

# UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL



DISTR. LIMITED

E/ICEF/L.1279/Add.1 16 March 1972

ORIGINAL: ENGLISH

UNITED NATIONS CHILDREN'S FUND Executive Board 1972 session

UNICEF AID FOR EDUCATION, REVIEW OF POLICY

bу

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72-10861

(79p)

# Contents

		Paragraphs
INI	RODUCTION: ORIGIN AND CONTEXT OF THE REVIEW	1 - 6
I.	THE OVER-ALL NEEDS OF THE CHILD AND THE DEVELOPMENT OF EDUCATION: PROBLEMS, OBJECTIVES AND POSSIBILITIES OF MEETING MINIMUM NEEDS	7 - 59
	The over-all needs of the child: the distribution of UNICEF assistance	8 - 12 13 - 19
	shantytowns, drop-outs	20 - 26 27 - 28 29 - 33 34 - 35
	Objectives and possibilities of meeting minimum needs A wider conception of education	36 - 47 48 - 55 56 - 59
II.	PRIORITIES FOR UNICEF ASSISTANCE; RESOURCES; THE TARGET GROUP; INNOVATION AND ONGOING NEEDS; A STRATEGY	60 - 117
	Priorities and resources. The target group. Innovation. Educational renovation and adaptation to new solutions Wastage. Relation of formal and non-formal systems. Population education. Types of innovatory project aided by UNICEF. Education for those who will not continue beyond primary. Innovation in teacher-training. A strategy.	61 - 64 65 - 69 70 - 85 86 - 90 91 - 97 98 - 105 106 107 - 108 109 - 113 114 - 116
III.	TREND AND DISTRIBUTION OF UNICEF AID; THE JOINT UNICEF- UNESCO GUIDELINES; ACTIVITIES UNDER THE GUIDELINES AND THEIR CRITIQUE	118 - 166
	The joint UNICEF-UNESCO guidelines of 1968	121 125 126 - 127

# Contents (continued)

		Paragraphs
	Some major activities under the guidelines, and their critique	128 - 166 128 - 136 137 - 141 142 - 156 157 - 158 159 - 160 161 - 163 164 165 - 166
IV.	OVER-ALL EDUCATIONAL AID; PROJECT SELECTION AND APPRAISAL	167 - 186
	Over-all aid for education	167 - 174 175 - 186
٧.	SUMMARY AND CONCLUSIONS	187 - 209
	Objectives and possibilities: new targets  Problems and solutions  Innovation and adaptation in educational services  Types of recommended activity  Complementarity with other educational aid  Review of the joint UNICEF-UNESCO guidelines of 1968.  Suggested new strategy  Implementation	187 - 192 193 - 195 196 - 199 200 201 - 202 203 204 205 - 209

#### INTRODUCTION: ORIGIN AND CONTEXT OF THE REVIEW

- 1. The UNICEF Executive Board decided in 1971 (E/ICEF/612, paras. 96-103) to review policy on UNICEF aid for education at its 1972 session. UNICEF assistance to education was last reviewed by the Board in 1968, at which time the Director-General of UNESCO and the Executive Director of UNICEF jointly proposed guidelines for UNICEF assistance (E/ICEF/L.1270). These guidelines were accepted by the Board but with hesitations on the part of some delegations (E/ICEF/576, paras. 35-40), and with an agreement that certain unresolved questions be examined by the Board in two or three years' time. Discussion of UNICEF's educational aid relevant to the present review also took place at the 1969 and 1970 session (E/ICEF/590, paras. 79, 80, and 85-87; and E/ICEF/605).
- 2. The main questions on which a variety of views were expressed during the Board's discussions were (a) whether the proportion of UNICEF aid for education was too high as compared with that going to nutrition and health; (b) whether the aid to education should not be concentrated more on the younger children and be limited to primary and pre-primary education rather than include aid for adolescents; (c) whether formal education should have a lower priority as compared with out-cf-school educational needs; (d) whether the guidelines made the pricrities for UNICEF aid sufficiently clear; (e) whether they took sufficient account of the respective role of UNICEF and UNESCO and other sources of aid; (f) whether UNICEF's aid should not be more geared to qualitative rather than quantitative aspects of education, and "be more effectively related to the most essential elements required in a particular country for effective education appropriate to UNICEF's objectives."
- Juring the review, close attention was paid to these questions and also in order to make the review complete to those on which the Board expressed its consensus. The report also takes into account events that have taken place since the last session of the Board, notably the adoption of the International Development Strategy for the Second United Nations Development Decade by the General Assembly in October 1970 1/2 and resolution 9.1 of the UNESCO General Conference on the development of education adopted shortly after, as well as the results of the Regional Conferences of Ministers of Education held in each of the developing regions in 1971. A further important factor is that the Capacity Study of the United Nations 2/1 is now being implemented and the new country programming procedure should provide a further opportunity for a close integration of UNICEF's assistance into the effort of the United Nations system as a whole, and that of other aidsupplying agencies, multilateral and bilateral.

<sup>1/</sup> International Development Strategy (United Nations 1971, Sales No. No. 71. II.A.2).

<sup>2/</sup> A study of the capacity of the United Nations Development System, United Nations 1969 (Sales No. E.70.I.10).

- 4. The conclusions have also been influenced by the perspective study of the needs of children which is being submitted to the Board (E/ICEF/CRP/72-8) and an attempt has been made to place the review on the context of the total conjuncture of educational assistance, which like education itself, is at a critical point. At the present time a number of other reviews of educational aid policy 3/ are in progress or have recently been made. Notably UNESCO established in the spring of 1971 an International Commission on the Development of Education under the chairmanship of Mr. Edgar Faure to undertake a world review of all aspects of educational development including international co-operation in aid for education. The report of this Commission is expected to be issued in 1972 shortly after the UNICEF Executive Board meets. Meantime, it has been necessary to form conclusions based on existing material and the results of informal consultations with the Commission rather than await the publication of its report.
- 5. In the preparation of this document advice and material were obtained from many sources at the governmental, intergovernmental, and expert level. Consultations took place with the UNDP and the World Bank, and particularly close liaison was maintained with UNESCO as the technical United Nations agency co-operating most closely with UNICEF educational assistance. The ILO, WHO and FAO were also consulted.
- 6. The report and conclusions were studied at an interagency meeting between UNICEF and UNESCO held on 27 and 28 January 1972 at UNESCO, in which UNDP and the ILO also participated. The recommendations on future assistance policy given in the main document are put forward by the Director-General of UNESCO and the Executive Director of UNICEF. However the consultant was left the final responsibility for the views contained in, and the drafting of the present addendum. Its object is to give background information and analysis supporting the joint recommendations.

<sup>3/</sup> Among the reviews given publication or general circulation see Education in the Developing Countries, United Kingdom White Paper HMSO 1970, and Aid to Education in Less Developed Countries (OECD). Sector Working Papers reviewing and needs have also been produced recently in the UNDP, the World Bank, the United States Agency for International Development and other bilateral agencies. See also Philip H. Coombs, The World Educational Crisis, Oxford University Press, 1968 and the statement of Mr. René Maheu, Director-General of UNESCO to the Economic and Social Council, June 1970. The Ford and Rockefeller Foundations are also reviewing their educational aid policies. UNICEF itself, in addition to making the present review, has commissioned the International Committee on Educational Development to undertake a study of non-formal education for rural children which will be available to the 1973 session of the Executive Board.

- I. THE OVER-ALL NEEDS OF THE CHILD AND THE DEVELOPMENT OF EDUCATION:
  PROBLEMS, OBJECTIVES AND POSSIBILITIES OF MEETING MINIMUM NEEDS
- 7. It was pointed out in paragraph 2 of the introduction that there were six main unresolved questions on which a variety of views were expressed at the 1968 Board session when the present joint UNICEF-UNESCO guidelines were adopted. These questions are discussed at various points of the present review and the results are summarized in the conclusions. The sequence and presentation of the document is not, however, framed round these questions, since the treatment has had to range over the subject as a whole, including matters on which there was agreement as well as variance of view. The first of the six questions, however, is of a fundamental nature: namely what should be the right distribution of UNICEF's funds as between education on the one hand and health and nutrition on the other. This question needs to be approached at once as it raises basic issues concerning the nature of the over-all development of the child.

# The over-all needs of the child: the distribution of UNICEF assistance

- 8. The child's over-all development depends, inter alia upon his basic and interlocking needs being met for nutrition, health, welfare, education, and opportunities for self-improvement and for contributing to society. There is, however, no simple prescription to say what proportion of funds either domestic or external should go to the different aspects of child development, except that the best possible balance must be maintained both in terms of the particular child's own interest and of each country's priorities. The interest of each particular child is in the hands of the parents and local agencies. Allocations made by governments and UNICEF are necessarily at the macro-social level, i.e. for programmes and projects.
- 9. The allocation problem at the programme and project level has been studied in Report on Children prepared for the United Nations Commission for Social Development. This report states: "Social targets and techniques of allocation of resources concerning children may be determined by several approaches... Only the cost/benefit procedure is a complete allocation device. The other methods are only aspects or partial features of full allocation procedures. There is a great need for theoretical elaboration and improvement of statistics to carry out these approaches effectively. Meanwhile, a number of simple steps can be taken to secure an adequate place for children and youth in national development."

<sup>4/</sup> These needs are listed because they require the support of social services as well as of the parents. Others, such as the child's need for emotional security, love, and affection, are chitted because they depend more on the parents. For a fuller statement see the "Declaration of the Rights of the Child", General Assembly resolution 1386 (XIV).

<sup>5/</sup> Report on Children (United Nations publication Sales No: E.71.IV.3), p. 57.

- 10. Although costs can be easily identified, it seems doubtful if it could ever be possible, however much statistics were improved, to place monetary values on the different services for child development. Furthermore, attempts to establish a scientific allocation procedure as between children's different needs are complicated by the fact that the needs, though interlocking, are basically different in kind and change at varying rates at different levels of economic and social development. 6/ The average life expectancy, for instance, usually increases fairly rapidly with relatively small advances in a country's per capita income and then tapers off; education usually does not advance as rapidly without a somewhat greater increase in income per head.
- The "simple" steps recommended in Report on Children consist of a "commonsense" as distinct from a scientific solution, i.e. bringing the problems down to the particular needs revealed most clearly in each country at the national and local level, and co-ordinating through whatever planning machinery is available. This is the essence of the "country approach" which UNICEF began to try to follow during the 1960s. The new country programming procedures introduced by UNDP will no doubt provide more data and analyzes than are at present available, to guide the distribution of aid between the different sectors and so permit, in due course, a more specific answer to the question. Meantime the answer would seem to be that the objective of the present distribution of UNICEF's funds between the sectors is to reflect national needs as governments have seen them. Where projects are approved seriatim in different years, it may well be that improvements could be made in these procedures to allow the balance between the various priorities to be weighed more accurately. At Board sessions now, imbalances are being reduced considering all projects for a country together. Discussions at the national level with the country Planning Commission are also designed to reduce this difficulty, and the objective is to have all projects prepared for a period of years related to the country's plan period.
- 12. The changes in the distribution of UNICEF's assistance between the main sectors in the last ten years are shown in the following table, which indicates how the assistance to education has increased:

## UNICEF assistance (commitments) by main sectors

Sector			Annual average				
(millions		of US	dollars)	,	(percentages)	)	
	1960- 1964	1965- 1969	1970- 1 <u>971</u>	1960- 1964	1965- 1969	1970- 1971	
Health Nutrition Child welfare Education Other long-range aid Emergency aid Total	20.4 7.7 1.1 3.4 1.0 0.9 34.5	21.0 4.1 1.6 8.9 1.7 1.4 38.7	31.0 5.5 3.6 14.1 4.2 1.6 60.0	59 22 3 10 3 3	54 11 4 23 4.5 <u>3.5</u> 100	52 9 6 23 7 3 100	

Note: Commitments include projects to be financed from trust funds.

<sup>6/</sup> D.V. McGranahan, Contents and Measurement of Socio-Economic Development, United Nations Research Institute for Social Development, Report No. 70.10 (Geneva 1970), p. 76.

