periods of teacher training supported by in-service training could lead to significant savings as could larger class sizes at the middle levels. The class sizes at those levels are not high and an increase by 10-15% would not lower the education quality, but the savings achieved could either be used to reduce the current costs by some 8-10% or provide funds to be allocated for activities which are known to improve the learning. The type of teacher training institution also affects

efficiency as in the case of the smaller and locally based primary teacher training colleges which in some cases can be more effective than large urban based schools in assuring a better deployment of teachers and the adaptation of the training to local conditions.

81. There are other measures which can be cost saving or can be implemented with no overall cost increases. Adapting the school calendar to the calendar of local economic activities may improve attendance. Flexible promotion methods tied in with multigrade teaching could lead to more effective use of teaching resources. Teaching in national languages would improve learning rates and student attitudes to schooling.

82. Many measures, however, would have important cost implications. It is estimated in a typical case that the improvements which educators traditionally recommend - smaller class sizes, better learning aids and more highly trained teachers - would require an increase of 75% in annual recurrent costs. To counter this effect, for example, teachers can learn to prepare by themselves or with student help some of the teaching materials and apparatus. Where costly manufactured equipment is essential, it may be provided in central facilities or mobile units serving a number of schools.

83. Programs involving the use of mass media such as educational radio and television should be designed on the basis of careful analysis of costs and the capacity for the production of educational material, with emphasis on logistics problems such as the distribution and maintenance of receivers, spare parts and other material. A major economic consideration is that the unit cost of radio or televised instruction can be very high

for small numbers of students but declines sharply as numbers increase. In the Ivory Coast's TV project, for example, the estimated annual recurrent cost was $115 per student for 21,000 students and $6 for 700,000. It should also be remembered that where technical problems or cost make television prohibitive radio may be a useful, lower cost substitute.

84. Preparing teachers to perform a new role in a changing educational technology is of crucial importance. Teachers are now expected to accept educational broadcasting not merely as a substitute for the blackboard, but as a vehicle to introduce improved curricula and new subject matter into the classroom. The best way to secure this cooperation, as well as to improve the product, is to involve the classroom teacher in teamwork with the broadcasting teacher in all phases of the program.

85. Better nutrition may be an important factor in increasing the return on educational investment. Feeding and other programs directed to improve the performance of those already in school as well as programs aimed at prenatal and younger children may have a high rate of return. Nutrition influences the quality of education but education can also influence the quality of nutrition. Primary schools, teacher training colleges, agricultural training institutions, adult literacy programs and mass media can provide nutrition education in their regular curricula.

86. There are, finally, ways to vary the structure of education systems so as to maximize both efficiency and educational opportunity. By varying the length and number of cycles in the formal system and consequently the number of exit points and by varying also the progression

rate from one cycle to the next it is possible not only to broaden the base of enrollment as suggested in para. 53 but also to respond more readily to changing needs and possibilities in the system as a whole. To the classic six years of primary followed by three years of lower and three of upper secondary (6-3-3) a number of modifications can be made (e.g. 4-4-4 or 4-2-2-4) each of which will serve different needs for schooling and initially larger percentages of the entering age group.

87. Structural variations may also be combined with school location patterns to achieve better distribution of education. For example, in a 4-2-3-3 structure as is being introduced in Peru the intermediate years or part of them may be provided in smaller, localized, satellite schools which feed into a larger school for the upper cycle, thus minimizing the need for boarding accommodation.

88. Close articulation between formal, non-formal and even informal systems can help to distribute the education workload more efficiently. For example, it may be advantageous to upgrade the traditional (informal) systems of child care and preschool education by (non-formal) adult programs thus avoiding expensive, formal kindergarten instruction.

89. For many countries, once programs of basic education have been established the critical task is the elaboration of follow-on vocational training in both rural and urban areas. This may take many forms - on or off the job - short courses at vocational or rural training centers, apprenticeship, youth groups, extension, cooperatives, mass communication media and mobile training units. They may follow directly on completion of basic

education and before work begins or at intervals during subsequent years. Taken together, these non-formal "delivery systems" provide a substantial resource for human development which may prove greatly more cost effective than the replication of formal education and training institutions at the lower and upper secondary levels.

90. Efficiency has so far been discussed in terms of structures and resource inputs for education institutions. The question can also be discussed as the choice between alternative educational technologies, especially for vocational education and training. Attention has been focused on the comparison of vocational and technical schools with production-related or on-the-job training programs. Recent debates on "the vocational school fallacy" tend to create a bias in favor of on-the-job training programs, particularly for middle and lower level skill categories. This conclusion has not been substantiated by a Bank research project on the "Cost Effectiveness of Alternative Learning Technologies in Industrial Training",[1/] which finds no evidence to support the claims for a clear-cut superiority of one technology over the other. Factors such as the skill category, the size of the target group, the teaching methods, and particularly the cost of equipment used for training, determine the efficiency and economy of the particular technology.

Improving Management and Planning Capacity in Education

(a) Major Issues

91. As enrollments, education personnel, schools and expenditures all continue to increase, the management of education becomes a task of

---

1/ Bank Staff Working Paper No. 169, December 1973, prepared by Manuel Zymelman.

formidable magnitude and complexity. Experience reveals that education planning as understood only a decade ago is inadequate and that new approaches need to be developed. In most other respects - administrative structure, policy formation, operational procedures, research, information systems and evaluation - the elements of modern management are not yet available.

92. A major challenge faced by the less developed countries is to find better ways of channeling private demand for education into socially beneficial areas - not only to eliminate distortions between supply and demand but also to make education systems more responsive to new development policies. It is evident that changes in the pattern of demand would require interventions not only in the education systems (structural and institutional reforms and changes in educational content and technology, etc.) but also in other areas such as the labor market. With education policy making oriented toward social and economic utility, a comprehensive policy approach is needed to cover areas which are generally beyond the scope of conventional education policies. Education policy makers are not usually equipped to view education in this broader context, especially in its interactions with employment and finance.

93. The structure of administration is another source of difficulty for the design and effective implementation of comprehensive education policies. Responsibilities in education are often dispersed. Ministries of education, labor, agriculture, health, etc. control a substantial part of the education/training institutions. Their activities are seldom

properly coordinated. The lack of effective coordination at local level causes further complications. Various agencies are directly linked to their respective ministries in the capital without any connecting lines with other local units. A serious shortage of qualified middle level managerial personnel in education hampers the coordination within the administration. Communication with the public is also negatively affected creating additional difficulties in generating popular support for new education policies.

94. A fundamental issue in the effective management of education is political. Inability of political decision makers and education managers to communicate with each other is frequently a cause for failure in the implementation of education policies and plans. It is important, first, to have a clear idea about the objectives that education is expected to fulfill in a given country at a given point in time. Confusion about objectives or lack of consensus among the various groups involved in planning and policy making have often been a major reason for failure. No planning method - however sophisticated - can substitute for a clear understanding of objectives. It is also necessary, for planners, to take into account the political context within which education policy has to be formulated. Political pressures generated by social demand for certain types of education sometimes leave little scope for governments to consider other options. One of the challenges for planning lies in the design of politically feasible alternatives or the preparation of technical solutions which avoid political tension.

(b) Policies

95. (i) New Approaches to Planning: During recent years two approaches to educational planning have claimed attention - the rate of return and the manpower approaches. The wide use of rate of return analysis in other sectors makes it appealing for education since theoretically it could thus establish a basis for comparison and establishing intersectoral, as well as intrasectoral, priorities. Despite considerable efforts to develop rate of return analysis as an operational tool in education, it has thus far been impossible to resolve many of the methodological and practical difficulties in its use either for sector or project analysis.[1/] Estimates of manpower requirements have been more widely used although this method suffers from many of the same limitations, notably the limited reliability of its demand estimates, given the long lead time required to produce the supply, the scarcity of knowledge about the substitutability of skills and, more generally, about the behavior of the labor market.

96. The basic and non-formal education developments foreseen in the next decade or so will raise further problems in the use of both of these techniques. Both methods are exclusively quantitative and dependent upon data relevant to the modern sector such as growth rates of GNP, wages, productivity, visible employment rates, occupations and formal education costs. Moreover, they can suggest how much (of the same type of) education is needed but, as presently practiced, say nothing about who is to receive it and therefore bypass the key questions now being raised of equalizing educational opportunities and participation, especially for people in the non-modern sectors.

1/ World Bank Staff Occasional Paper No. 14 Cost Benefit Analysis in Education: A Case Study in Kenya by H. Thias and M. Carnoy, 1972.

97. Despite these limitations manpower planning can still yield meaningful results in some specific areas. Science and technology-related categories and, more generally, all the skills for which no substitutes are readily available can be subject to conventional methods of manpower analysis. The planning of a new, emerging economic activity for which no labor market exists as yet, could also be done with the help of manpower considerations. However, a broader approach to planning is needed to include analysis of both the demand and supply of trained manpower and of the socio-economic environment within which the adjustment process between them takes place.