#### The growth of school enrelment

- 13. Education has a triple role in the process of the over-all development of the child. First of all, it is needed for his personal development, and in this sense is a human right and an end in itself. Secondly, it is a requirement for his preparation for citizenship and employment. Thirdly, it is an important instrument for bringing about improvement in the other sectors of concern to UNICEF, especially better health, since there is an important link between a child's education and his ability to live a healthy life, both physically and morally.
- 14. Among the sectors involved in over-all child development, education consumes the largest amount of national resources, yet major technological "breakthroughs" like those which have had a large impact on health and nutrition (antibiotics, insecticides, the "green revolution") are absent in education, or only just beginning. It is a sector that can particularly benefit from the introduction of new techniques of management and from innovatory approaches to the learning process. Yet, it is at present a sector in which far less effort is devoted to research and development than is the case with the other sectors.
- 15. In what follows, the concern is with minimum standards and levels and therefore mostly with primary education. This does not mean that the higher levels are not also important. Without them there would be no road for the underprivileged to the "glittering prizes" of State and business. Minimum standards have to cover educational opportunity as well as educational levels. This is not only a question of human rights but of economic and social development. If one applies the statistics of the distribution of human ability to the child population of developing countries, one is struck by the great loss of talent and genius that must result from so many of them growing up illiterate. Between 1960 and 1968, primary school enrolments in the developing regions increased as follows:

# Increase in primary school enrolment 1960-1968

	1960	1968	Annual rate of
	(in	millions)	increase
Africa	1849	2943	5,6
Asia 7/	87:.2	132.6	5'•4
Latin America	274.0	40.8	5'•3
Arab States	7.1	11.0	5•5

16. These numbers indicate the extent of the effort being made. To understand what has still to be accomplished if the whole of the child population from 5 to 14 were to be covered, it is necessary to look at the enrolment ratios, i.e. the percentage of children enrolled in school.

<sup>7/</sup> Not including People's Republic of China, Democratic People's Republic of Korea, and Democratic Republic of Viet-Nam.

# Enrolment ratios 8/

	1960/61	1967/68
Africa	34	40
Asia	50	55
Latin America	60	75
Arab States	38	50

17. In assessing the significances of these ratios, it must be borne in mind that to bring them up to 100 per cent would imply a ten-year system of compulsory education. Few countries outside Northern America, Europe and the Union of Soviet Socialist Republics have such systems. The aim of most of the developing countries is, therefore, to establish 6 to 8 years of universal primary education by 1980 (1985 for the lower income group of countries), which would mean that all children between 5 or 6 to 11 or 13 would be in school. This is the task which the ministers of education of those countries have set themselves for child education, and which has been included at UNESCO's request, in the International Development Strategy for the Second United Nations Development Decade.9/ It would have been desirable ideally, to have also established objectives for pre-primary education and the education of parents in child-rearing. But this was not found feasible while the basic educational systems of the developing countries remained so incomplete for children of school age.

18. More significant ratios are those which are adjusted to each country's length of primary educational cycle. On this basis, the proportion of children enrolled in school is much higher for two reasons: first, because the cycle has a shorter base and secondly because the schools contain considerable numbers (sometimes up to 25 per cent) of children older than the age group of the cycle. The adjusted enrolment ratio for the Latin American region for 1970 is recorded as 112.10/ The 1968 figures for Asia 11/ show that 9 out of 18 countries in the region had achieved enrolment ratios of 90 per cent, and over 5 countries were in the range, 60 to 89, while the remaining 4 were below 50. In the Arab States 12/ the enrolment ratio in 1968 was 62.1 per cent for the region as a whole, the over-all percentage being reduced by 3 countries having an enrolment of only 23.6. For Africa, the adjusted enrolment ratio was 40 per cent for 1968.

/...

<sup>8/</sup> Of children 5-14 regardless of level of school. Some are junior secondary schools.

<sup>9/</sup> International Development Strategy (United Nations publication, Sales No. E.71.II.A.2) paras. 18 (b) and 67.

<sup>10/ &</sup>quot;Development of Education and Science Policies in Latin America and the Caribbean" UNESCO/MINESLA 3, table 6. The percentage over 100 is due to the presence in primary schools of children over primary school age.

<sup>11/ &</sup>quot;Development of Education in Asia" (UNESCO/MINEDAS 3), table 9.

<sup>12/ &</sup>quot;Trends in general, technical and vocational education in the Arab States" (UNESCO/MINEDARAB 4), appendix II, table 5 and notes.

19. The most telling indicator, however, is the number of children who enter school, and the length of time they stay. At present the indications are that, except in 3 Latin American countries, 13 out of 54 African countries, and 4 Asian countries, existing facilities would permit most children to enter school as soon as they reach school age.13/ Enrolment ratios for the first year of schooling are around 70 or 80 per cent for these countries. But, as will be seen below, most of the children in the developing countries that have these high initial enrolment ratios, do not stay in school the minimum length of time required to obtain a rudimentary basic education. A large part of the children in the countries with the low initial enrolment ratios are deprived of any kind of school.

Problems: urban-rural disparities, urban slums and shanty-towns, drop-outs

20. Moreover, just as regional enrolment ratios obscure the special difficulties of the least developed countries, so the national figures mask very serious internal disparities, particularly between town and country, and between the urban dwellers integrated into town life and those living in shanty towns. 14/ These disparities take the form of lack of school places and of teachers, leading to large numbers of children not attending school at all, combined with high drop-out rates and the presence of many repeaters and over-age children in the schools. At the same time, large numbers of adolescents, unemployed and without any place in their societies, drift footloose into urban areas. The standard statistics do not reveal these weaknesses sufficiently, since they do not distinguish town and country and are figures of enrolment and not of attendance. Under the present regional objectives, it is aimed to remedy these disparities progressively as part of the extension of the present system. But the difficulties are hard to surmount with the present methods, especially in the rural areas, urban slums and shanty-towns, and in the least developed countries, and it is here, as we shall see, that we come face to face with the problem that a great mass of the world's children either do not receive an education, or partially obtain one which is inadequate, inefficient, and badly related to their needs. These areas of child deprivation command a high priority for both domestic effort and external aid. The number of children and adolescents involved may be around 500 million.

21. During the First United Nations Development Decade, stress was placed on raising Gross National Product and on pre-investment activities, including educational expansion for the supply of skilled manpower and for nation building. Although target rates of economic growth were attained in many countries, the benefits went to limited sections of the population. The International Development Strategy while

<sup>13/</sup> UNESCO Statistical Yearbook 1970 Michel de Beauvais, "Education and Employment", paper prepared for the International Commission in the Development of Education Education, Series B, No. 22, 1971; "Development of Education and Science Policies in Latin America and the Caribbean" (UNESCO/MINESLA 3), table 8 and "Development of Education in Asia" (UNESCO/MINEDAS 3), table 9.

<sup>14/</sup> See "Development of Education and Science Policies in Latin America and the Caribbean" (UNESCO/MINESLA 3), para. 158: ..."In nearly every case, these disparities correspond to the disparities discernible in standards of living and in the structure and rate of social and economic development, but a further factor, to a great extent, is the absence of any deliberate policy and action to ensure evenness in the educational development of the different regions and zones. The lack of such policies means that education advances more readily in places where obstacles and difficulties are smaller while its backwardness persists or even increases when geographic and socio-economic conditions are less favorable."

also emphasizing short-term productivity and the attainment of higher levels of economic growth, takes a wider view of the commitments required for social objectives. This has led to the new "unified" approach to development which pays special attention to the problems of timing and balance between economic and social development and the needs of the more deprived section of the population. In terms of aid for children, this underlines the comprehensive view of the child and the necessity of redeploying educational resources to benefit children deprived of minimum basic education, especially in rural areas, urban slums and shanty-towns, and for nation-wide assistance in the case of countries which are least advantaged in terms of national income and educational facilities.

22. A recent study 15/ by UNESCO in Latin America shows the distribution of urban and rural primary enrolment in 18 countries. In only six of the countries were rural enrolment ratios equal to urban. Over the period 1963 to 1968, for instance, out of 1,000 pupils who began their studies, 129 in Uruguay and 404 in Guatemala did not reach the fourth grade in urban schools; while in rural areas, the number was 345 in Uruguay and 902 in Guatemala. In urban schools in Uruguay, 736 completed the course whereas in rural schools only 417: in Guatemala, 496 completed the course in urban areas but only 35 in rural.

23. National drop-out and promotion rates in three Asian countries in 1969 can be seen from the following table:

Promotion	and	drop-out	profiles	in	three	countries

Country	Grade		Promotion			Drop-out		
	42.440	Total	Boys	Girls	Total	Boys	Girls	
Cambodia	1 2 3 4 5 6 Total	1,000 880 782 619 468 360	1,000 907 830 687 540 439	1,000 838 705 507 346 226	120 98 163 151 108 -	93 77 143 147 101	162 133 198 161 118	
India	1 2 3 4 5 Total	1,000 711 560 490 451	1,000 745 557 497 475	1,000 655 570 480 407	289 151 70 39 - 549	255 188 60 22 - 525	345 86 90 73  594	
Iran	1 2 3 4 5 6 Total	1,000 922 878 850 816 779	1,000 926 886 852 820 789	1,000 914 859 837 802 756	78 44 28 34 37 -	74 40 34 32 31 -	86 55 22 35 46 -	

Source: "Development of Education and Science Policies in Latin America and the Caribbean" (UNESCO/MINESLA 3), table 10.

15/ "Development and trends in the expansion of education in Latin America and the Caribbean: Statistical Data" (UNESCO/MINESLA/REF/2), table 5.5.

- The situation in the Arab States has been described by UNESCO in its report 16/for the Conference of Arab Ministers at Marrakech in 1970 as follows: "The fact that at the first level in some countries enrolment in the first grade is less than two thirds of the theoretical first-grade age population; that the total drop-out rate at the first level can be more than 50 per cent in some countries although as little as 10 per cent in others; that in some countries a third of those enrolled in primary schools are above 13 years of age; that in some countries less than a quarter go through the first level without repeating a grade: all these facts reveal a very serious wastage problem with serious effects on the dual task of raising the intake into primary education and raising its capacity to retain pupils."
- 25. The reasons for drop-out and repetition usually are on the one hand, poor economic and social conditions causing children to have to undertake gainful work, 17/or be occupied in family tasks in the home and on the other, absence of classes in the later grades, poor teaching methods which discourage those who could stay at school, and examination systems designed to be selective. Thus the task for most of the developing countries is not the large-scale creation of additional enrolment facilities of the present kind at the first grade, except in the least developed countries, though facilities and teaching staff will have to expand as the retention of pupils in schools increases. The task is making education more related to local needs tackling the weaknesses in the organization and quality of education which result in poor teaching and large-scale educational deprivation through drop-out and introducing new types of education which will progressively extend and modernize the whole educational process. While this is true of most of the countries, it must also be emphasized that in low-income countries there is still an over-all need for a large-scale increase in the sheer quantity of educational facilities.
- 26. The task in both cases is far from being simply a financial one of providing more money for education. The major constraints are both money and the time needed to extend and improve school facilities and train teachers. Further, the pace of educational progress is also hastened or limited by the prevailing social and cultural attitudes to education. Part of the task of governments and, when appropriate, of external assistance, is to assist in the modernization of these attitudes.

#### Socio-cultural factors

27. One of the socio-cultural constraints in some developing countries is that as additional educational resources become available, they are absorbed in the interest of the most influential local groups. The social structures of these countries cause changes in the national aims fixed by the government to take place in their application as they go down the line to the local level. 18/ Socio-cultural factors

<sup>16/ &</sup>quot;Trends in general, technical and vocational education in the Arab States" (UNESCO/MINEDARAB 4), chap. I, p. 13.

<sup>17/ ... &</sup>quot;Boys and girls who do not have the opportunities for attending primary schools often become economically active by the time they are seven years old. For many children, in fact the transition from helping inside the family and beginning to work purposefully as members of the adult work force is imperceptible. They learn on the job by progressively taking on more difficult tasks." (See A. Callaway "Training young people within indigenous small-scale enterprises: the Nigerian example", unpublished paper, IIEP/S/II, Paris, December 1971).

<sup>18/</sup> Andrew Pearse, "With good intentions - primary education systems fail to promote social mobility in rural areas" in CERES, No. 21 (FAO, Rome).

also influence educational content. In traditional societies teaching tends to be by rote, and the learner's individual creativity remains unaroused. Much of the primary education given in the developing countries is bookish, and in the nature of preparation for second-level education. It does not include enough content related to environmental and development needs for the majority of pupils for whom the primary cycle is terminal .19/ Much has been done over the last decade in curriculum revision and in finding better patterns of rural education, but it has mainly been in the form of adjustments of past practices rather than fundamental changes.

28. Another socio-cultural constraint on universal primary education is the position of girls in certain traditional societies. This is illustrated by the lower proportion of girls than boys in total enrolment. The disparity is decreasing gradually over the years, though it is still marked, except in Latin America. The trend has been as follows:

#### Female as proportion of total primary enrolment

Region	<u>1960/61</u>	1964/65 (Percentages)	1967/68
Africa	37	38	40
Asia	37	38	38
Latin America	49	49	49 (1970)
Arab States	34	35	36

The education of girls and young women is particularly important from the angle of the over-all development of the child, because of their subsequent role as mothers, and of the influence exercised by the home upon the child's capacity to learn. The education of mothers and fathers in child-rearing is also a basic need. Much evidence is forthcoming that the home exercises an equal or greater educational influence than the school.

#### Unemployment

29. A further serious factor that complicates the problem of achieving universal primary schooling of six to eight years is the failure of the economies of the developing countries to provide sufficient employment outlets in which the school-leavers can use the typical educational qualifications that are demanded by parents and provided by schools.

/...

<sup>19/</sup> The problems of educational efficiency arise across a wide range of social systems. It is interesting to see the critique which Mr. Yang Yiu-feng, Minister of Education of the People's Republic of China, made of the Chinese education system in 1960, because it parallels that made so frequently in other developing countries. At the Second National People's Congress in 1960 he referred to "the problem in our school system and pedagogical methods which cause our general education programme to achieve smaller, slower, poorer aid and uneconomical results." He cited the "unnecessarily long period of schooling - 12 years; too many subjects... poor selection of content, and suggested cutting the school course to a 5-year primary, a 10-year primary-secondary. Since then major reforms have been made. See "Our educational work must be reformed", Documents of the Second Session of the Second National People's Congress of the People's Republic of China (Peking, Foreign Language Press, 1960), p. 134.

- 30. The logical arrangement from an employment standpoint would be for the educational system to produce the number of people required for foreseeable job opportunities, and then progressively to expand the number as the society develops and modernizes. This does not in fact take place. Parents will not accept in advance that their children should not have the chance to be educated for the modern sector. In view of the very considerable rewards resulting from successfully moving up the educational ladder, everyone wants to take his chance to move into new jobs and an urban environment. Thus political pressure, reflecting the aspirations of parents, is constantly pushing the expansion of education beyond the employment outlets requiring that level of education. The result is large numbers of educated but jobless and dissatisfied youths, many of whom move from the countryside to the towns only to find that there too, the employment outlets they need are not available.
- This parental and political pressure cannot in itself be regarded as undesirable, either on economic or on social and educational grounds. It is the mark of one of the most important motivations to progress. The increase in the number of children with primary education, even if they become underemployed in relation to their qualifications, reduces the monopoly position of the educated. It should widen opportunity, raise the general level of the labour force, and help to bridge the income and educational disparities within developing countries. Unfortunately the quality is sometimes so low because of ignorant teachers, lack of teaching aids, and learning by rote, that school attendance contributes little to the individual child, apart from the possible socializing influences of his having entered the school system.
- 32. Further, parental pressure has to be looked at in a social and political context. On the one hand, conditions of unemployment in the educated groups tend to create instability owing to the frustrations created. On the other, education is a human right, and countries lacking the motivation to produce a literate and educated population are unlikely to achieve the political maturity necessary to the attainment of higher development levels. The problem also involves the concept of equality of opportunity and, in general, is one of great difficulty. Solutions consisting of consciously planning a restrictive or elite system to educate for the limited number of jobs and roles available in the modern sector, and giving the rest of the children limited functional education are not easily accepted politically if put in this form.
- The African Ministers of Education stated in the final report of the Conference in 1968 "In revising the content of primary education to take account of ... the rural environment, care must be taken not to create a rural education differing entirely in content from urban education. There must be only one education ... and it must make possible the utilization of all human resources in town and country alike." 20/It may, however, be argued that since the drcp-out rate, home-background, and geographical variations in school facilities, do in any event restrict educational opportunities and may do so for a long time, the most useful course is to recognize the facts and to operate a parallel system for the benefit of the disadvantaged. A number of countries do this.

<sup>20/</sup> See Conference on education and scientific and technical training in relation to development in Africa, Nairobi 1968, Final Report (UNESCO, ED/CS/125/21), annex I, para. 25.

#### Demographic factors

- 34. A further factor governing children's education in the developing countries is that the attainment of universal primary education is closely linked to the population problem both negatively and positively. Negatively, because exceptionally high rates of population increase mean that countries have the double task of reducing the backlog of unenrolled children and of providing for a growing child population with the same resources. Positively, because there is evidence that the spread of education tends to have a limiting influence upon family size.
- 35. The positive impact upon family size affects the difficult choice of quantity versus quality in primary education which is faced by countries with incomplete educational systems, since the child population not covered by primary education rapidly become uneducated adults with large families. So long as there are large groups without education, the gradual extension of the school system is like pouring water into a bucket with a hole in it. On population grounds alone, therefore, there is a strong case for extending basic education even of the simplest kind as rapidly as possible. The fact of girls being in school rather than unerrolled raises the age of marriage in countries where the marriage age is low. There is also a link between education and population distribution that may be unfavourable. Rural education, unless geared to the needs of the environment can encourage the movement to shanty-towns of youths in search of work, in excess of the numbers the towns are able to absorb.

#### Objectives and possibilities of meeting minimum needs

- 36. The Ministers of Education of the developing countries have been engaged, since 1960, in establishing and reviewing their educational objectives at UNESCO conferences held at the regional level. This work has included forecasting, using different hypotheses of economic and population growth, of the time and resources it would take to attain universal primary education of a seven-year cycle. Their conclusions were incorporated at the request of UNESCO in the International Development Strategy for the United Nations Second Development Decade. The objectives are subject to periodic revision, as is at present happening in the Africa region, where there are lags in enrolment, as well as in quality, and in the hoped-for reduction of wastage.
- 37. At the time the objectives were set, the Ministerial Conferences considered it feasible that universal primary education could be attained in most countries by 1980 and in others in 1985. The total effort in all levels of education, which involved higher percentage increases at the second and higher levels than at the primary, was estimated to require a rise in the cost of education expressed as a percentage of GNP in Asia, for example, from 3.1 in 1965 to 4.3 in 1980, and in for Africa from 4.2 to 4.7. For the developing countries as a whole it meant raising the percentage of GNP spent on education (all levels) from just under 4 per cent in 1968 to 4.68 per cent in 1980.21/ In.terms of educational expenditure as a proportion of national budgets, it would require raising the existing average proportion of 14 per cent to between 18 and 19 per cent.22/

<sup>21/</sup> Resolution 1.102, para. 4, of XVI Session of UNESCO General Conference. (Approved Programme and Budget for 1971-1972, (Paris, UNESCO, March 1971), Document 16 C/5 Approved).

<sup>22/</sup> This assumes the proportion of GNP raised in revenue remains constant. If it increases, as anticipated, the percentage required for the educational objectives would be reduced accordingly.

- 38. On the basis of the economic progress postulated for the Second Development Decade, and improvements in the organization of education, the objective of universal primary education in developing countries by 1980-1985 is not a chimera from the financial side. The resources for fairly complete coverage could, according to these estimates, be built up over the next 10 to 15 years, the speed being a matter of each country's resources and priorities, and influenced greatly by its particular situation as regards teachers' salaries, teacher-training facilities, and its tax effort.
- 39. The effect of teachers' salaries upon the rate of progress is illustrated by comparison of the lower enrolment rate of Africa where teachers' salaries are frequently many times larger than average earnings, with the higher rate in Asia where teachers' salaries bear a closer relation to average earnings.
- The regional objectives established by the Ministers, although they included reduction of class size, increase in the number of trained teachers, etc., factors which improve quality, were fundamentally of a quentitative character. Thus, while it may remain true, logistically and financially, that the developed countries viewed as regions and groups of countries, could extend their existing carte scolaire to provide the framework of universal primary education by 1980 or 1985, the regional models contain no assurance that the serious problems of individual countries set out in the foregoing paragraphs will be overcome. Indeed, there is the likelihood that, owing to disparities between countries and areas within countries, large numbers of children will continue to drop out before they attain a minimum education, and to grow up illiterate and ill-adapted to the developing needs of their environment. To see the issue clearly, it is no longer necessary to start from regional models and local situation, but to start with the position of the deprived child and to foresee how minimum standards can be created for him. From this point of view, the regional objectives, although they serve an important purpose, do not provide a valid answer.
- Thus, a dual approach is required. On the one hand, progress towards the regional objectives has to be promoted, but at the same time innovatory approaches must be adopted. Just as the formal educational system should progressively reach out over the next decade to the educationally deprived children, so should new initiatives and simplified solutions at the local level move in to meet the advance of the system. This should hopefully lead towards a fusion between the established and the new forms of education. If there is a particular urgency for new initiatives to help the deprived groups, this is not because the established educational systems may not need renovation and regeneration education has to be seen in the final analysis as a whole .23/ It is because of the stark fact of the mass of children for whom the necessary minimum education is not being provided adequately, as regards content, duration or equality of distribution.

<sup>23/</sup> The Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia held in Singapore in June 1971 stated in resolution No. 1 that it "welcomes the growing awareness of Member States of the need for a thorough transformation of the educational systems as a prerequisite for their further expansion". A closer formulation appeared in resolution No. 13 of the same conference which states "considering further that short of a thrust in favor of innovations leading to a regeneration of education in the region, solutions to the quantitative demand will be increasingly difficult to find". (see UNESCO, Final Report of the Conference).

- 42. In all these matters, the speed with which the objectives are reached, whether through conventional or other methods, depends also on the priority accorded to primary as compared with other levels of education. The older developed nations achieved their growth with half of the population illiterate, and with élite systems in which the educational effort concentrated on the socially and economically favoured groups. Later, the need for the whole population to become effective citizens and producers created the modern type of education in industrialized societies. The developing countries have accepted the objective of universal primary education, but in the later 1950s and early 1960s, when the "education explosion" was taking place in the developing countries, the manpower and development approach to education turned priorities in the direction of second and higher level rather than primary. New nations particularly needed well-trained cadres to hold their place in the world politically, and to create enterprise and economic growth. This has been reflected in the greater annual rate of increase in enrolment in second and higher than in primary education.
- 43. The regional objectives, however, have not yet been revised to take account of the trend in the employment situation since they were drawn up. This trend is towards increasing unemployment of secondary school-leavers and university graduates. It now appears that general education at these levels has moved beyond the economic absorptive capacity of many countries, though particular skill shortages still exist. There is, therefore, a case for more concentration on rapidly achieving universal primary education, and this may be taken into account in the reviews which Ministers will make of the regional objectives in the coming decade. 24/
- The speed with which universal education can be attained for the primaryage group depends not only on the impact of new resources but also on those made available from improvements in the existing use of resources (internal efficiency). In the case of both the Ivory Coast and Costa Rica, two major examples of innovations assisted by UNESCO, the major source of finance is the reduction of

<sup>24/</sup> Some conclusions as to the relative rates of return of the application of resources to primary education as compared with other educational levels is contained in a study by Mr. Nalla Gounden reported in The Journal of Human Resources, vol. II, No. 3, page 352. The author found that the rate of return investment on primary education in India in the 1960s had been the highest of all the levels. His results were: Literacy: 15.9, Primary: 16.8, Middle: 13.7, Matriculation: 12.1, Bachelor: 8.9, Engineering: 9.6. Professor Okita of Japan (member of the UNDP Advisory Panel) who made a study of relative levels of investment in education in India and Japan at different periods came to a similar conclusion. Results of this kind of study are, of course, not necessarily transferable to countries other than those studied. See also Michel de Beauvais, "Education and Employment", paper prepared for the International Commission on the Development of Education, Series B., No. 22, page 9; critizing the rate-of-return approach but points out "most often it is the primary education level which appear most "profitable" (in comparison with the illiterate worker), see also the results of Strumilin's study of 50,000 workers in Leningrad in 1919, in Readings in Economics of Education, (Paris, UNESCO, 1968), page 413.

repetition in the present system. This has the effect of opening the "dam" for children held up by the process of restricting promotion by examination and, together with the necessary increase of quality, results in accommodating a greater flow for the same funds.