98. "Cohort analysis," which has yet to be elaborated fully in practical terms, may become a useful tool for planning in the present context. While the unit of observation in conventional educational planning is the proportion of the population enrolled in and processed by the education system (the enrollment pyramid), cohort analysis is based on the idea of following the major steps in the life cycle of the total age group. This involves those who enter the system as well as those who are excluded. The steps include enrollment and promotion within the education-training systems, both formal and non-formal, and the absorption into the labor market (employment-unemployment, occupation, income, etc.) of all the groups leaving the system from various points (graduates, dropouts, etc.). This approach to planning provides a convenient way of viewing formal and non-formal education as a single learning system and also of analyzing its relationshps with the labor market. It also embraces a longer time span than the age period of formal education and is, thus, in line with the "life long education" concept.

99. Cohort analysis necessitates a broad information base covering not only the school population but the educational and employment status of the whole age group. In some cases such information can be obtained through special tabulations of available census data, school statistics and other survey results. But a full-fledged use of this approach may require the collection of new information, particularly in the area relating jobs to educational background. Tracer studies have been introduced in some ten World Bank Group-financed education projects, and a recent study in Thailand showed that while the vocational school graduates were readily employed on graduation and had no serious employment problems, an increasing percentage of the graduates were entering higher education for which their vocational studies were less well suited. Tracer studies permit, therefore, a following of education and work careers of identifiable age cohorts and the impact on these of specific educational measures. It would therefore be useful to incorporate tracer systems into major educational programs.

100. More disaggregated analysis (by regions, economic sectors and social groups) is another essential feature of educational planning. Modern and traditional sectors cannot be grouped together in terms of their education and training requirements. Some specific social or occupational categories may need to be treated separately. Where, for example, it is government policy to improve the condition of a hitherto underprivileged racial or other group or where it wishes to test the impact of a new policy on different sectors of the society it will have to use the disaggregated approach.

101. (ii) Educational Reform: The implementation of new education policies largely depends on substantial changes in the organization and structure of the education systems. This implies not only a change in the existing institutions, but also the creation and development of new ones. Political determination and effective management are essential for the design, initiation and implementation of educational reforms. A critical question in considering educational reforms is the scope and pace of change on the basis of a realistic assessment of the country's readiness. Awareness by the public of the necessity for change is the beginning point for development of a climate conducive to reform.

102. (iii) Educational Finance: Educational finance raises management questions affecting most aspects of education policy. References have already been made to educational implications of finance in such areas as the supply and demand or equity. It would be useful now to present a more general picture of the role of finance as a policy tool for education.

103. An important function of the system of finance is to provide a regular flow of resources into the education system to meet its current needs as well as planned expansion. The critical issue is how to deal with the increasing burden on public finance. A number of ways can be suggested to broaden the revenue sources for education beyond the limits of regular government budgets. They include various methods to increase the share of users in the cost of education such as fees and private education. Self-help is another example involving community contribution to investment in education. Earmarking certain revenues or tax levies on the total wage bill of business firms are other examples. They are usually

linked with specific types of education such as industrial training or adult literacy. Student loan schemes are also intended to relieve the burden of government budgets, although the evidence so far suggests that their overall impact is rather limited.

104. The mode of financing can also affect the demand for education. The cost of education (fees, other expenses and income foregone) relative to the incomes of various segments of the population is one factor determining demand. Subsidies and fees adjusted for different types and levels of education could therefore play a role in controlling the level and structure of demand. In some cases, the demand for certain types of education can be influenced by the use of non-monetary contributions such as direct work schemes to encourage enrollments in vocational schools. Equity in education is also sensitive to alternative modes of financing as discussed in paras. 61 and 67.

105. Despite increasing knowledge about the relationships between education and finance many of the financial measures need to be further developed and tested. The question, moreover, goes beyond the definition of specific policy measures or tools. These tools need to be related to each other to form a coherent education policy. A system of fees, for example, can defeat the principle of equal opportunity if it is narrowly conceived. There is, furthermore, the need for these measures to be consistent not only with education policies but also with overall finance policies. Earmarking certain public revenues for education may be appealing to educators but an unsound practice from the point of view of fiscal policy.

106. (iv) Research and Development for Education Policy: Management of education systems implies making decisions about a broad range of questions frequently not covered by traditional education policies or by available information and analysis. This means that some critical decisions will have to be made in uncertainty, without the benefit of past and current experience and, in many cases, without an adequate research and information basis. In this context, policy-making and implementation should be seen as a learning process conceived to improve our knowledge about the behavior of the education systems. Experimentation and feedback must be considered as regular components of major operations. Such an approach to policy-making requires an adequate research and development capacity. Since research capability is limited and difficult to develop, it is necessary to design a "research strategy" to establish priorities in the development and utilization of research resources. Policy-oriented research requires familiarity with local conditions. The development of local research capacity in less developed countries is therefore a high priority.

107. The creation of regular evaluation machinery is essential for effective education management as it is the main channel through which research and development can be introduced into decision-making. Evaluation also contributes to a better design of education schemes by requiring a clear, operational formulation of their objectives. It plays an important role in the assessment of the results of various new measures whether they are related to cost-effectiveness, internal efficiency and qualitative improvements or contributions to development. Education authorities have been increasingly aware of the need for independent formative evaluation machineries which would be built into the education system. Few countries have, however, so far established such regular machineries. A current Bank research project is aimed at this need.

CHAPTER II: BANK EDUCATION LENDING POLICY AND PROGRAM

108. In this chapter Bank education policy is defined as certain development objectives which the Bank seeks to foster by financing education and certain means it can employ, together with the borrower, in fostering such objectives. Under the circumstances we have described - the great variety of conditions within developing countries and the essential uniqueness of each country's development strategy - Bank policy for education must have a high degree of diversity in its application. No single formula or strategy can meet the needs of all the Bank's borrowers. The analysis of educational profiles of countries in different income categories (Tables 2-4 and paras. 26-29 and 42) reveals, however, some patterns which can help the Bank to adjust its response to the differing priority needs of countries with different income levels and stages of development.

109. A basic premise in the discussion of education lending is that the Bank's operations in this sector should reflect its overall policies including its increasing concern with the problems and needs of low income countries and the promotion of development strategies designed to improve the well-being of the lower 40% of the population through increased productivity and employment and improved income distribution. But while this is the new and dramatic feature of Bank policy, it should not obscure the fact that the Bank will continue to assist countries which have moved to higher levels of development but still require help. A flexible response adjusted to the variety of conditions in all the developing countries will govern the Bank's activities in education. The differences between the lower income countries and the relatively more developed ones will determine the proportion or "mix" of different kinds of development to be assisted.

110. For the poorest countries meeting minimum learning needs of the uneducated masses to ensure their contribution to and benefit from economic and social development is a major task. In these countries, the development of low cost and functional basic education programs, through restructuring primary education and/or other methods, should receive emphasis. Concentration on rural training for selected target groups, within the framework of broader rural development schemes, would, in many cases, be a necessary complement. Conversely, the development of upper levels of formal education should be selective and carefully planned, taking into account on the one hand the limited absorptive capacity of the modern sector labor markets and on the other the need for local leadership and technical skill in both public and private sectors.

111. In the education strategies of the middle and higher income countries the development of the secondary and post-secondary levels will take a more central place. Where first level education is already widely available, skill development to meet the needs of increasingly sophisticated economies will have priority. More favorable resource disposition will permit increased education expenditure. Striking a balance between overall supply of and demand for educated manpower, matching the output of education with the particular needs of the economy and efficient use of resources will be the major policy concerns in determining the rate of expansion of the system, as well as its internal priorities and the choice of institutions and technologies. This involves not only improved planning but also considerable emphasis on educational reforms. To achieve equity, these richer countries will have to pay increasing attention to providing educational opportunities for urban poor, in addition to rural poor.

112. Differences in the educational strategies of developing countries will be heightened by the differing effects on their economies and development prospects of the recent changes in the world economy. At one extreme, during the period 1973-1980 the per capita GNP of seven OPEC countries is estimated to increase 8.4% per year. For countries in this situation financial constraints will be non-existent or minor and their intention to expand education at the maximum feasible rate is already clear. At the other extreme, ten countries with GNP per capita below $200 are estimated to have growth rates during the same period of -0.4%. It is not yet clear how such countries will react in terms of both overall expansion goals of education and of the priorities given to types and levels. These reactions need to be closely followed in order to enable the Bank to develop ways and means for timely and adequate response.

113. These examples illustrate the differing considerations which must be brought to bear in forming lending programs for individual countries. It will be useful, therefore, to see these new orientations against the background of the Bank's earlier and recent experience in this sector.

Bank Policy and Activities - 1963-1974

114. By 1961 it had become clear to the World Bank that the lack of qualified manpower in developing countries was a serious obstacle to the successful implementation of its own projects in several sectors as well as to the process of economic development. Thus it was seen that investment in education was not only consistent with the Bank Group's objectives but would be a desirable addition to its activities. In 1962 the first education project was presented to the Executive Directors and subsequently in

October 1962 a memorandum from the President on "Proposed Bank/IDA Policies in the Field of Education" was issued in which the basic statement of policy with respect to types of projects to be financed was set forth. The major point of the policy statement was 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."