The pressures for the expansion of second-level education are strong, and they come not only from the more vocal and well-to-do groups in society who are not satisfied with primary education levels for their children, but also from development planners anxious to increase the modern sector quickly, in order to raise productivity. The economic growth of the developing countries does, in fact, depend heavily upon extending the modern sector and especially on the development of industry. But there are no fundamental incompatibilities, except of a political nature, between pursuing at the same time the minimum social objective of universal basic education, and the expansion of secondary, technical and higher education to meet the needs for qualified manpower. The policy of educational planning involved is to treat the minimum social objective as equal in importance to the economic objective, and to restrict the resources applied at the second level to those the country can afford after occupational and employment needs have been cared for. Few countries, however, because of the strength of the social-culturalpolitical factors influencing educational policy, seem in a position to adopt such a clear-cut course. Both for the purposes of national development and in order to give children further opportunities to use their abilities and personalities, emphasis has to be placed not only upon the attainment of basic literacy and adequate minimum educational levels for the primary-age group, but also on education during the adolescent years following primary education. This may take the form of reinforcing formal secondary and vocational education, and of establishing non-formal education opportunities outside the school system with a vocational or pre-vocational bent. For the relatively few who go up the educational pyramid to upper secondary, technical and higher education, many improvements in teacher-training and educational methods and equipment are required. For the majority of the children of the developing countries, however, especially in rural areas, minimum standards require the provision of proper follow-through of what was taught at primary levels and the integration of the adolescent into working life has to be stressed. This means concern with the provision of special educational patterns suited to adolescents who leave school younger than in the industrialized countries, and with adequately trained teaching and training staff for such patterns of formal and non-formal education.

46. Taking the objectives of the regional conferences 25/ for universal primary education as they are, with the deficiencies to which attention was drawn above, it is to be noted that in both Asia and Latin America, progress has corresponded closely with the target figures which were set. There are, however, serious lags in a number of countries in Africa, South of the Sahara. The Final Report of

<sup>25/</sup> The Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia held in Singapore in June 1971, Resolution No. 2: "Noting the remarkable convergence between the total enrolments actually recorded by the countries of Asia and the targets laid down in the Asian Model". (see UNESCO, Final Report of the Conference). Latin America is moving ahead of the target. See also "Development of Education and Science Policies in Latin America and the Caribbean" (UNESCO/MINESLA 3), table 6. Africa has fallen below the target as indicated above and the objectives are at present under review by UNESCO and ECA.

the Conference of African Ministers of Education (in 1968) stated that "...enrolment in 1965-1966 was 1.1 million short of the total foreseen; unless the trend was reversed, the primary schools of Africa would be in danger of losing the battle against illiteracy... the enormous wastage at the primary school level is measured by the fact that for the continent as a whole, only 32 per cent of pupils enrolled in the first year complete their sixth year."26/ Difficulties are not only that the objectives, while including many improvements, basically project the present type of system which many educators feel need fundamental reform, but also that a number of countries where educational finance is largely centralized are finding heavy financial pressure on their national budgets. In some cases these are low tax-effort countries, and the answer is to raise a greater proportion of national income as revenue for public use. In others the cause is very limited resources in relation to their educational progress. In these cases, increased efforts are needed to find new sources of educational finance and new types of educational organization by using local initiative, as well as by improving cost efficiency.

47. The objectives have also been affected by some increases in the rate of population growth beyond that originally foreseen, and further increases in population growth rates would menace them. The present increase in growth rates is fortunately not of such a decisive character 27/as to cause much delay in reaching the target and the family planning programmes adopted in countries having the majority of the population concerned may reduce the increase. Moreover financially, the impact of the somewhat higher population growth rates would be more than off-set by the GNP growth rate of 6 per cent postulated for the Second Development Decade. The previous objectives were set on the basis of a 5 per cent growth rate, and if the rate of 6 per cent is obtained the financial burden is considerably reduced, since an increase from 5 to 6 per cent would mean a 30 per cent increase in the resources remaining after population growth

<sup>26/ &</sup>quot;Conference on education and scientific and technical training in relation to development in Africa", Nairobi 1968, Final Report (UNESCO, ED/CS/125/21), paras. 10 and 12.

<sup>27/</sup> See Final Report of the Third Regional Conference of Ministers of Edudation and Those Responsible for Economic Planning in Asia held in Singapore in June 1971, Reports of Commission I, para. 2: "...the size of school-age population had been sometimes underestimated when the Asian Model was established. Consequently, greater financial effort will have to be made if the percentage objectives of the model are to be reached. With these two qualifications, the objectives of the Asian Model for 1980, including financing projections, appear feasible."

has been provided for. The decisive question is whether the necessary contribution to educational development can be attained with linear expansion of the present systems with their poor quality teaching, frequently lacking in relevance to development and their low cost efficiency: 28/

## A wider conception of education

48. Moreover, the objectives as quantified and costed, are limited to the formal system. The needs of children at present unenrolled because no school places are available, of those who have dropped out, and of adolescents who never went to school would be partially provided for only by the progressive extension and improvement of the formal system. The role that non-formal education and continued part-time schooling of a non-formal kind could play is recognized in the objectives but not provided for in the model, and it has little place at present in the educational plans of the developing countries. While considerable effort is already being directed towards formal education, little is being done, or has been done, to exploit the possibilities of out-of-school education. This is partly because formal education usually absorbs practically the entire budget of the Ministry of Education. It is also partly because there is no authority which is concerned with the over-all communication and distribution of knowledge to children through all channels (in school, out-of-school, and in the home). No funds are earmarked for over-all educational purposes so defined, just as funds are not earmarked for over-all child development.

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28/ The 1969 survey of educational wastage by the Office of Statistics at UNESCO studied in the form of input/output ratios the relationship of pupils years actually spent, to the duration of the educational cycle multiplied by the number of successful completers. Under optimum conditions (no repetition, no drop-outs) the ratio would be one, but in practice the situation disclosed was as follows:

Countries in major regions	Range of country (input/cutput ratios)	Median (input/output ratic )		
Africa	1.24-3.55	2.00		
Latin America	1.53-2.42	1.90		
Asia	1.00-2.48	1.31		
Europe	1.00-1.56	1,20		

The above ratios show that, in Africa for instance, the median "cost" to the system per successful completer was double the prescribed one. In other words, only half of the cost was effective, since repetition and drop-out were responsible for the other half.

The significance of the conclusions has to be appraised in the light of the fact that a pupil even if he may be literate and have had five or six years of education, is defined as a "drop-out" under the UNESCO definition if he does not complete the required primary cycle, which in some countries is overambitiously long.

- 49. Two factors which make it particularly urgent to provide educational services, even in the simplest form for the educationally deprived children and adolescents as soon as possible are first, the effect of the education they will have received upon restraining excessive population growth since people with even a minimum basic education tend to have fewer children than those who are illiterate; and second, the impact of education at the level of simple literacy and numeracy in assisting social and structural changes, such as land reform and environmental controls, which are required in many developing countries. In a number of matters, such as population increase and environment pollution, and perhaps also in social roblems, there are points of no return. Education services should reach out, as quickly as possible, through the schools or non-formal education to reduce the educational deprivation of children and young persons in the shanty-towns, rural areas, and the least developed countries, before the bad effects of illiteracy damage other vital programmes.
- 50. Among the advantages of non-formal education may be its lower cost, if limited to simple literacy and numeracy and civic and pre-vocational education, and the possibility of gearing it more quickly and directly to explicit economic and social purposes. Its acceptance by the population will depend upon constructing the necessary ladders and bridges into the formal system, upon it not being regarded as discriminatory, and upon whether it adds to the earning power and social prestige of the participants. Special action is required to attack the growing problems of young unemployed and frustrated adolescents living on the edge of a modernized society that they are not equipped to enter. This is particularly the case for rural immigrants to towns, who remain economically, socially and psychologically unintegrated into urban life. In some cases, formal education may be the integrating factor educationally; but there will be other cases where the formal educational system, as at present organized and operated, is not ready for the task.
- 51. A number of trends in modern educational thinking concentrate on the fact that distribution of knowledge and the forming of attitudes is only partly the result of formal education. Emphasis is placed on the use of all of the available educational instruments of society. These include the training of parents for education in the home, the use of the information media, the education of adolescents in the factory and on the farm, use of health, nutritional and welfare services, as well as voluntary civic and recreational groups. Projects are needed in which this kind of over-all approach to learning is combined with an over-all view of the child's development.
- 52. Many examples of successful non-formal education projects exist, usually associated with the initiative of some particular individual or non-governmental organization. What is lacking is official use by appropriate ministries of non-formal mucation as part of the national education system. Frequently the obstacle to official support is the objection of education ministries and of parents to what is thought of as a dual system. What has not yet been fully established are designs for non-formal education which provide the necessary bridges and ladders for transit to formal education. No doubt as formal education itself becomes reformed in its curriculum, and becomes more learning for life than sitting for examinations, the linkages will be easier to establish. Moreover, the increased use of integrated services in which education is viewed functionally in relation to the human needs of the person and the development needs of the environment may also promote non-formal education.

- 53. The other major need which is both supplementary to and connected with primary education, is pre-primary education. This form of enrolment is only about 7 per cent of the world's total enrolment, but it is rising steadily for the world as a whole, at an annual rate of 5 to 6 per cent, increasing from 25 million in 1961 to 36 million in 1968 at an over-all rate of expansion greater than the first and second levels of education. Most of the expansion, however, is made up of private rather than public primary education. In the Asian and Arab States more than 90 per cent of it is private and in Africa 75 per cent. In Latin America about 30 per cent is private, whereas in Europe it is under 20 per cent.
- The importance of pre-primary education for the child is great, since it is at that level that the integral relationship between education and health and nutrition factors is most apparent. There is much scientific evidence that nutrition deficiencies in a child's pre-school years heavily condition his capacity to develop intellectually to the full because of the effect of bad nutrition on the brain. Having regard however, to the very limited nature of public investment in pre-primary, the first step for a major attack on the problem is that countries should themselves be convinced whether or not this is a profitable social, economical and educational area of investment of public funds. The longer-term solution, as resources become available, is to view education as a total "follow-through" process, starting with the earliest years in the home with parent education, going through the school system with cycles of years and ages of entry determined by local conditions, and continuing throughout adult life. At present, however, few educational ministries feel they have the resources to spend on pre-primary education while primary enrolment is incomplete 29/
- Taking into account the difficult choices to be made between the short-term and the longer-term, it would seem that the primary-age groups with the necessary follow-through into the problems of drop-outs and adolescents who have had no schooling, are likely to remain the main areas of emphasis rather than pre-primary. Nonetheless, UNICEF-aided projects, at the pre-primary level, especially those of a catalytic nature, can no doubt spark increased interest in making public investments in the education of children at this level.30/ In this respect valuable experience exists in certain developed countries.

#### Summary of minimum objectives

- 56. The educational objectives affecting over-all child development, viewed in terms of minimum requirements to relieve deprivation may, therefore, be summarized as follows:
- (a) To establish as soon as possible effective universal and compulsory primary education of at least four and preferably of seven to eight years according to the country's level of development;

<sup>29/</sup> In India, for instance, the condition of pre-school age children is regarded as a problem of national importance and increasing attention is being given to a variety of means for their protection, although only a very small percentage is yet receiving pre-primary education. A number of countries, e.g. Thailand, Malaysia, are encouraging pre-primary education as a means of eliminating language difference and reducing educational wastage at the primary level.

<sup>30/</sup> Recommendation of the Executive Director for assistance to Americas Region: Caribbean, Guyana and Surinam, Services for pre-school children (E/ICEF/P/L.1478).

- (b) To follow up the primary programme by providing some measure of prevocational training for adolescents for whom the primary cycle is terminal, and basic education for adolescents who have missed schooling or dropped out prematurely;
- (c) To use non-formal education to supplement the formal system, with the necessary education ladders and bridges between the two;
- (d) To increase the quality, relevance and cost-efficiency of education, and reduce "wastage";
- (e) To move progressively towards a view of education which starts at the earliest years and continues throughout life, and the instruments of which are the home, the pre-primary school, social services, the community, the communication media, and non-formal education as well as schools;
- (f) To give special attention to those educational elements especially valuable for the over-all development of the child; and
- (g) To favour the "unified approach" to development planning, 31 and so stress the needs of the most educationally deprived children, including handicapped children, and to pay special regard to the problems of peri-urban and rural areas and to the over-all problems of the least developed countries.
- 57. The difficulties of attaining these objectives are very great, since adequate solutions have not yet been found to the high rate of drop-out, lack of relevance of educational content to development needs, poor teaching methods, shortage of educational resources of all kinds, and low cost-efficiency. But the possibilities, if innovative approaches are combined with what is best in the existing educational system, are also great, given judiciously combined national and international efforts.
- The purpose of this section has been to outline the educational situation of children and adolescents in the developing countries and to indicate over-all minimum needs. The emphasis on the need to establish adequate basic services for the mass of deprived children and adolescents does not mean that special education for the handicapped, pre-primary, parental education, or other types of education are not essential. Indeed, the provision of basic minimum educational services is the structure upon which special services for the handicapped has to be built, and the emphasis on primary education reflects the trend of government policies in a situation where their educational systems are imcomplete and greatly need external aid.
- 59. Section II attempts to narrow the problem down to the activities most needing UNICEF's aid and best suited to its means and methods.

<sup>31/</sup> See United Nations General Assembly resolution 2681 (XXV): also International Social Development Review No. 3, Unified Socio-economic development and planning: Some New Horizons (United Nations publication, Sales No. E.7.IV.9).

- II. PRIORITIES FOR UNICEF'S ASSISTANCE; RESOURCES; THE TARGET GROUP; INNOVATION AND ONGOING NEEDS; A STRATEGY
- 60. Section I dealt with the present aituation and prospects regarding minimum standards of education of children and youth in the developing countries. The present section narrows the problem down to the priorities for UNICEF's assistance and how it can best be deployed. While, as seen earlier, the choice of priorities between the different sectors of children's needs and individual projects have to be settled at the national and local level, there remain broad questions of strategy and tactics affecting the choice of priorities for use of UNICEF funds for which the decision of the Executive Board is needed. In particular, the question has to be asked whether the joint UNICEF-UNESCO guidelines are still adequate.

#### Priorities and resources

- 61. Aid priorities spring not only from needs and from each country's assessment of its requirements, but also from the extent of the resources which have to be engaged to have an impact, and the purposes for which the aid funds have been raised. As regards the extent of the resources, the present annual amount of around \$18 million committed by UNICEF to education contrasts with the \$5,000 million being spent annually on primary education in the developing countries from domestic funds. If junior secondary education is added, the domestic expenditure may reach \$7,000 8,000 million a year, a total which is increasing at a rate of 6 to 7 per cent annually.
- 62. The limited size of UNICEF's assistance in relation to the total needs of deprived children is one of the issues that have been raised by critics of the present UNICEF educational aid policy. The argument used is that the needs are so huge and UNICEF's relative contribution so small that the aid process is one of pouring water into a bottomless bucket. This overlooks the fact that the economic studies made by UNESCO, the Ministers of Education, and planning authorities of the developing countries, have shown that the attainment of the objective of universal primary education is feasible financially on the basis of the progressions set out in the regional model, with the exception of Africa, South of the Sahara, which would need heavy external aid. Educational assistance, therefore, is not a process of trying to help educational systems that are rushing into bankruptcy to attain impossible targets. On the contrary, it has to be viewed as a means of hastening the attainment of the objectives, opening bottlenecks, and contributing to the solution of problems of educational inefficiency such as poor teaching, lack of equipment, inadequate curricula, etc. The limited size of the UNICEF funds, however, clearly indicates that they should be used only for the highest priorities - for activities likely to have a multiplier or catalytic effect, or for innovatory solutions.
- 63. Since UNICEF's aid to education is part of an over-all educational assistance that is flowing at an annual rate of \$1,500 million to \$2,000 million from all sources to the developing countries, the views and strategies of other providers of aid should also be taken into account in the choice of priorities. The position

in this respect is that most of the large providers of educational aid have recently been reviewing their aid strategies. This is one of the principal concerns of UNESCO and of the International Commission of Educational Development set up by UNESCO, which is working under the Chairmanship of Mr. Edgar Faure. It has also been the subject of review by UNDP, the World Bank Group, the Development Assistance Committee of the Organization for Economic Co-operation and Development (OECD), and by majer bilateral providers of aid. Consultations took place with the international agencies concerned in the preparation of the present report and the conclusions were framed in the light of their views as to the nature, importance, and complementarity of UNICEF's assistance in relation to their own programmes.

64. While section III analyses the over-all flow of educational aid as regards its direction and type of projects aided, it should be noted here that the World Bank Group which is the largest single contributor, has so far devoted only a tiny fraction of its resources to primary education. Its main concern has been with other levels of education and with projects that aid economic development and nation building, and which have a clear impact on productivity. The aid of UNDP is also geared towards development rather than welfare objectives. UNESCO itself is concerned with all forms and purposes of education, and provides the technical help and "intellectual back-stopping" for all of the United Nations agencies as well as the World Bank. Organizationally therefore, UNICEF's role fits into the total aid system, provided its priority concern is assisting in the creation of minimum levels of education for deprived children and promoting the over-all view of child welfare.

#### The target group

65. That this should be the purpose and nature of UNICEF's contribution can be seen from the fact that, within its general focus of assisting national welfare and development programmes for children, increasing priority is being given, at the request of Governments to children in rural areas, urban slums and shanty-towns and in the lowest-income countries. The objective is not only aid to national development through children, and to children through social development, but especially to help to provide minimum standards for deprived children. Thus it would be possible to define the priority target group for UNICEF's educational aid as the children who are not being provided with minimum basic education. As was seen from the analysis in section I, these children probably number some 500 million in the developing countries as a whole. This objective would involve some changes in the existing use of UNICEF's resources for educational assistance, since the present joint UNICEF-UNESCO guidelines relate to the education of all children. Rather than being limited to minimum standards for educationally deprived children, they also include aid to secondary education for advantaged children in the more developed and more modern population sectors of the developing countries matter is dealt with further in the conclusions.

#### Educational services to be provided

66. With this definition of the priority target group, it is now necessary to ask what are the minimum educational services to be provided for it that UNICEF should aid? There appear to be two requirements of concern to UNICEF's comprehensive view of the child. The first is the provision of literacy and numeracy and some education in health, home economics and civic responsibilities. The second is

minimum form of pre-vocational education. The former might normally consist of four years of primary schooling, 32/ or its equivalent, where other educational patterns might exist. The latter might require about a year of post-primary education, the objectives of which would be to follow through the basic education received with some pre-vocational and civic training. This is needed to provide the minimum further knowledge and behavioural attitudes required for participation in the economy through jobs, self-employment, vocational training or other forms of self-betterment. It will also be necessary to provide basic education facilities at the later stage of childhood and adolescence for those who were deprived of it in their earlier years. The education may be formal or non-formal, or mixed. The starting age for the period of four years could vary according to local conditions but the process should be completed by the age of 15.

67. In addition to the above minimum educational services, are there further types of activity to be aided? One suggestion might be that because of UNICEF's concern with child health, nutrition and home economics, education on these particular matters should be encouraged through the educational system without restriction to the target group. This would mean aiming at the curricula in all schools and for all children for whom these subjects should be included. This might also extend into secondary education on the ground that it is not covered by aid from other agencies.

## Existing approaches and new solutions

68. The next delimitation needing discussion is the extent to which UNICEF should be content to aid present efforts to deal with the problems of the target group, and the extent to which it should concentrate its aid on the seeking of new solutions. The question of innovation in education is of great topical interest and importance—and it is necessary to discuss it in some detail. At the

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There is some consensus among educators that four years of primary education is the minimum required for lasting literacy skills. An interesting study of literacy retention, sponsored by UNESCO and carried out in India by J.M. Kapoor and Prodipto Roy under the auspices of the Council for Social Development in New Delhi states: "As for school leavers, only 10 per cent of those with one or two years of schooling scored above the median test score, compared with 39 per cent of those with three years of schooling. Starting at four years of schooling scores begin to rise dramatically; of those leaving after four, five or six years of schooling the percentages securing above the median literacy score were 62, 78 and 91 respectively.

"For participants in adult literacy classes, Grade III of literacy training seems the 'take-off' point at which literacy skills have a good chance of being self-sustaining. For school leavers, four years of schooling seems a minimal requirement for maintenance of permanent literacy at a useful level.

"The longer the period between instruction and testing the lower the score on the literacy test--for both school leavers and former adult literacy students. Time lapse is a relatively unimportant factor in literacy retention for school leavers who finished four or more years of education, or for adults who passed the Grade III examination."

last meeting of the UNDP Advisory Panel the suggestion was made that, owing to the poor results being obtained by the present systems, the United Nations agencies should concentrate their aid on educational innovation, including new solutions for the education of primary-age children and the pre-employment education of adolescents. This suggestion, which was contained in a paper prepared by Ambassador Edwin Martin and Mr. Roland-Billecart, resulted in a discussion in which the President and the Executive Secretary of UNESCO's International Commission on Educational Development participated, as well as members of the UNESCO secretariat. The consensus was favourable to an approach in which emphasis would be placed on innovation. This consensus, together with the analysis of the educational situation made in section I, poses the question whether UNICEF might wish to put the major part of its assistance for education into projects that are significantly innovatory, and progressively to clear the arena of those of the traditional type. The argument in favour is that since innovation is at present small and difficult to bring about while the need is great, relatively small international funds could have a major impact and that instead of spreading its assistance widely on many needs, UNICEF could play, even with its relatively small resources, an important part together with UNESCO in helping developing countries to find new solutions to the problems of educationally deprived children. This question is examined in the paragraphs which follow.

69. Cautionary considerations which come to mind immediately are (a) whether countries themselves are ready for such an effort, (b) whether they, and the international agencies, have yet the necessary expertise for the purpose, (c) whether in fact there exists a sufficiently tested body of knowledge on which to base important innovation, and (d) whether new solutions can be specially directed to the educationally deprived groups of children, or whether the whole fabric of the education system is necessarily involved. To attempt to answer these questions and to see the matter in perspective, it is necessary to clarify what is meant by innovation.

#### Innovation

70. In ordinary usage, the term "innovation" means any change in the way of doing things that is consciously brought about. In most people's minds, when applied to education it means any progressive and original piece of action by teachers or educational authorities. In the more technical and important sense of the term, innovation means change which has a lasting effect on the institution or output sequence involved. It is not simply a question of one imaginative teacher using new effective methods (though this is important and should be encouraged), but whether the particular school as an institution has new methods incorporated into its teaching that become norms 33/ independent of the particular teachers.

Mr. René Maheu, Director-General of UNESCO, in his opening statement to the Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia, June 1971, annex II, said: "Partial improvements, or innovations restricted to a single point or aspect of the educational system, useful as they may be, cannot suffice for the future. The reform of education must be all embracing, because education is a system closely interwoven at every point with the whole fabric of the community and is, either naturally or designedly, subjected to a complex body of constraints and purposes. To my mind, it is on the adoption or non-adoption of clearly defined overall policies, and on their soundness of their errors that, in the last analysis, the future of education in Asia, as in the rest of the world, will depend. It is here above all that innovation is required - and precisely here that it is most difficult." (see UNESCO, Final Report of the Conference).

Innovation in this latter sense, especially if the view is taken that it has involve the whole system, is much more difficult to achieve than the first. 34/

- 71. The term innovation has its most precise meaning in the science of economics especially in studies dealing with changes in production through the introduction of new processes. Although education is far more than an economic activity, analogies from industry have a certain relevance since education systems are big organizations employing large resources of manpower and finance. In industry, innovation is usually the result of the following sequence: (a) invention, which may be spontaneous or the result of scientific research; (b) studies of the feasibility of adopting the invention or new methods; (c) development of the new methods by trial and error to the point at which they are ready for application; and (d) production based on the new methods. Innovation is only achieved when the last stage is reached, the previous stages being efforts to achieve innovation. Only a small proportion, around 2 or 3 per cent, of invention and research results in actual innovation, and only rarely is innovation achieved without the process of research and development having followed the invention. This seems to be true of education as well as industry.
- 72. This sequence is a useful frame of reference, <u>mutatis mutandis</u>, for considering educational change. It is not enough to have new ideas or to produce valuable research in individual schools, though these processes have also to be encouraged. The most significant stage is the passage from ideas to the required inputs, and thence to the production of new educational output. This involves identifying key areas of change, testing possible new designs, giving them "trial runs", and following through with a process of adjustment, adaptation and development. In the process of educational change, adaptation may be even more important than invention. In either case the method required is to find the means of bringing about the maximum impact and diminishing the constraints. In the remark quoted below, J.S. Mill put his finger on one of the greatest single points either of impact or resistance in the process of educational change, namely teacher education.