Following this stated policy, until about 1969 the Bank concentrated on high priority projects within a country's educational development plan which usually were related to the modern sector. A major thrust was the training of critically needed types of manpower insofar as those needs had been identified.

115. With increased knowledge and experience, the Bank's approach to education widened in the late 1960's. 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 systems as a whole rather than by 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." As a consequence, the scope of the Bank's education operations increased to cover not exclusively hardware projects in restricted subsectors but a mixture of hardware and software projects based on sector analysis and aimed at achieving qualitative improvements as well as meeting crucial manpower needs. It has also been marked increasingly by experimental approaches and innovations such as educational television, learning materials production, support to curriculum development and educational planning and management, mobile training units and health personnel training.

116. These developments can be seen in the profile of the Bank's lending in education presented in Table 5 below:

Table 5: DISTRIBUTION OF EDUCATION LENDING[1/]

	FY63-71 Actual (%)	FY72-74 Actual (%)	FY74-78 Projected (%)
By Levels			
Primary and Basic	5	11	27
Intermediate	72	48	43
Higher	23	41	30
	100	100	100
By Curricula			
General and Comprehensive	44	43	31
Technical	29	24	23
Agricultural	15	17	24
Teacher Training	12	14	12
Health	-	2	10
	100	100	100
By Outlay			
Construction	61	49	54
Equipment and Furniture	34	44	37
Technical Assistance	5	7	9
	100	100	100

1/ Through FY74, the World Bank Group had approved the financing of 99 education projects with a total project cost of US$1,936 million and a total lending amount of US$1,059 million. Of this lending, East Africa, West Africa, Asia (except the Middle East), Europe and the Middle East, Latin America and the Caribbean area absorbed 16%, 15%, 27%, 15% and 17% respectively.

(i) The period covering the fiscal years 1963-1971 was characterized by strong support for technical and vocational education (29%) and agricultural education and training (15%). The bulk of lending (44%) went to general secondary education, largely in the form of comprehensive schools offering specialized options of pre-vocational education at the upper level such as agricultural, industrial and commercial. Teacher training institutions absorbed about 12% of the lending. Although a precise breakdown between rural and urban locations is not possible, with some exceptions, urban groups preparing for work in the modern sector or as modernizing agents in the rural sector were given priority. Other than teacher training, little was done in support of primary education, and with a few notable exceptions universities were not assisted. A few projects for adult training - which would now be called non-formal education - were supported, but the great bulk of Bank assistance went to the formal education system. Technical assistance consumed less than 5% of the volume of lending.

(ii) A comparison of the lending during 1972-74 with the figures for 1963-71 shows that a shift was beginning in the pattern of Bank education financing. For example, the heavy concentration upon the secondary level during the early period was giving way to greater support for primary and basic education and for youth and adult training. Technical assistance had increased from less than 5% to over 7%. Moreover, the number of projects which included Bank-financed technical assistance had risen from an

average of 56% for the earlier period to 90% in 1974. Relatively new items such as learning materials production, curriculum development and planning, which had only occasionally been assisted, were now receiving more regular attention and have recently received 5-10% of the funds. (See Annexes 3-6.)

(iii) The shift observed during the 1972-74 period is further confirmed in the projected lending program for 1974-78. Primary and basic education (which includes education of youth and adults) is expected to absorb about a quarter of total lending in education. The share of secondary and especially higher levels of education will decline, but they will still account for about 75% of the total. The implications of the projected lending program will be analyzed in the following discussion of the various issues related to the Bank's education lending objectives. (See paras. 149-151 and Table 6.)

Objectives of Bank Education Lending

117. The Bank seeks to promote a balanced educational development based on the following broad principles:

(a) That all members of the population should receive at least a minimum basic education as fully and as soon as available resources permit and the course of development requires.

(b) That further education and training beyond the basic should be provided selectively to improve quantitatively and qualitatively the knowledge and skills necessary for the performance of economic, social and other development roles.

(c) That a national education system be viewed as a comprehensive learning system embracing formal, non-formal and informal education and working with maximum possible internal and external efficiency.

(d) That in the interest of both increased productivity and social equity educational opportunities be equalized as fully as possible.

Some considerations of particular importance in the pursuit of these objectives follow.

How the Bank Will Deal with Basic/Primary Education

118. The Bank's interest in basic education is very closely related to its efforts toward the promotion of a broader approach to development. Basic education is conceived as a vehicle to meet minimum learning needs of the masses to ensure their effective participation in the development process which is essential in implementing strategies based on fuller and more productive use of human resources (see paras. 22 and 45-47). It can thus be instrumental in increasing productivity as well as improving opportunities of underprivileged groups.

119. It is expected that most countries, and particularly those already having high primary enrollment ratios, will meet the need for mass education through expansion of the formal primary system. For those countries, in providing assistance toward this end, the Bank will give particular attention to curriculum and other reforms which take account of the needs of the substantial number of students who will not continue beyond the primary cycle.

120. In those countries having the lowest primary enrollment ratios and working under severe financial constraints, the Bank will encourage review

and revision of education structures along the lines suggested in paras. 53 and 86 so as to meet the need for low cost, minimum mass education.

121. In all cases the Bank will assist in the development of a wide variety of education and training for adolescents and adults, either as follow-on programs for those who have had primary education or in the more extreme cases as an alternative where primary school opportunities did not exist (para. 47).

122. The Bank will encourage the integration of basic education with other rural and urban development programs. This implies that the education programs will serve different target groups whose development needs will be met through a combination of education and other assistance programs. In Bank projects the integration can take place through inclusion of education and training in comprehensive rural development or urban settlement projects. The education and training should, however, always be viewed as a part of a total education delivery system (para. 37 (b)).

123. In designing new models of multi-purpose institutions for basic and primary education such as community education or rural training centers there is serious danger of creating prototypes which are too elaborate and expensive to be replicable on the desired scale. The central purpose of basic education programs is always to meet minimum learning needs for as many as possible within the limits of available resources. Standards and costs of at least the first generation of institutional models should be consistent with this purpose.

124. Other important elements mentioned in Chapter I which contribute to broader dissemination of basic and primary education and to which the

Bank will give particular attention will be: (a) language planning and development work making easier the use of mother language(s); (b) the use of mass communication radio and television and the production of learning materials for both formal and non-formal basic education; (c) improvement of local management capabilities through appropriate administrative reorganizations and/or training. Such reorganization and training will often be needed for other sectors of rural development and might be assisted more effectively for all together; (d) an essential corollary of local management is the localizing of procurement and support through local taxation and other contributions, selfhelp construction schemes and the use of local people in whatever ways they are or may become qualified.

125. In Table 5 we have noted an increase from 11% in 1972-74 to 27% for 1974-78 in the estimated share of Bank educational lending devoted to primary and basic education. Based on current overall program estimates this would mean about $280 million in constant prices to which should be added an estimated $90 million included for this purpose in rural development and "site and services" projects - a total of $350-400 million. This should be manageable but, given the still highly experimental "state of the art", it will challenge the capability of both the Bank and its borrowers.

126. The most important contribution the Bank could make during these years would be to use them as a "tooling up" period for a substantially greater attack on the worldwide needs outlined in Chapter I in the years after 1978. This tooling up would embrace not only refinements of project criteria, planning, staffing and acquisition of experience within the Bank but also a many sided effort within the developing countries themselves to

increase their capabilities in this field and prepare for a major thrust getting under way during the later 1970's. It would include (a) operational research into demographic, social, geographical and economic conditions related to basic education, (b) development work in curricula, teacher training, institutional models, project design, physical facilities and the use of mass media, (c) planning, policy formation, legislation and budgeting by governments, (d) administrative reorganization and management training necessary to achieve the decentralized, yet coordinated, execution which a major program would require, and (e) systematic monitoring and evaluation of ongoing operations.

127. The effort envisaged here should not be limited to the Bank and its borrowers alone. If the obstacles of mass illiteracy and ignorance are to be lifted from the path of development, the task will demand the common efforts of all educational assistance agencies which are interested. Almost all of them already give highest priority to meeting the need for basic education and preliminary steps to form channels for cooperative action are being taken. There is, therefore, a potential vehicle for mounting a massive attack upon this most formidable problem of educational development and an opportunity for the Bank, by a positive position, to help crystallize the sentiment for action among agencies and member countries.

How the Bank Will Deal with Skill Development

128. There will continue to be a shortage of middle- and high-level manpower in specific areas in many developing countries and the Bank will therefore continue its current policy and support the development of skills to meet the needs of vocational and professional manpower in the urban and rural sectors. The Bank will utilize the experience it has gained in previous lending for

skill development and a major part of the Bank education funds will continue to flow into this sector up to 1978. The financing will cover secondary and post-secondary institutions, training centers and university institutions in agriculture, industry, science, commerce, management, pedagogy, health and other education and training sectors. The assistance would continue to include buildings, equipment, development of curricula, production and use of learning materials including textbooks, and staff training. Technical assistance will be included whenever necessary and it will comprise the use of national expertise wherever available.

129. The Bank has financed general secondary education including comprehensive education projects in the past and will continue to do so to the extent it would support skill development and the programs mentioned above. Comprehensive schools may often meet the education needs in societies at a fairly advanced stage of development but they are relatively costly and the experience of Bank-financed comprehensive schools indicates that the concept might be less relevant in poor countries with low school enrollments. It might sometimes be preferable to replace the comprehensive education by a combination of general education and short accelerated training courses.

130. The Bank will continue to use manpower analysis in the assessment of education and training needs but it will broaden the scope and perspective to cover skill and population categories which would not be covered by conventional manpower techniques. It will in this analysis continue to take account of the tendency of many education systems to generate surpluses of educated manpower and, therefore, the need for explicit government policies regarding the rationing and pricing of secondary and post-secondary education. Wherever possible tracer studies should be included in education projects.

131. The Bank will develop and apply new techniques for cost effectiveness analysis in the choice of alternative forms of vocational training, particularly in the assessments of the advantages and disadvantages of in-plant training institutions versus formal vocational schools (para. 90).

132. The Bank will continue to finance training components in projects in agriculture, tourism, transport, public utilities and other sectors also at the post-basic education level. There is no clear line between such project-related training and training provided as a part of a system development as described above but there are some criteria which can help to determine how to deal with a training need generated by project financing. Among such criteria are the urgency of the need, the degree of specificity of the skills and the length of the training period. As a general rule training components attached to projects will lead to more experience than training conducted as a part of a regular education program. Its execution will also require more Bank attention and manpower (para. 149).

Efficiency

133. The Bank will continue to encourage efforts to increase cost consciousness in education management and support the development of cost effective education programs and projects and of cost saving learning methods. The Bank will therefore support the development of management capacity in education and provide technical assistance to develop local participation in the education activities in rural areas and urban settlements (paras. 38 and 93).

134. The Bank will actively promote the optimum combination of high education achievement and low costs in three specific ways:

(i) Encourage the application of substantial research findings which indicate that class sizes may be increased without a loss in student learning performance (para. 80).

(ii) Encourage and finance the local design and production and distribution of learning equipment and textbooks.

(iii) Encourage staffing of educational institutions with personnel having a diversified experience covering not only pedagogy but agriculture, industry, business, health and other sectors (para. 80).

135. The Bank will encourage further efforts to identify and eliminate the main causes of high attrition and repetition rates through a systematic use of built-in evaluation systems in education projects leading to improved curricula and selection, teaching and learning methods.

136. Wherever possible within the framework of education projects, the Bank will attempt to improve nutrition for pre-natal, infant and school-age children as a crucial factor in human resource development. Among means to this end would be improved nutrition education in teacher training colleges, adult education programs and in the curricula of primary and secondary schools, possibly combined with school feeding programs.

137. The Bank will continue to emphasize the financial criteria of education projects and development strategies including:

(a) A sound balance of expenditure between components within the education system and between the education and other development sectors.

(b) The recurrent cost implications of both plans and projects and the replicability of experimental activities.

Education and Equity

138. A final objective of Bank lending in education, as in other sectors, is the improvement of equity, the redressing of imbalances in opportunities for education and training among different geographical, ethnic, social, sex, income and age groups. Equity in Bank education policy is not a program which can be financed in itself but rather a major criterion which should suffuse all Bank operations.

139. In its analysis of education systems and policies the Bank will be concerned with such questions as where the funds really go, who benefits most and how the burden is distributed. In some cases this may require special surveys. The Bank will assist in such surveys and, based on them, will help design programs to be financed by it and others which will improve the distribution of education services. One such study - in Colombia - has recently been published by the Bank[1/] and others are getting under way.

140. In project identification and design the Bank will seek information on specific target populations in order to assess the degree to which the programs contribute to a rational policy which balances equity and other educational objectives such as efficiency and skill development. More specifically, a guidance and monitoring system will be developed to determine the beneficiaries of education projects.

Bank Lending Programs and Possibilities

141. Having outlined the major objectives for Bank educational lending and defined the position the Bank would normally take on specific questions, there arise three crucial sets of questions concerning the viability of these proposals:

1/ J.P. Jallade: Public Expenditures on Education and Income Distribution in Colombia, World Bank Staff Occasional Papers, No. 18 (1974).

(a) Will developing countries be willing to accept the general and specific policies suggested in this paper and what might the Bank do to encourage their receptiveness?

(b) What are the risks inherent in these policies? Will countries have sufficient management capability to carry them out?

(c) Do the Bank's own current policies, procedures and lending programs give effect to the directions and proposals put forth in this paper? How should they be changed or improved?

142. Overall, experience suggests that the innate caution and conservatism of educational establishments will continue and that relatively few countries will undertake the radical changes which many external observers consider necessary. At the same time, there is a widening recognition that significant changes are needed and willingness to consider selectively specific proposals for reform. A small but growing number of countries have begun to look squarely and objectively at their total education systems in terms of both internal and external efficiency. Some factors which may encourage this highly useful practice of self-examination are suggested here.

143. Awareness of financial constraints may be a powerful inducement to considering alternative modes of education. For example, three countries - Ethiopia, Tanzania and Peru - which have faced their problems resolutely and with imagination were all confronted by serious financial problems. If this is so, then the unfavorable effects of recent economic changes on many of the poorest countries may encourage a critical and objective review of existing systems. For the more favored countries where growth prospects have substantially improved there may be less inclination to experiment or question conventional practices, but the need to plan for rapid expansion does compel a searching review of existing conditions.

144. The beginning will normally be through a study - in this case a comprehensive study of the sector as a whole which assesses broadly the degree to which the country's total learning system responds to its development objectives and needs. Such an assessment, perforce, includes a fresh look at accepted objectives and updating of the estimates of needs.

145. To achieve their best results comprehensive sector studies must be undertaken at the initiative of, and carried out by, the country itself. Technical assistance and guidance from the Bank, Unesco or some other source may also be needed. The Bank has provided financial help for one such study, in Ethiopia, and has also assisted or cooperated with those in Sierra Leone, Indonesia and the Philippines. It is also financing a number of subsector self studies such as a review of basic education in Mali and of the role of the Koranic schools in Mauritania. During the next four years we might expect that from 8 to 12 comprehensive sector self studies will be initiated with Bank financial help plus an undetermined number of more specialized studies.

146. A second way of encouraging innovative attitudes is through technical assistance in the identification and preparation of projects as provided by the Bank/Unesco and Bank/FAO Cooperative Programs or directly by the Bank. These services will continue, although it is expected that developing countries will gradually assume more direct responsibility for sector studies and analysis leading up to policy, strategy and project decisions and not just for the decisions themselves.

147. Responding to the second question, it must be acknowledged that the risks inherent in highly innovative policies are substantial. In the face of the uncertainties involved, embarking into the relatively uncharted regions of rural and poverty oriented educational development will [illegible]

including the politically accountable leaders of LDCs, a risky business indeed. But since the foreseeable effects of continuing to neglect these needs would certainly be more costly, it is clearly preferable to pursue a prudent, but active, course while seeking to identify and minimize the risks involved.

148. It has been pointed out frequently in this paper and elsewhere, for the education sector and other sectors, that the major problem of development is management, and especially local management, calling in many cases for organizational reform and in all cases for intensive training programs of all kinds. That continues to be a major recommendation.

149. Thirdly, it has been asked how well positioned is the Bank itself to give effect to the proposals of this paper? The proposed lending program for 1974-78 allocated $1.075 billion in constant prices for Bank/IDA lending to the education sector, as compared with actual lending for the period 1969-73 of $947 million, an increase of about 14%, covering 80 projects as compared with 66 projects in 1969-73, an increase of 21%. In addition, nearly $350 million for education and training components is expected to be included in lending for other sectors. This moderate increase is justified given the rapid expansion of education lending during the previous five years (by nearly four times), the need for additional staff for project related training and, above all, the experimental nature of some of the new emphases indicated in the profile of lending (Table 5). This program would permit the necessary "tooling up" for substantial expansion beginning about 1978.

150. Qualitatively, the answer is mixed. In aggregate terms the distribution of lending in Table 5 does reflect the policy directions suggested. This is supported for the most part by the content of projects brought to the Board during FY74. There is foreseen a substantial increase up to 27% in lending for primary and basic education and a proportional decrease for intermediate and higher. General education, including comprehensive schools, declines, technical education and teacher training remain at approximately the same levels while education for rural populations (agricultural plus a substantial part of primary and basic) mounts sharply as does health personnel training. The estimated increase in technical assistance from 7% to 9%, which may in fact go higher, is significant.

151. When we turn to the distribution of lending by income levels of countries, the result is less reassuring. Table 6 below shows that of the currently projected education lending program, 33 countries with GNP per capita over $250 and less than 40% of the population would receive 58% of the lending, while 35 countries under $250 (not including India) with over 60% of the population would receive 42%. Per capita lending would range from a low of $1.03 in countries with $120 per capita GNP (excluding India) up to a high of $4.40 in countries over $750. There are, admittedly, many possible explanations in particular cases for these disparities - differences in loan absorptive capacity, education technology, economic sophistication and skill levels required, not to mention the greater availability of Bank loan funds than of IDA credits. But since this distribution is considerably worse in the education sector than for Bank lending as a whole, regional lending programs must be restudied with a view to improvement in this respect for the education sector.