<sup>34/</sup> John Stuart Mill in his inaugural address to the University of Saint Andrew in 1864 remarked "Reform even of government and churches is not so slow as that of schools, for there is the great preliminary difficulty of fashioning the instruments of teaching the teacher". Torsten Husen in his paper on "Strategies of Educational Innovation" (Series B, No. 28) for the International Commission for Educational Development draws attention to the institutional and other difficulties which fundamental educational innovation involves. See also paper by Lionel Elvin in the same series on institutionalizing educational reform. See also Gunnar Myrdal, The Challenge of World Poverty, New York, Pantheon Books, 1970, p. 174: "A revolution of the education system would assume that which is often mistakenly said to be what these countries have been going through: a social and economic revolution".

- 73. The time normally required to bring about a really important innovation in education, even in the best circumstances, is probably about eight to ten years. This period starts with the diagnosis by the educational authorities of the problems needing solution, and the recognition that there are new methods that could be adopted. This period, which may last two years or more, is one of promotion of the idea, study of its feasibility, and acceptance by the leaders of the teaching profession. It is followed by another period of two years or more during which the specific programmes or pilot projects required are prepared in detail, costed and budgeted for, and the ancillary and complementary means explored. The latter include the possibilities of foreign aid, provision for the production or import of the new materials and equipment, textbooks, etc. required. The process of receiving the foreign aid itself will take two or three years within this second phase.
- 74. Thus, after a period of four or five years the supplies of materials, textbooks and trained teachers may begin to arrive, and the new outlooks and educational patterns start to be applied in the schools. At this stage there begins a process similar to that in the motor industry known as "taking the bugs out of a new model". It does not involve the high-level designers, but as in engineering, is the work of the foreman, or in education of the headmaster or inspector. In education, this step, which may last two or three years, consists of securing the acceptance by the teacher of the new methods, by conviction as well as on paper, and his adjustment of them to local conditions. It is at this stage, which may take two or three years, that the activity starts to be really innovatory - i.e., things are actually done differently over a large part of the educational system and output starts to improve. In industry and agriculture, it takes, on the average, ten to twelve years for important innovations to affect 50 per cent of the producers, followed by a further period of imitation by most of the remainder. In education, this period is shorter because most of education is under the control of central or local authorities.
- 75. An important difference between education and industry is that, whereas the most complicated pieces of machinery take a few months to move over the assembly line, four years or more are usually required before pupils leave the educational system with the necessary benefit from the new methods, i.e. the production cycle is much longer. This is important for the race between education and technological change, which mankind has to win for its survival. Unfortunately, progress in educational innovations has started late, and the problem is will it ever catch up, or will the more gloomy forecasts be realized which see today's children as future victims of a technological society. 35/

<sup>35/ &</sup>quot;Conference on Policies for Educational Growth", Background Study No. 12, p. 90: "Indeed, the very forecasts, whether emanating from Delphi procedures or from more conventional trend extrapolation, which the Syracuse Center is employing now in the construction of pictures of the future, are so dismal with respect to the likelihood of survival of human values as to call into question society's will and ability to invent the social and political institutions - and to promote changes in underlying human attitudes and behaviours - even barely adequate to control and reverse these ecological developments. We are thus confronted with the role and function of educational systems: in what ways might education contribute to the development of attitudes and skills appropriate for supporting, perhaps engendering, fundamental systems breaks and the social, political and human experimentation which may now be called for?" (Paris, OECD, 1970, Restricted, STP (70) 17, Scale 2).

#### Obstacles to innovation

- 76. This makes it particularly important to examine the main obstacles to innovation and discuss how they can be tackled. They are different according to the following six major types of innovation:
- (a) Changes in mechanical teaching aids, e.g. by the use of the new media television sets, and teaching machines, commonly known as "hardware". This type of innovation may be purely mechanical and not deal with the fundamental problems. One major innovation being supported by international aid (the Ivory Coast television project) is currently under criticism on this ground. To affect the education process, mechanical innovations have to be accompanied by structural changes and curriculum reform;
- (b) Changes in the methods of organizing, storing, retrieving, distributing, and displaying or presenting educational sequences, e.g. cassettes, tapes, instructional lesson cards, film strips, new types of textbook, radio and television. Innovation in this area of activity implies the application of modern techniques not only to mechanical educational aids but also to the whole teaching and learning process;
- (c) Changes in the content of education and in examination systems designed to evaluate progress;
- (d) Changes in methods involving the interaction of teachers and students, e.g. team teaching, learning in small groups, ungraded classes, etc.
- (e) Political, structural, and administrative changes in the educational system, e.g. in the distribution of educational opportunity, in the length of the different cycles, in promotion rates, in the balance between the academic and the practical streams of pupil flow within the system, etc.;
- (f) Changes in the planning and promotion of innovation itself, in project identification methods, in the training of planners and specialist staff, in the sources and methods of finance, etc.
- 77. As regards "hardware", although there are sometimes conservative hesitations about it by traditionally minded teachers and parents, it does not normally raise opposition. This seems to be the case at the present time, since existing hardware is in the form of teaching aids to existing systems. However, major

technological changes would be possible in the next few decades which would open new dimensions and might abolish the school in its present form. 36/

78. Difficulty usually arises only when new "hardware" is accompanied by organizational and content changes that are not acceptable. Since most "hardware" involves supplementing the teachers' efforts and not replacing them, and since the new media have their own "magic", little opposition exists apart from cost, which frequently is prohibitive. Lowering of costs involves breaking the vicious circle of limited supply based on small demand. 37/ Efforts are already being made by research groups associated with industry to produce cheaper and more long-wearing products needing less maintenance, but greatly intensified cooperation is needed between educational authorities and industry.

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36/ In the Background study No. 12 for the OECD Conference on "Policies for Educational Growth" dealing with alternative educational futures, results are given of a research and design project of the educational facilities laboratory at Rice Institute. It stated: "Technology will exert an influence on education out of all proportion to the influence it presently exerts. Among the technologies designed were drive-in education, the motorised carrel, the shoulder carrel and the town brain. All of these technological innovations and developments were explored quite free of possible constraints imposed by social, political, and economic modalities in the future.

"The shoulder carrel, for example, is a private, air-conditioned, electronical-ly-controlled booth, mounted on the student's shoulders and designed for use either at home or in school. The carrel would bring to the student a vast library of data, electronically retrieved and individually controlled, thus in direct competition and contrast with person-to-person teaching. The carrel weighs about 20 pounds, and incorporates such instruction media as UHF-VHF TV, tapes, records, computer connection, two-way radio, telephone, slide projectors and screens.

"On the other side of this individualized electronic man-machine symbiosis is the town brain for transmitting "learning" to town residents of all ages. The town brain is a central computer bank, monitoring and programming centre which is electronically hooked up with a variety of audio-visual, computer-assisted communications links ranging from individual, hand-carried consoles, to home installed consoles, to portable conference units and mobile teaching units which permit the development of a total, comprehensive education system independent of classrooms, lecture halls and permanent school buildings." (Paris, OECD, 1970, Restricted, STP(70)17, Scale 2) p. 52.

37/ The uncertainty of the market for educational software materials is also a factor. It is interesting to note that the shares of one of the most important and successful corporation working on the development of educational teaching and learning materials of a novel and now accepted range, have fluctuated in the last two months by about 100 per cent.

- 79. The types of innovation involving fundamental changes in content, techniques of teaching, and organization of education do, however, encounter obstacles in penetrating existing social and economic attitudes and traditional views of the educational process. Educational innovation did not materialize in developing countries on any scale in the 1960s for this reason (although useful changes in educational structure and curriculum have taken place in a few countries), as well as because of sheer pressure of expansion. However, the limit to which educational policy can move ahead of the accepted educational values of given societies is tending to advance. Since youth absorb innovatory ideas quicker than the older generation, progress depends greatly on securing the participation of youth as well as interesting young parents in educational change. Basically progress depends upon the teacher, provided educational structure and content are adequate, and to achieve substantial results it is necessary to modernize teacher education. In a number of teacher-training colleges, for instance, old methods of teaching are used to instruct pupils to follow new methods of teaching.
- 80. Paradoxes of this kind will continue until there is a sufficient body of teachers who are educated in and thoroughly believe in the value of the new methods. It is necessary to attract increasing numbers of young and modern-minded teachers into the profession. Since in most countries teachers are civil servants, important administrative and staff questions arise. The solution of some of these may be costly, but the expense of the continuance of inefficient education is likely to be even greater. One approach might be the setting-up in each country of a nucleus of model teacher-education centres with facilities for experiment. It may also be possible to award diplomas for qualification in modern methods which would give entitlement to higher salaries. Systems of bonuses to teachers, based on pupils' result3, also need continued study.
- 81. Changes in the streaming of the flow of pupils as between different fields of study, and alterations in the content and length of the educational cycles often counter serious opposition. Parents and pupils do not agree readily with the idea that the educational system should be arranged on a functional basis serving manpower and development plans. The experience of the 1960s has shown that educational plans based on manpower allocation have rarely been implemented. Instead, the social pressures based on other than manpower considerations have created imbalances both in the developed and developing countries in the supply and demand of the different qualifications. It is useless for planners to set up programmes that ignore these considerations, and it is clear that, to secure innovation in preparation for occupational opportunities, the main interests of parents and pupils must be properly weighed and discussed and their participation ensured. Otherwise, attitudes will not change and innovatory projects will not succeed. A valuable example of how major structural changes in the duration, streaming, and content of education can be planned successfully is illustrated by the case of Costa Rica. The new system prepared with the co-operation of UNESCO, is being discussed and "thrashed out" at the municipal and local level throughout the country in order to ensure full co-operation and to amend the proposals to suit local conditions.

- 82. The principal difficulties about the sixth type of innovatory activities listed, namely research and development, and the planning of new designs for education are the cost of research, shortages of research staff, and lack of opportunity to undertake pilot projects. Few of the Governments of the developing countries have sufficient facilities of this kind, and internationally as well as in the developing countries themselves, there is a shortage of the relevant skills. Efforts are required to increase the present supply of these skills for use at all levels. The International Institute of Educational Planning for instance, has at present few resources for this task. Its resources should be increased to enable it to train the necessary experts to design and advise on the carrying out of sound innovatory projects. Alternately, a special new centre concerned exclusively with innovation and experiment might be set up. The suggestion was made by the Director-General of UNESCO in his report on the Feasibility of an International Fund for Education, submitted to his Executive Board in 1969 that, while an over-all fund was not recognized as feasible at that time, support might be obtained for such an international centre. One already exists, attached to the OECD and covering its member countries, but not dealing with the specific problems of the developing countries.
- 83. One of the most serious obstacles affecting all of the six types of innovation, is the absence of funds for the purpose in the budgets of the Ministers of Education. The average educational budget is so heavily pressed with meeting the expansion of the educational system, the expenses of which are predominantly made up of teachers' salaries and administrative expenses, and in the educationally least-developed countries and disadvantaged areas, the capital needs of school construction, that only rarely is it possible to allocate funds to research and development and to "trial runs" of new educational patterns. To achieve lasting results, the developing countries must themselves allocate resources for innovation, but external aid can have a particularly useful role. It can also sponsor projects involving more "risks" than national administrations may be able to take.
- 84. At present it is probable that no more than 10 per cent of all projects assisted by external aid, whether multilateral or bilateral, are innovatory in the institutional sense described above. Most add to or make small improvements in existing educational patterns. The latter is a very necessary and even key activity for the purpose of raising productivity in the short term, and the International Development Strategy draws attention to the need to increase productivity substantially in the short run. 38/ Nevertheless, particularly when the subject is children and the innovatory process is a long one, regard has to be paid not only to the Second Development Decade but also to succeeding decades. This would indicate an assistance policy of making a major thrust for innovation and future needs, combined with progressively phasing out aid to ongoing activities.

#### The capacity to innovate

85. Most developing countries, however, are not yet ready for the administrative tasks of large-scale educational reform. This means that aid is required to expand and improve their planning and management resources and their research and development effort. It means assisting them to increase their capacity to innovate. In particular, it involves assistance in: (a) training of planners, administrators, and specialists of various kinds (educational technologists, curriculum development and evaluation experts, etc.) as well as teachers; (b) working out norms and designs for innovatory projects; (c) stimulating teacher and parent interest in educational change; (d) applied research in new educational approaches at the country and local levels.