Table 6: EDUCATION LENDING: FY74-78 PROJECTIONS BY GNP PER CAPITA

(US$ Million)

	I Below $121	II $121-250	III $251-750	IV $751-1500	Total
Amount	400 (360)1/	270	800	110	1,580 (1,540)1/
Number of countries	22	14	28	5	69
Number of projects2/	33	18	47	7	105
Population (millions)	900 (350)1/	209	330	25	1,464 (914)1/
Education lending per capita	$0.44 ($1.03)1/	$1.29	$2.42	$4.40	$1.08 ($1.69)1/
All sector lending per capita	$8.59 ($12.35)1/	$22.87	$28.80	$11.58	$15.44 ($20.01)1/

1/ Calculated without India.
2/ Operations.

152. Finally, in projects for basic education where capital expenditure is to be minimized and physical facilities are simple and the locations widely scattered, international competitive bidding generally will not be appropriate. Greater resort to construction by negotiated contracts, force accounts or some form of selfhelp community effort involving contributions of labor and materials will be needed. In this connection, if building costs are truly to be low enough to be replicable and if local capabilities are to be brought into play, the Bank and its borrowers might reconsider what is a "proper" building for the Bank to finance. Instead of the usual concept of a structure lasting 30-40 years, there might be many advantages, including cost, in designing first generation models for shorter periods of time.

153. In some other respects, although no new policy issues appear to be involved, implementation of the policies and programs proposed will require greater use of flexible procedures for financing and procurement which already exist in the Bank but have not been fully utilized in the education sector. The Pearson Commission recommended in 1969, with agreement in principle by the Bank, that "greater resources for research and experimentation with new techniques" should be provided by World Bank Group lending. This was further defined as "... loans to finance: (1) research and experimentation with new curricula, methods, structures, materials, and plant design; and (2) the establishment and partial operation of new institutions based on the results." Since then, through its own research allocations and through provision in loans and credits the Bank has given increasing support to research and studies leading to improved techniques. But the effort can be greatly expanded. In particular, in order to give momentum to experimentation the Bank can lend an appropriate part of the total costs of an experiment - both capital and operational - over a stated period of time. This policy should apply in all parts of the education sector, although in the immediate future it will perhaps be most widely used in basic education, where project models, criteria and standards are still being developed.

154. In view of the crucial role of the teacher in bringing about educational change (or in failing to do so), the capital and operational costs of training of teachers and administrators - the human infrastructure of education systems - should be financed by the Bank as has been done in the third Indonesian project (Credit 387-IND).

Conclusion

155. Bank lending operations in any sector are part of a continuing relationship with its member country which is rooted in agreement upon an overall development strategy and upon individual sector strategies such as education. Such strategies take their direction from the country's own definition of its development objectives and aspirations.

156. Recognition of the sovereign prerogative and the practical necessity for a country to determine its own affairs does not, however, preclude the possibility of a useful and constructive dialogue between it and the Bank. If there is no substitute for the borrower's own judgments regarding political and social issues, it may also be true that from its experience in development financing and its broad awareness of technical alternatives and their outcomes in other countries the Bank may help to illuminate the choices a country faces and help it to make better decisions. The Bank hopes to maintain such a dialogue beginning with policy and strategy definitions and leading on through lending operations to the implementation of projects and ultimately their evaluation. Through this dialogue, it is hoped there may emerge for each country a unity of purpose and plan between it and the Bank.

LIST OF ANNEX TABLES

ESTIMATED TOTAL ENROLLMENT BY LEVEL OF EDUCATION[1/]

(In Millions)

	1950	1960	1965	1970
		FIRST LEVEL		
Developed Countries	112.4	124.5	129.7	141.8
Developing Countries	64.7	118.9	159.6	201.4
Africa	8.5	18.9	25.9	32.4
Asia[1/]	53.3	87.7	113.9	138.8
Latin America	15.3	26.9	34.7	43.3
World[1/]	177.1	243.4	299.3	343.2
		SECOND LEVEL		
Developed Countries	30.5	50.7	64.5	70.8
Developing Countries	7.5	18.2	29.3	42.4
Africa	0.7	2.1	3.6	5.1
Asia[1/]	12.7	21.3	30.7	36.3
Latin America	1.7	3.9	6.7	10.3
World[1/]	38.0	68.9	93.8	113.2
		THIRD LEVEL		
Developed Countries	5.4	9.1	14.3	20.5
Developing Countries	0.9	2.1	3.7	5.5
Africa	0.1	0.2	0.3	0.4
Asia[1/]	1.1	4.0	5.0	6.2
Latin America	0.3	0.6	0.9	1.5
World[1/]	6.3	11.2	18.0	26.0

[1/] Not including the Peoples' Republic of China, Democratic Republic of Korea and Democratic Republic of Vietnam.

Source: Unesco 1972 Statistical Yearbook.

ESTIMATED NUMBER AND RATE OF ILLITERATES IN THE DEVELOPING WORLD, AROUND 1960 AND 1970

(In Millions)

	Developing Countries		Africa		Asia		Latin America	
Around 1960:								
Males	295	50%	56	73%	224	45%	17	28%
Females	406	69%	68	88%	318	63%	23	37%
Total	701	59%	124	81%	542	55%	40	33%
Around 1970:								
Males	306	40%	61	63%	231	37%	16	20%
Females	450	60%	82	84%	348	57%	23	27%
Total	756	50%	143	74%	579	47%	39	24%

Source: Unesco Statistical Yearbook, 1972

COMPARATIVE EDUCATION INDICATORS

Comparative education data are useful in the evaluation of various education systems and the analysis of relative stages of educational development between various countries. However, on the basis of the present data, cross-national comparison should be approached with great caution. Data presented in the following table have been collected largely by the Bank missions from government sources; the remainder are staff estimates or data from Unesco. Efforts have been made to standardize definitions and, within limits, to check the accuracy of the data. Nevertheless, such data are still imperfect in several respects and the Bank is working to improve them progressively on the occasion of its operational work. In the use of these data, the following qualifications should be borne in mind:

1) "Education" as defined in the table includes all education and training, formal and nonformal;

2) "Primary" education refers to education at the first level and "secondary" education refers to all education at the secondary level regardless of type (e.g., general, technical, agricultural);

3) "Vocational" education (Col. 10) includes enrollments in technical, commercial, agricultural, vocational and home-economics courses;

4) "Literacy rates" (Col. 3) are usually obtained from country censuses. In many countries they are only approximations and it is doubtful that any uniform definition of "literate" has been followed consistently;

5) "Public expenditure in education" (cols. 4 and 6) refers to all capital and recurrent expenditures devoted to education by public and quasi-public agencies;

6) "Enrollment ratios" (Cols. 7 and 9) refer to school year and mean the percentage of eligible children enrolled full-time in the appropriate school, public and private by level. They are often subject to a wide margin of error in the developing countries owing to variation in the accuracy of basic data (i.e., age-specific population and enrollments). Enrollment figures frequently are higher than the number of students