#### Educational renovation and adaptation to new solutions

- 86. At the same time, it must be stressed that the emphasis which has been given to fundamental reform should not obscure the value of efforts of all kinds, whether by educational administrators or by teachers in the class, to bring about educational renovation and regeneration however and whenever possible. While important innovation usually mean structural changes and new content, much useful action can be taken to improve ongoing systems. Efforts of this kind have been pursued by many developing countries and aid-providing agencies over recent years, e.g. the fields of rural education, "animation rurale", teacher-training, new content for textbooks, 39/ new methods of science teaching, etc.
- 87. Moreover, not all types of innovation have necessarily to be preceded by prolonged studies. Where clear and tested methods and patterns exist, the problem is one of imitation and adaptation rather than of research. There is therefore, the need for operational assistance to spreading innovation. This may take the form of assisting the setting-up of innovatory types of school (e.g. the community school in which adults and children participate) in shanty-towns and backward rural areas. It may involve altering the length of the formal school cycle. A number of countries (e.g. Iran and Ceylon) are introducing earlier terminal dates for their primary-age-group education, with new "guidance cycles" being substituted for academic courses for the later years. One of the most promising fields has been the design of school buildings, e.g. the Mexican pre-fabricated one-teacher rural schools including the teacher's home (aula-casa). Another important area has been the use of the new media, 40/ though major experimentation has been limited to only a few of the developing countries so far (Niger, Ivory Coast, Togo, El Salvador, Algeria, Eastern Samoa).
- 88. In other examples, the main element may be organizational change (e.g. the UNESCO-aided project in Costa Rica, which involves restructuring the primary and junior secondary cycles and changing their content). It has been found that innovations in structure and organization, once aid has been furnished for their design and management, could in some cases be financed domestically to a great

<sup>39/</sup> See considerable UNESCO literature and annual country reports to the International Bureau of Education. See also Michael Kelly "The Africanisation of Syllabuses in Education in Anglophone and Francophone Countries of West Africa" in Teacher Education in New Countries, (Vol. II, No. 3, February 1971).

<sup>40/</sup> For the advantages and limitations of the new media, see The New Media: Memo to Educational Planners (UNESCO-IIEP), Paris, UNESCO, 1967.

part by internal economies, resulting either from the reduction of large numbers of repeaters blocking the primary educational stream 41/ or from the redeployment of future capital development and maintenance costs in new directions e.g. changes in the carte scolaire (location of schools), in teacher-training colleges, in equipment and textbooks.

- Thus, the emphasis on innovation would be unlikely for many years to replace completely the task of adaptation and improvement of the ongoing system. Teachertraining within the present systems will, for instance, continue to be important. Although buildings and equipment are important, potentially the most dynamic single factor, provided the educational content and structure are suitable, is the well-trained teacher. The training of teacher-educators and of teachers has a particularly strong multiplier effect, and it is not surprising that most educational aid is going in this direction. This need will be increased rather than diminished by likely innovations, since new types of projects require new types of teaching skill moving away from teaching by rote to encourage most active participation by pupils and teacher alike in the educational process. Important experimentation 42/ is taking place in the United Kingdom and the United States for instance, on new methods of teaching the primary-school child; in the United Kingdom concentrating especially on diversifying and intensifying the role of the teacher, and in the United States concentrating on organization and teacher aids. The new methods may be found to be valuable if applied to the different conditions of the developing countries. Further, the teacher's role in the community and his capacity to diffuse modernizing attitudes to parents through children, are particularly important and need to be stimulated. The introduction of adult instruction in matters of child welfare on the school premises after hours is also to be encouraged.
- 90. It is, renetheless of little use to introduce more effective teaching techniques and better teacher-training if the content of education is unsatisfactory, and if the child's learning capacity is impaired by tiredness and malnutrition. Educational content in many developing countries lacks relevance to the country's economic and social objectives, and also to the over-all requirements of the development of children. A number of the UNICEF-aided projects, it should be noted, have been well geared to the improvement of this aspect. In the UNICEF-aided projects, in the United Republic of Tanzania and Uganda, for example, the involvement of teacher-educators, supervisors, and panels of teachers in curriculum revision and in the preparation of supporting educational materials, has contributed to greater realism of content as well as a high degree of receptivity to the new approach in the in-service training of teachers. The child's learning capacity depends heavily upon his health, nutrition, distance from school, and the educational and welfare background in the home and community. UNICEF's assistance in nutrition, along with that of the World Food Programme (WFP), \(\frac{43}{}\) deal with important aspects of the productivity of education, as well as health aspects of child development.

<sup>41/</sup> Jan Auerhan, study on "Alternative Strategies" (Rwanda), Paris, UNESCO (UNESCO Series C, Innovations No. 18).

<sup>42/</sup> G.W. Bassett, <u>Innovation in Primary Education</u>, New York, John Wiley and Sons, 1970.

<sup>43/</sup> For the year 1969/70, WFP aid to education acounted to around \$226 million.

#### Wastage

- 91. Of all the aspects of poor educational productivity of the existing systems, the one for which it is perhaps most difficult to find a solution is the problem of wastage. Wastage is made up of drop-outs and repeaters, and is defined as "Incidence in a country's educational system from the point of view of its efficiency of factors such as premature school leaving and retardation or repetition." 44/ By "premature" is meant before the end of the prescribed cycle. This means that "A drop-out is a waste even if after several grades the pupil who 'drops out' or was 'pushed out' by strict examinations, without concluding the cycle, did in fact gain a basic knowledge that raised his level of educational attainment". 44/ This concept is a harsh one since it means that countries which set themselves over-long cycles have high wastage rates. Similarly, countries which have restraining examinations between grades have many repeaters, and those with automatic promotion, few. A different approach would be to limit the term wastage to those who drop out without attaining a minimum basic education of say, four years.
- 92. Moreover, if education is viewed as a life-long process which starts with the parents at home and continues in school, in society and through adult life, people will, during their lives, both "drop out" and "drop in". No stigma will be attached to individuals or to efficient educational systems which permit pupils to profit from education as and when their life and family opportunities permit.
- 93. The central feature is that the period spent in a particular cycle should be used effectively. If it is accepted that when children start school at the age of six or seven, a four-year period 45/ is usually required to attain basic literacy and numeracy, it may be that for those who start at the age of ten, eleven or twelve, acquiring these skills could be condensed into two or three years, especially with the use of modern techniques. Children who return home after four years to take an active part in their community life, at work or at home, or who start late for economic reasons, cannot automatically be reflected as output losses in circumstances where an educational cycle of seven years may be the standard for the country, but unrealistic locally. The twin priorities would therefore seem to be to reduce the number of children who drop out before four years of education, and to provide non-formal education to those who do drop out with a view to ensuring, as a minimum objective, that they retain and develop the benefits of the little education they had at school.

<sup>44/ &</sup>quot;International Conference on Education, XXXIInd Session", held in Geneva, July 1970 (UNESCO, ED/BIE/CONFINTED 32/Ref.1) Paris, June 1970, para. 2.4.

<sup>45/</sup> Not all authorities believe that as much as four years is required as a basic primary minimum. In the Union of Soviet Socialist Republics, for instance, the primary education course has recently been shortened from four to three years. See Final Report of Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia, Singapore, June 1971, (UNESCO), Section I, para. 167.

#### Asian example

- 94. An interesting project in India, consisting of 60 pilot centres, was set up to integrate back into the education process, children from 11 to 14 years of age who have dropped out. In a typical centre, half of the day is spent in workshops, while the other half is given to general education; a vocational guidance counsellor is available, and there is constant contact with the community. The amount of child employment in many countries is still large and this cannot be eliminated simply by the establishment of schools with fixed cycles for certain age groups. Much depends upon the conditions in the home, the age of other children in the family, and the nature and seasonality of the employment.
- 95. The study "Wastage in Education" published by UNESCO/IBE following the Conference to which reference has been made above stated that "The causes of drop-out have also been of primary concern in the Asian region .... An examination of the causes by a check-list completed by schools gave the greatest weight to poverty and included employment of children in agriculture; other causes were unfavourable attitudes to women's education, lack of religious education in schools, migration, unsatisfactory methods of teaching, hostility among the landlords, lack of means of communication and school failure. Similar conclusions were reached by a committee on non-school-going education in Ceylon (1960) in which the inquiry related to children between the ages of 5 and 14 during the 1950s. The main cause for drop-out and non-attendance was asserted to be poverty.... The Bureau of Public Schools of the Philippines carried out a survey of elementary school drop-outs (undated) and referred to the period 1952-55. After reporting that 10 per cent of the children in the age-group did not enter school and that 75 per cent of enrolments in grade 1 left school before reaching the last grade of the elementary stage and showing a drop-out rate of 62 per cent for boys (almost twice as high as that for girls), it attributed drop-out to economic factors primarily but regarded school failure and home and social factors as having considerable importance." 46/

#### Curriculum reform in Mexico

96. By way of measures to reduce wastage due to a non-relevant curriculum, the example of Mexico is interesting. The new curriculum, put into effect in 1960 and still in operation aims to co-ordinate the schools' activities, teaching content, methods and objectives, with life in the home and in the local, national and world communities. It is organized not by subjects but by six major functions of elementary education, namely (a) to protect health and improve physical fitness; (b) to promote study of the physical environment and of the conservation of natural resources; (c) to create understanding of and to improve social life; (d) to teach creative activities; (e) to teach practical activities; and (f) to develop the elements of culture. The cycle is for six years, but an intensive programme is given during the first four years, in view of the heavy drop-out rate, thereafter, in order to give the pupil who cannot last for the full cycle better preparation for work and usefulness in the community. In the fifth and sixth year teaching is given especially in manual and occupational activities related to the pupil's aptitudes and the national economic and technical needs. The programme is supported by boarding and social assistance schools, schools for minority groups, and schools for the handicapped. /...

46/ M.A. Brimer and L. Pauli "Wastage in Education: a world problem", study prepared for International Bureau of Education, (UNESCO, Paris: IBE, Geneva, 1971), chapter II, Asia.

97. Since it was found that only about 25 per cent of the schools were functioning in 1964 with all six years, consolidated schools have been established (escuelas de concentración) to take in pupils from the rural schools which could not provide the full cycle. These consolidated schools provide an interesting example of a ladder between schools, meeting strictly local conditions, and the need for opportunity of access to the national system. They are faced with problems of transportation, lunches and other services needed by pupils who come long distances every day, but represent, structurally, an important form of educational innovation. The programme was prepared in 1959 by the National Technical Council on Education and put into operation in 1960. In an article, "Los nuevos programmas de enseñanza", the Centro de Estudios Educativos criticized the programme on the grounds of insufficient teacher preparation, lack of experimentation in pilot schools, and lack of a plan of evaluation. It appears that the programme as first established overestimated the retaining capacity of the rural schools, but as a result of experience the newer consolidated schools together with four-year primary schools in the small villages, have found an answer. 47/

#### Relation of formal and non-formal systems

- 98. This programme is an instance of flexibility and innovation within the formal education system. A point that sometimes causes controversy is the extent to which it is desirable to introduce non-formal education parallel to and not incorporated with the formal educational system. On the one side the view is taken that the raison d'être of non-formal education is precisely, that it fills needs with which the formal system has been unable to deal, and that its integration with the formal system under the Ministry of Education might inhibit its originality and its close connexion with the work of other Ministries (Agriculture, Health, Labour, etc.). On the other side it is pointed out that the existence of two systems side by side has an adverse effect on educational opportunity, since it is through the formal system that the fullest social and personal advantages of education are attained. Different positions have been taken on this issue in respect of the rural education project in Upper Volta, assisted by UNICEF, FAO and UNESCO, and on proposals made for a similar project in Ethiopia.
- 99. Undoubtedly, some countries feel that parallel systems are indispensable. The position in Cuba, for instance, is described in a document 48/ of the International Commission on Educational Development as follows: "Thus was born the Parallel System of Education for young people between the ages of 1 and 16 who have either left school or have fallen behind. It is gathering strength as it offers to those who have failed under the Regular System of Education a means of re-entry, of raising their educational level, of learning a trade or of acquiring skill in some particular job. This presupposes a twofold tactical

<sup>47 /</sup> Clark C. Gill, Education in a changing Mexico, Washington, U.S. Department of Health, Education and Welfare, Office of Education, 1969, p. 38. See also Angel Palerm, Planeamiento integral de la Educacion en Mexico, Mexico, Centro Nacional de Productividad, 1969.