	Year	Population (Millions) (1)	GNP/CAPITA (US$) (2)	Literacy Rate (% of Adults) (3)	Public Education Expenditures Per Capita (Market Prices US$) (4)	% of GNP Devoted to Education (Public Expenditures only) (5)	% of Total Public Expenditures Devoted to Education (6)	Primary Enrollment Ratio Net (7)	Primary Students Per Teacher (8)	Secondary Enrollment Ratio Net (9)	% Secondary Enrollment in Vocational Schools (10)	Secondary Students Per Teacher Full-time Equivalent (11)	% Higher Enrollment in Agriculture & Engineering (12)	Annual Output from Higher Education Per 100,000 Population (13)
ADVANCED														
Austria	1970	7.5 G	2,200 G	99	73	4.3	9 9	99	24	46	60	12	24	77 B
Canada	1971	21 6 G	4,140 G	98	352	8.2	21.1	98	24	82	...	17	9	630
Germany, Fed. Rep.	1970	61.3 G	3,210 G	99	149	4.2	14.2	91	33	91 Y	30	22	19	211
Japan	1971	104.6 G	2,130 G	99	50 C	3 9	20.5	99	26	90	20	21	21	308
Netherlands	1971	13.2 G	2,620 G	99	216	7.7	17.0	95	29	70	60	19	25	230 E
New Zealand	1971	2.9	2,470	99	110	4.8 M	16 5 M	99	27	68	...	18	18	287
Norway	1970	3.9 G	3,130 G	99	169	6.7	17.5	99	23	71 E	22 E	16	22	64 C
Sweden	1970	8.1 G	4,240 G	99	311	9.0	15.0	100	18	88	31	16	14	260
United Kingdom	1970	55.9 G	2,430 G	97	94	5.8	13.8	98	28	58	5 C	18	16	188 B
U. S. A.	1970	202.1 G	5,160 G	99	253	5.8	16.0	97	25	94	...	20	7	520
EUROPE														
1. Greece	1971	8 9	1,250	82 E	23 E	2.2	9.3 E	99 E	33 E	59 E	16 E	31 E	14 E	86 F
2. Ireland	1972	3.0 G	1,510 G	98	58	5.1	14.8	97	35	75	22	19	12	154
3. Spain	1970	34.0 G	1,100 G	94 D	20	2.4	12.5 E	91	35	29	22 C	30	19	31 C
AFRICA														
1. Algeria	1971	14.4	360	25 B	34 F	9.0 F	29.8 F	64	40	13	18	26	6	22
2. Cameroon	1970	5.8 G	200 G	...	6	3.0	20.0	74	48	6	23	25	4	7
3. C. A. R.	1970	1.6 G	150 G	...	5	4.0 N	20.0	73 X	64	4 X	18	30	. .	.
4. Chad	1970	3.7 G	80 G	7	3 D	4.3 N	14.3 D	33	72	2	8	30	.	..
5. Congo (B)	1970	1.1 G	270 G	50 ?	14	5.8	23.2	80 X	59	13	10	28	.	. .
6. Ethiopia	1971	25.3	80	7	3	4.0 F	19.5	16	51	3	2	34	17	5
7. Gabon	1968	0.5 G	700 G	30 Dt	11 C	3.3 C	13.7 C	75	40 E	10	18	18 E	1	...
8. Ghana	1970	8.8 G	250 G	...	13	4.7	21.7 Q	74	29	8	4	18	15 E	13 E
9. Ivory Coast	1968	5.2 G	320 G	9 A	10	4.2 C	20.4	44	46	6	8	23	.	..
10. Kenya	1970	11.7 G	160 G	30 D	8 H	5.3 H	20.0	64	34	10	2	22	29 D	5 A
11. Lesotho	1971	0.9	100	40	4	5.8	17.1	69	44	8	3	22	-	1
12. Liberia	1970	1.6 G	210 G	15	8	3.71	11.7	50 X	31	12 X	6	16	12 C	9 C
13. Mali	1972	5.1 G	70 G	10	3	4.6 N	32.3	18	40	4	6	17	36	5
14. Mauritania	1970	1.2 G	170 G	10	2	4.5	21.0	15 X	22	3	13	24	15	...
15. Mauritius	1972	0.8 G	280 G	80	31	3.7	11.7	86	31	30	2	30	. .	55
16. Morocco	1970	15.4 G	260 C	20	9	4.1 N	17.4	54	35	12	3	22	3	7 A
17. Nigeria	1971	56.5	140	...	3	3.2 N	...	34 X	37	4	18	23	16	6
18. Senegal	1971	4.0	251	10	11 F	4.0 N	25.1 H	38 X	46	11 X	8	25	2 C	12
19. Sierra Leone	1968	2.7 G	250 G	27	4	3.8	19.5 C	32	31	13	7 C	25	22	9 H
20. Somalia	1971	2.9	70	5	1	...	6.7 E	6	30	2	3	20	20	1
21. Sudan	1970	16.1 G	120 G	...	4 A	3.5 B	22.0 B	31 X	48 A	2 A	3 C	17 A	23 B	10 C
22. Tanzania	1971	13.3	110 G	...	4	4.5	16.4	37	45	2	6	29	11	3
23. Uganda	1970	10.1 G	130 G	25 A	6	3.2 N	24.3 Q	46 EU	36	4 U	11	21	10	5
24. Upper Volta	1972	5.5 G	70 C	5	2	4.0	27.6	10	65	2	5	23	6	1
25. Zaire	1970	19 3 G	90 G	13	8	5.7 N	19.0 E	78	64	8	20	24	10	2 E
26. Zambia	1971	4.2	380	43	28	5.6	17.4	80 X	50	12	5	17	8	2
C. AMERICA AND CARIBBEAN														
1. Costa Rica	1971	1.7	590 .	89	30	5.2	22.7	84	29	26	8	25	11	...
2. Dominican Republic	1969	4.1 G	430 G	55	6	2.9 F	17.0	80	56	17	1	26	10	16 C
3. El Salvador	1969	3.7 G	320 G	49 YA	10 BV	3.0 B	25.6 CQ	63 C	31	15 C	32 E	.	15 C	7 A
4. Guatemala	1968	5.4 G	391 G	38 YA	6 B	2.5 B	17.6	43	38	6	22	26	10	6
5. Honduras	1972	2.6 G	300 G	52	11	3.9	18.2	81 X	37	14 X	17	14	8	4 E
6. Jamaica	1969	1.9 G	720 G	86	24	4.4	19.1	86 X	52	43	9 A	19	..	11 A
7. Mexico	1970	52.6 G	700 G	76	18	2.6	17 1 Q	71	46	19	23 C	23	26 C	22
8. Nicaragua	1969	2.1 G	430 G	53	10	2.4	19.8	80	36	13	8	23	20 F	15
9. Trinidad and Tobago	1971	1.0	940	90	40	5.1	18.9	95	35	49	11	25	19	14
SOUTH AMERICA														
1. Brazil	1971	93.2 F	460 G	67 F	16 H	3.0 H	12.0 H	94	31 E	16 E	17 E	...	18 C	35 C
2. Chile	1969	9.9 G	760 G	90	32	5.4	29.0 F	90 F	40	35	31	32 A	28 C	41 A
3. Colombia	1970	22.3 G	370 C	74 H	12	3.7 H	10.9	99 X	36	19 X	21	14	29	30
4. Ecuador	1968	6.3 G	310 G	68 A	8 V	3.2 V	21.5 C	71	38	18	29 U	13 A	29 C	21 C
5. Guyana	1968	0.7 G	390 G	83 A	15	5 O	14 4	90 X	33 A	18 C	3 C	28	3 C	...
6 Paraguay	1970	2.4 G	280 G	79	5	2.2	14.0	89 X	26	17 X	2	15	12	31
7. Peru	1971	14.4	480	72	18	4.5	21.1	80	37	30	15	22	23	111
8. Venezuela	1970	10.6 G	1,060 G	81	45	4.9	22.0	80	33	35	32	22	18	59
ASIA														
1. China (Taiwan)	1973	14.9 G	430 G	82	19.3	3.3	14.0	98	40	61	23	26	32	299
2 India	1971	551.1	110	29	3 AV	2.6 AUV	...	79 X	63 A	28 X	6 AY	20 AY	11 AY	52 AY
3. Indonesia	1971	119.2	80	56	1 Q	2.6 NV	13.0 F	77 X	39	15 X	26	18 X	8	...
4. Iran	1971	29.8	650	37	11	3.1	10.8	62	33	23	3	36 F	23	39 F
5. Iraq	1970	9.7 G	370 G	26	19	6.7	16.3	64	22	25	3	26	17	80
6. Jordan	1970	2.4 G	260 G	55 A	7.3	4.6	17.1 Q	90	34 G	35	9	22	1	46
7. Korea	1971	31.8	290	85 B	13.0	3.6	16.7	100 X	56	46	49	36	28	117
8. Lebanon	1971	2.8	660	86 F	21 F	4.0	21.0	79	18 U	34	36	23	4	120
9. Malaysia	1972	11.1 G	400 G	60	32	6.4	20.9	90 X	32	33 X	2	26	19	80
10. Oman	1972	0.6 G	450 C	20	12	2.3	3.8	24 X	33	0.2 X	23	9	..	...
11. Pakistan	1972	62.7 C	130 G	39	1	1.7	8 0	48	35	8	5	18 E	7 E	41 P
12. Philippines	1972	37.9 G	240 G	72	6.3	4.6	29.0	119 X	30	71	8	36	10	457
13. Singapore	1972	2.1 G	1,200 G	75 F	46	3.1 H	11.5	107 X	33	47	6	24	20	172
14. Thailand	1971	37.3	210	70	8 V	3.7 H	17.1	83 X	34	13 X	13	25	15	37
15. Turkey	1969	36.2 G	340 G	49 A	9	3.5	17.1	92 X	42	25 X	14	33	26	41
16. Yemen Arab Republic	1971	5.9	90	10	1 F	1.0 P	9.4 P	12 H	40 H	1 H	3 H	18 H	...	1 H
17. Yemen P. D. R.	1972	1.5 G	120 G	10	6 G	2.3 E	12.6 G	70 X	29	12 X	14	20	8	...
SUMMARY FOR DEVELOPING COUNTRIES														
Number of Countries				57	63	62	62	63	63	63	63	60	55	52
Range				(5-98)	(1-58)	(1.0-9.0)	(3.8-32.3)	(6-119)	(18-72)	(.2-75)	(1-69)	(9-36)	(1-36)	(0-457)
Quartiles: Upper				72	18	4.7	21.0	86	45	29	20	26	23	41
Medium				52	10	4.0	18.2	74	36	13	10	23	15	16
Lower				20	5	3.0	14.0	46	33	8	5	19	8	6

Symbols:
... Datum unavailable
- Magnitude nil or negligible
0 Magnitude less than half of unit employed
? Questionable
* Includes part-time students

Notes:
A = 1965 or before
B = 1966
C = 1967
D = 1968
E = 1969
F = 1970
G = 1971
H = 1972
M = Current prices
N = GNP
P = Including foreign aid
Q = Central Government only
U = Public only
V = Including private expenditure
X = Including overage students
Y = UNESCO sources

Sources: Columns (1) & (2): World Tables (IBRD) Provisional Figures
Columns (3) - (9) & (11): IBRD Missions
Columns (10) (12) & (13): UNESCO Statistical Yearbook and IBRD Missions

July 1974

ANALYSIS OF IBRD/IDA EDUCATION LENDING
FY1963 - FY1974 (Actual)

	FY1963 - 1971 US$ Million	%	FY1972 - 1974 US$ Million	%
A. By Levels				
Primary and Basic	22.48	5	69.00	11
Intermediate	309.65	72	301.08	48
Higher	99.32	23	257.17	41
	431.45	100	627.25	100
B. By Curricula				
General and Comprehensive	190.77	44	269.72	43
Technical	126.48	29	150.54	24
Agricultural	63.03	15	106.63	17
Teacher Training	51.17	12	87.81	14
Health	-	-	12.55	2
	431.45	100	627.25	100
C. By Outlay				
Construction	262.17	61	307.35	49
Equipment & Furniture	148.16	34	275.99	44
Technical Assistance	21.12	5	43.91	7
	431.45	100	627.25	100

ANNEX 4

IBRD/IDA EDUCATION PROJECTS FY1963-1974
STUDENT PLACES PROVIDED OR IMPROVED

Student Places Provided or Improved	1963-1971 Number	%	1972-1974 Number	%	1963-1974 Number	%
General and Comprehensive	553,000	58	458,000	60	1,011,000	59
Technical	250,000	27	144,000	19	394,000	23
Agricultural	73,000	8	82,000	11	155,000	9
Teacher training	66,000	7	81,000	10	147,000	9
Total	942,000	100	765,000	100	1,707,000	100

ANNEX 5

EDUCATION LENDING BY GNP PER CAPITA OF BORROWER COUNTRIES, FY1963-FY1974

FY	Countries by GNP per Capita					Total No.	Total Amount	Avg. Amount
	Up to $120	$121-250	$251-750	$751-1500	Over $1500			
	(Number of Loans/Credits)						-(US$ Millions)-	
1963			1			1	5.0	5.0
1964	1	2				3	17.6	5.9
1965	1	2				3	29.5	9.8
1966	1	1	1	1		4	33.95	8.5
1967	1	3	2			6	51.8	8.6
1968	1	1	3			5	24.2	4.8
1969	2		7	1		10	81.8	8.2
1970		5	3	3		11	79.9	7.3
1971	5	2	6	1		14	107.9	7.7
1972	2	5	4	2	1	14	180.4	12.9
1973	7	3	6	2		18	293.55	16.3
1974	1	1	6	1	1	10	153.1	15.3
Total	22	25	39	11	2	99	1,058.7	
Average amount of Loan/Credit (US$ Millions)								10.7

IBRD/IDA EDUCATION PROJECTS APPROVED AS OF JUNE 30, 1974

Fiscal Year		Country	Main Purpose	(U.S.$ Million) Total Project Cost	Amount of Loan 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	
	15.	Thailand	Secondary Technical and Agricultural (T.A.)	21.0	6.0	
	16.	Uganda	Secondary General	14.3		10.0
	17.	Malawi	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
	22.	Ecuador	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	
	27.	Guyana	Secondary General and Teacher Training (T.A.)	10.0	2.9	2.9
	28.	Zambia I	Secondary General, Technical and Teacher Training	36.2	17.4	
	29.	Malaysia	Secondary General, Technical, Agricultural and Teacher Training	16.4	8.8	
	30.	Tanzania II	Secondary General and Teacher Training	7.2		5.0
	31.	Korea	Secondary and Post-Secondary Agricultural and Technical (T.A.)	26.8		14.8
	32.	El Salvador	Secondary General, Technical and Post-Secondary Agricultural (T.A.)	8.4	4.9	
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	

IBRD/IDA EDUCATION PROJECTS APPROVED AS OF JUNE 30, 1974

Fiscal Year		Country	Main Purpose	(U.S.$ Million) Total Project Cost	Amount of Loan Bank	IDA
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		2.0
	57.	Uganda II	Secondary General and Technical; Post-Secondary and Non-Formal Agricultural; Health and Medical Training (T.A.)	10.4		7.3
1972	58.	Ireland I	Secondary General and Agricultural; Post Secondary Technical (T.A.)	33.0	13.0	
	59.	Morocco II	Secondary General and Technical; Agricultural Teacher Training; University (Agricultural); Adult Non-Formal Technical Training (T.A.)	13.5		8.5
	60.	Zaire I	Secondary Technical; Primary and Technical Teacher Training (T.A.)	11.8		6.5
	61.	Jordan I	Secondary General and Agricultural; Post-Secondary Technical; Teacher Training (T.A.)	9.8		5.4
	62.	Singapore I	University (Technical) (T.A.)	20.0	9.5	
	63.	Indonesia II	Agricultural Secondary; Adult Training (T.A.)	12.3		6.3
	64.	Nigeria	Post-Secondary General; Teacher Training (T.A.)	27.8	17.3	
	65.	Malaysia II	Secondary Technical; University (Science); ITV	28.4	15.5	
	66.	Liberia	Secondary General; University (Agricultural); Teacher Training (T.A.)	9.6		7.2
	67.	Central African Republic	Secondary General; Post-Secondary Technical; Teacher Training (T.A.)	5.4		3.9
	68.	Thailand II	University (Agricultural) (T.A.)	28.3	15.4	
	69.	Spain II	Secondary General; Technical Teacher Training; University (Technical) (T.A.)	152.5	50.0	
	70.	Cameroon II	Secondary General and Technical; Teacher Training; Non-Formal Adult Technical (T.A.)	11.4		9.0
	71.	Iraq I	Secondary General and Technical; Post-Secondary Technical; Non-Formal Adult Agricultural and Technical Training; ITV	19.9	12.9	

IBRD/IDA EDUCATION PROJECTS APPROVED AS OF JUNE 30, 1974

Fiscal Year		Country	Main Purpose	(U.S.$ Million) Total Project Cost	Amount of Loan (Loan Bank	(Credit) IDA
1973	72.	Greece II	University Engineering and Science; Teacher Training; Technical and Agricultural Secondary; Vocational Training (T.A.)	43.9	23.5	
	73.	India	Agricultural University, Computer Center, Curriculum Development (T.A.)	19.4		12.0
	74.	Trinidad & Tobago II	General Secondary, Teacher Training (T.A.)	19.7	9.3	
	75	Philippines	Agricultural University, Agricultural Secondary Schools, Technical and Vocational Institutions, Development Centers (T.A.)	17.7		12.7
	76.	Paraguay	General Secondary, Technical Post-Secondary (T.A.)	7.3		5.1
	77.	Lebanon	Basic and Secondary General, Teacher Training (T.A.)	15.9	6.6	
	78.	Thailand III	General Secondary, University, Teacher Training (T.A.)	39.0		19.5
	79.	Tanzania IV	Primary, General Secondary, Medical School (University), Technical Secondary (T.A.)	14.6		10.3
	80.	Indonesia III	Teacher Training, Learning Materials, Development (T.A.)	39.2		13.5
	81.	Algeria	Technical and Agricultural Post-Secondary and University (T.A.)	10.2	6.0	
	82.	Korea II	Engineering Science and School of Education at Universities, Teacher Training, Agricultural and Technical Secondary (T.A.)	70.2	23.0	20.0
	83.	Zambia III	Paramedical, Health Training Centers, Agricultural School of University, Farmer Training Centers, Teacher Training, General Secondary, Development (T.A.)	40.1	33.0	
	84.	Bangladesh	University and Post-Secondary Agricultural and Technical, Teacher Training (T.A.)	36.4		21.0
	85.	Mali	Technical Teacher Training, General Secondary, Technical Education, Development (T.A.)	5.5		5.0
	86.	Nigeria	General Secondary, Teacher Training (T.A.)	107.4	54.0	
	87.	Upper Volta	General Secondary, Youth Training, Development (T.A.)	3.6		2.85
	88.	Costa Rica	General Secondary, Adult Training (T.A.)	9.4	6.2	
	89.	Ethiopia	General Secondary, Agricultural Training, University School of Science, Teacher Training, Development (T.A.)	12.7		10.0
1974	90.	Yemen Arab Republic	Secondary General and Agricultural, Non-Formal Basis; Teacher Training (T.A.)	16.95		11.0
	91.	Colombia IV	Primary Agricultural; Secondary General; Post Secondary Technical and Teacher Training, Rural Development Center	33.50	21.2	
		Chad	Supplementary credit to Chad I & II			0.9
	92.	Peru	General Secondary (TA)	40.00	24.00	
	93.	Honduras	Vocational and Agricultural Training Centers; Teacher Training (TA)	8.66	3.0	3.0
	94.	Ireland II	Secondary General, Post-Secondary Technical, University Agricultural; Teacher Training (T.A.)	62.84	25.0	
	95.	Mauritania	Secondary Technical, Community Development Vocational and Teacher Training (T.A.)	4.30		3.8
	96	Singapore II	University law, Arts and Science (T.A.)	42.00	19.5	
	97.	Oman	Teacher Training, Agricultural Secondary, Youth Training (TA)	11.10	5.7	
	98.	Malaysia III	General Secondary; Post-Secondary General and Technical; Teacher Training	41.40	19.0	
	99.	El Salvador II	Primary and Basic Education; Youth Training Center (T.A.)	24.20	17.0	
		TOTAL		1936.45	642.3	416.4

Summary of Education Lending by Fiscal Year 1963 - 1974

Fiscal Year	Bank	IDA	Total
1963	-	5.0	5.0
1964	-	17.6	17.6
1965	6.0	23.5	29.5
1966	2.75	31.2	33.95
1967	15.5	36.3	51.8
1968	10.6	13.6	24.2
1969	57.3	24.5	81.8
1970	52.3	27.6	79.9
1971	68.2	39.7	107.9
1972	133.6	46.8	180.4
1973	161.6	131.95	293.55
1974	134.4	18.7	153.1
Total 1963-1974	642.25	416.45	1058.7

COMPARISON OF EDUCATION EFFICIENCIES IN
URBAN AND RURAL AREAS, LATIN AMERICA

(a) Successful Completers and Dropouts in Primary Education

	Total Country Successful Completers	Urban Successful Completers	Rural Successful Completers
	as a % of entrances		
Colombia	27.3	47.3	3.7
Dominican Republic	30.4	48.1	13.9
Guatemala	25.4	49.6	3.5
Panama	62.3	80.7	45.3
Average Percentage Completers	39	51	22

(b) Efficiency of Primary Education

	Years to Produce a Successful Completer				Input/Output Ratio		
	Ideal	Total Country	Rural	Urban	Total Country	Rural	Urban
Colombia	5	11	66	8	2.4	13.2	1.7
Dominican Republic	6	14	27	9	2.3	4.5	1.6
Guatemala	6	14	70	10	2.3	11.6	1.6
Panama	6	9	12	8	1.5	1.9	1.2

Source: Based on Unesco Report, "The Statistical Measurement of Educational Wastage"

AVAILABILITY OF COMPLETE PRIMARY SCHOOLS IN RURAL AND URBAN AREAS

Percentage of the Total Number of Primary Schools in Each Category (Rural and Urban) which Offer the Complete Number of Grades

		Number of Countries	Complete Urban Schools as a % of Total Urban Schools	Complete Rural Schools as a % of Total Rural Schools
(a)	Countries by GNP Per Capita			
I	Up to $120 (excluding India)	9	53	36
	India		57	49
II	$121 - 250	7	72	32
III	$251 - 750	16	77	62
IV	$751 - 1,500	2	89	56
V	Over $1,500	6	100	99
(b)	By Major Regions			
	Africa	16	79	54
	Asia (excluding India)	9	94	66
	India		57	49
	South and Central America	10	88	34
	Europe	5	98	99

Source: Based on data in the 1972 Unesco Statistical Yearbook

FEMALE ENROLLMENT AS A PERCENTAGE OF TOTAL PRIMARY AND SECONDARY SCHOOL ENROLLMENTS 1/

	1960	1965	1970
PRIMARY SCHOOLS			
A. Countries by GNP per capita			
I - Up to $120	35%	37%	38%
II - $121-250	42%	43%	44%
III - $251-750	43%	44%	45%
IV - $751-1,500	48%	49%	49%
V - Over $1,500	49%	49%	49%
B. By Continents			
Africa	37%	38%	40%
The Americas	49%	49%	49%
Asia 2/	38%	39%	38%
Europe	49%	48%	49%
Oceania	48%	47%	48%
Developed Countries	49%	49%	49%
Developing Countries	39%	40%	40%
World 2/	43%	44%	44%
SECONDARY SCHOOLS			
A. Countries by GNP per capita			
I - Up to $120	19%	23%	28%
II - $121-250	27%	30%	29%
III - $251-750	37%	41%	41%
IV - $751-1,500	45%	44%	45%
V - Over $1,500	47%	47%	48%

	1960	1965	1970
SECONDARY SCHOOLS (Continued)			
B. By Continents			
Africa	31%	30%	32%
The Americas	49%	49%	49%
Asia 2/	35%	36%	35%
Europe	45%	46%	47%
Oceania	42%	42%	44%
Developed Countries	48%	51%	49%
Developing Countries	31%	26%	35%
World 2/	44%	44%	43%

1/ Complete equity between the sexes would imply a female enrollment ratio of 49%.

2/ Not including Peoples' Republic of China and Democratic Republic of Vietnam.

Source: Unesco 1972 Statistical Yearbook.

PUBLIC EXPENDITURE ON EDUCATION AS A PERCENTAGE OF THE BUDGET AND GNP

	Countries by GNP Per Capita	1960		1965		1970	
		Budget	GNP	Budget	GNP	Budget	GNP
I	Up to $120	6.7	1.8	9.6	2.3	13.2	2.9
	(No. of countries)	(5)	(6)	(12)	(11)	(7)	(6)
II	$121-250	20.0	3.6	21.8	3.2	18.9	3.8
	(No. of countries)	(3)	(10)	(14)	(17)	(7)	(7)
III	$251-750	15.3	2.3	14.6	2.9	13.5	3.0
	(No. of countries)	(8)	(17)	(15)	(20)	(15)	(13)
IV	$751-1,500	6.1	2.1	8.3	2.2	10.1	3.1
	(No. of countries)	(2)	(3)	(5)	(5)	(5)	(8)
V	Over $1,500	12.9	3.8	19.5	5.5	17.8	5.8
	(No. of countries)	(4)	(14)	(14)	(14)	(10)	(12)

PUBLIC EDUCATION EXPENDITURES
(In US Dollars-Current Prices)
Per Capita of Population/Pupil

	Countries by GNP Per Capita	1960		1965		1970	
		Population	Pupil	Population	Pupil	Population	Pupil
I	Up to $120	1	16	2	21	2	18
II	121-250	5	33	6	40	9	49
III	$251-750	7	43	9	58	10	57
IV	$751-1,500	17	114	29	164	34	179
V	Over $1,500	67	338	113	504	168	749

Source: Based on data compiled by Unesco.

SCHOOL TEXTBOOK PRODUCTION[1/]

Countries by GNP per capita	No. of Books (000's)	Enrollment (000's)	Textbooks per student
Up to $250			
Ghana	19	1,518	0.01
Cameroon	30	956	0.03
Nigeria	340	3,871	0.08
Uganda	259	768	0.34
Kenya	592	1,404	0.42
Tunisia	1,580	1,070	1.48
Sri Lanka	4,229	2,653	1.59
Egypt	9,694	5,187	1.87
		Average	0.73
$251-1,500			
Chile	1,695	2,345	0.72
Argentina	3,973	4,359	0.91
Malaysia	6,945	2,274	3.05
Singapore	2,396	513	4.67
Spain	30,592	5,879	5.20
		Average	2.91

1/ School textbooks for primary and secondary education.

Source: Unesco 1971/72 Statistical Yearbook.

ANNEX 12

INTERNAL EFFICIENCY[1/]

	Percent Dropouts		
	Lowest	Median	Highest
I. ESTIMATED PERCENT DROPOUT IN COHORTS ENTERING PRIMARY EDUCATION AROUND 1960			
A. Countries by GNP per capita			
I - Up to $120	27.9	57.5	81.3
II - $121-250	13.2	49.0	75.5
III - $251-750	8.8	45.1	74.7
IV - $751-1,500	6.7	45.7	60.6
V - Over $1,500	0.7	9.7	56.8
B. Countries in Major Regions			
Africa	26.2	54.0	81.3
Latin America	33.1	61.6	74.7
Asia	0.7	20.2	64.0
Europe	0.7	18.3	48.3
II. ESTIMATED PERCENT DROPOUT IN COHORTS ENTERING SENIOR SECONDARY EDUCATION AROUND 1960			
A. Countries by GNP per capita			
I - Up to $120	5.0	43.2	47.9
II - $121-250	5.2	46.0	62.0
III - $251-750	5.0	28.3	69.1
IV - $751-1,500	11.4	13.9	23.4
V - Over $1,500	4.8	15.0	22.1
B. Countries in Major Regions			
Africa	7.5	41.9	61.4
Latin America	8.5	18.5	28.3
Asia	4.8	18.1	57.8
Europe	8.2	11.4	21.8

1/ The survey covered the educational systems of 58 countries for the years 1960-61 and 1967-68.

Source: Based on data compiled by Unesco.

ANNEX 13

EDUCATION AT THE FIRST AND SECOND LEVELS
STUDENT/TEACHER RATIO

Countries by GNP per capita	1960		1965		1970	
	First Level	Second Level	First Level	Second Level	First Level	Second Level
I - Up to $120	39	19	42	21	42	21
II - $121-250	42	21	42	24	43	25
III - $251-750	37	15	36	14	37	19
IV - $751-1,500	31	17	30	18	36	15
V - Over $1,500	28	18	25	17	24	16

Source: Unesco 1972 Statistical Yearbook.