<sup>48 /</sup> Raúl Ferrer Perez, "Innovating Experiments in Education in Cuba", Paris, UNESCO, (UNESCO Series C, Innovations No. 4 ICED/UNESCO).

objective: to convert under-educated young people into a qualified labour force by the time they reach working age, and to curb the growth of anti-social tendencies and behaviour." There is also the "youth camp" type of educational institution which exists in a number of countries (e.g. Malaysia), the farm-study schools in the People's Republic of China, and a variety of similar projects. 49/

100. The relation of projects of this type to the formal system varies from country to country, according to the age groups involved and to the degree of interest displayed in them by the Ministry of Education. Ideally, such projects should be an extension of the formal system, a mark of its dynamism, and practical examples of the idea that education is a process involving all aspects and stages of life. Unfortunately, the UNESCO educational advisers and UNICEF offices are handicapped by lack of data as to successful designs of non-formal schooling that will overcome the disadvantages of operating parallel systems, and provide the necessary ladders from informal to formal education, and between the various levels of the formal system. The study being undertaken for UNICEF by the International Council for Educational Development on non-formal education for children and youth will no doubt suggest solutions to this difficult issue.

101. Greater dissemination of ideas and data among the UNICEF and UNESCO Regional offices is required. The effort of Mexico in setting-up consolidation schools to bridge the gap between small village schools with only a four-year cycle and the main educational cycle, is worthy of study in other regions.

#### Innovation in Peru

102. A pilot project in Peru, will, if successful, be the first step in a reorganization of the country's educational system. The zone devastated by earthquakes was selected since a new orientation could be attempted in restoring and extending services. The assistance of UNICEF and UNESCO was requested to introduce new ideas and new programmes, especially in rural development and pre-school activities, which can gradually be applied throughout the country at later stages.

103. Among several innovative features in the new programme in Peru is the initial education of parents, for which courses (e.g. on family responsibilities, early childhood education, and nutrition) are being developed with the public health services. Specially constructed buildings (modules), planned jointly by the Ministries of Health and Education, are part of the educational reform, their purpose being to integrate for rural families, maternal and child-care services, parent education and the school. Education for children between 6

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49/ The introduction of farm-study schools into the educational programme of the People's Republic of China is an interesting example of how the formal education system at the primary level can include work-oriented studies, as is shown by the following statistics:

Type of school		<u>Percentage</u>	of children	in school
		1956	1963	<u> 1964</u>
Public full-time Private		34.3 3.1	31.3 11.4	41.6 17.2
Farm-study schools		<i>J</i> • ±		20.8
	Total	37.4	42.7	79.6

and 15 years of age has been divided into three cycles: each cycle is conceived as a unit in itself permitting the child to acquire a "minimal knowledge of fundamental attitudes, and abilities to orient himself to his environment". The movement of students up through this programme is not tied to year-by-year promotions by "grades", but allows the flexibility needed for advancement according to individual ability. Parallel to this new educational system is another programme designed for the special needs of youths and adults who have, for various reasons, dropped out of school in earlier years. Here too, an entirely new curriculum has been evolved, including community and cultural activities.

#### Tanzanian example

104. A further example is that of the United Republic of Tanzania, where the testing out of innovative ideas, to which UNICEF aid has been applied, has not been limited to a selected geographic area but has used selected primary schools located at strategic points throughout the country. Project preparation was undertaken in 1968 with the help of a UNESCO expert. Tanzanian educational personnel including Ministry of Education, University and Teacher-Training College staff and classroom teachers, have been involved in the revision of syllabi and the preparation of educational materials. The testing of materials in actual classroom situations has been conducted in 10 testing units each consisting of 10 selected schools. The training of supervisory staff and teachers has also been initiated. A pilot scheme for experimentation with a view to integrating school activities in community life is another aspect of the project. An experimental curriculum for primary schools has been drawn up, which includes a flexible grouping of activities within four areas: literacy and numeracy, citizenship, self-help, and cultural activities and community studies. The experimenting schools are to be located in the ujamaa resettlement villages which are playing an important role in the Government's programme of self-help rural development.

#### Reduction of wastage in Rajasthan

105. Another interesting project to reduce wastage is the Rajasthan experiment in India, introducing a three-hour school programme in the agricultural peak season. A recent study by the University of Delhi states that "From our household survey we found that the involvement of children in household work tends to be excessively high in lower-income groups, and the extent of involvement increases still more sharply during the agricultural peak seasons. In this context, a strategy based on shorter school-hours is worth considering. Happily, a three-hour school programme has already been introduced in Rajasthan State from March 1965, after a preliminary survey with regard to the timings which suit the parents of children of school-going age. Detailed report on the Rajasthan experiment is not yet available, but the State Institute of Rajasthan claims that the initial reactions of the parents are highly favourable. This approach appears to be generally correct in combating wastage."

#### Population education

106. A further area of priority closely bearing on the over-all needs of the child is population education, both in the schools and outside, for older children and adolescents, in order to relate better family size to child welfare. Projects for population education, especially at the junior secondary level, are being

undertaken in a number of countries with the financial assistance of the United Nations Fund for Population Activities (UNFPA) and the technical help of UNESCO. This type of project requires the kind of assistance UNICEF is particularly fitted to give because of the link with health services. While the UNFPA should continue to be the main financing source for this assistance, it should be related to UNICEF's assistance given in the context of maternal and child health services. 50/

# Types of innovatory project aided by UNICEF

107. Projects with an innovatory content, at present being aided by UNICEF in education are of five main types:

- (a) New approaches to the problem of primary school leavers, with special reference to rural areas;
  - (b) Use of mass media (television/radio) to extend educational resources;
  - (c) Development of new educational materials and equipment;
- (d) Measures such as improved one-teacher schools to cope with the acute problem of teacher/space shortage in rural areas;
  - (e) New patterns of teacher-training.

<sup>50/ &</sup>quot;The information which the mission received in its visits seemed to indicate that this was an area of social change in which it was not possible to move fast simply by altering curricula and issuing textbooks. The entry of effective population teaching into schools in Iran seems to depend more on the results of public information and the spread of modern ideas in influencing both parents and teachers as well as on the support or acquiescence which is now developing, of the religious authorities. The educational system seems equipped technically to enter into the important field of population education - though the curricula being new have not yet been fully tested - but it is important that the subject should not be pressed by the health authorities in too technical a manner and create a 'backlash'. This applies particularly to primary education. Rather the teachers should be given full and judicious training and then given latitude to expand the technical import of their teaching on population and family planning as local opinion progressively develops encouraged by the communication media. The mission is therefore of the opinion that the teacher-training colleges should be given the supplementary organization and equipment to conduct efficient programmes of training teachers on population and family planning problems. This in turn means strengthening of the personnel who will instruct the teacher in demographic and family planning matters. Further it is thought that the curricula already worked out would benefit from further review after testing in pilot schools and compared with other approaches of a somewhat less encyclopaedic kind, teaching methods also being adjusted accordingly." (See "Population and Family Planning in Iran", report prepared for the Government of Iran by interagency mission, 1971, (United Nations document, ST/SOA/SER.7/13) paras.418 and 419).

The procedures have consisted of a pilot phase of the designing of the project, its application on a limited scale, the involvement of teachers in both planning and where possible, try-out, the correlation of practical experimentation with teacher-training, the development or provision of supporting materials, and the systematic analysis and evaluation of pilot experience.

108. Progress has, not unnaturally, been uneven. Adaptations and substitutions have had to be made, in some cases steps retraced or plans modified, as a result of administrative reshuffling, changes in the national economic situation, or the mere unavailability of the projected local mampower for training and implementation. It is however clearly evident that in a number of instances, UNICEF aid has played an important part in stimulating and sustaining operational research essential to the adoption of innovatory projects. 51/

# Education for those who will not continue beyond primary

109. Mention must also be made of UNICEF aid to problems of "terminal" education in the last years of primary school, or out of school for primary-school leavers. High rates of wastage and youth unemployment have highlighted the importance of serving the outflow of pupils at various grades and age levels, who will not be going on to secondary or technical schools. New approaches to the problem of primary-school leavers have been along two main lines:

(a) Relevance of curricula. In Turkey a specific aim in curriculum reform is to ensure that schools really develop "the special talents and skills of those who do not continue with their education". They should become real instruments and agents of development, particularly rural development. In Paraguay regional education centres have been set up, stressing manual arts and pre-vocational skills.

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51/ See for instance:

Congo: First effort to ruralize education in pilot area, Mossendjo, followed by progressive extension of project to rest of country;

Indonesia: Experiment with a decentralized "province approach" to educational reform in Sumatra has proved highly positive, leading to expansion to other provinces;

India: The development of model instructional materials for science teaching in primary and middle schools is nearly complete: work has started on related materials at other levels;

Thailand: Pilot phase successfully completed, demonstrating how teaching methods can be improved with educational supplies and equipment;

Guatemala: Effectiveness of pilot project in N.E. Guatemala has justified expansion of project throughout the country;

United Republic of Tanzania: Information and experience from first phase is considered by the Government sufficient to justify launching a vigorous programme of reorientation of the entire primary system.

- (b) Recuperative programmes. These provide primary-school leavers with new and less formal opportunities to re-enter the learning stream. Peru has recently instituted measures parallel to the regular education system for recuperation of students who abandon school. This parallel system provides accelerated basic education and work skills to the young and to adults who for whatever reason, have had to abandon earlier the regular basic education cycle. The grades in this parallel system are flexible, the aim being to provide youth and adults, at their own pace, with the training that best fits with their capabilities and their aptitudes in their environment.
- 110. In between these two categories may be found a third, essentially a form of practical education for terminal students but which also permits those who wish to do so to continue within the regular system. The practical, rural secondary schools of Bolivia are intended to fill the gap between rural primary education and the urban secondary schools of the old system. The compulsory basic cycle of middle-level education which have been created in Ecuador since 1960, would enable all primary-school leavers to continue their education for a further three years.
- lll. In Africa, Gabon has undertaken an experiment in terminal education to relieve rural primary schools of pupils who are overage or must repeat classes. The new schools reinforce basic concepts learned in primary school and provide training in agriculture and manual arts. The aim is better to prepare young people for life in their communities, thus combatting the rural exodus, and permitting primary schools better to educate remaining pupils and potential secondary school entrants.
- 112. Out-of-school education of a less formal kind has been established in Chile where a variety of courses, e.g. in fishing, building, cattle raising and agriculture mechanization, are being offered to young people through the National Institute of Vocational Training. Similar educational opportuntities are being promoted in Lesotho, Uganda, and several other African countries, through youth clubs. UNICEF has participated both in the planning and in the implementation of such projects. In some instances, as in Rwanda, UNICEF has helped finance the basic study of the rural youth situation on the basis of which new education policies are being prepared.
- 113. The continuation schools of Ghana offer an interesting example of the scaling of innovation to the resources and stage of readiness of the country. The original idea was to provide youth who were unsuccessful in obtaining entry into secondary schools, with opportunities for post-primary education more directly related to actual work opportunities. A good start was made in selected regions with UNICEF equipment for teaching agriculture, woodwork, construction and home economics. More recent plans developed by the Government, are taking into account the danger that these schools can be looked upon as "designed for educational failures to fit them for low-rewarding jobs". The new plans include converting middle schools into three-year junior high schools providing all pupils with a more practical education. Thus, in addition to serving the needs of the terminal student, these new schools present manual activity and environmental studies in a new light "as part of an educational whole, part of the process of discovering and experiencing what has to be learnt in the modern world".

#### Innovation in teacher-training

- 114. In the area of teacher-training, some progress has been made in the development of new forms of in-service training of classroom teachers, notably in Africa. A number of projects include experimentation with correspondence courses, home study, the use of cassette tape recorders and radio programmes. Television is also being used (for teacher-training in Cuba and for education at the school level in Niger and the Ivory Coast). While the response of teachers has been encouraging on the whole, the task of creating effective in-service training programmes by means other than attendance at teacher-training colleges is far from an easy one. The low academic background of average teachers in many cases throws in doubt the feasibility of real training via correspondence courses, cassette recorders and radio broadcasts.
- 115. It is also becoming evident that no one media is in itself adequate as the chief tool for in-service teacher-training. The production and dissemination of manuals, guides, texts and other supporting educational materials must therefore keep pace with the training programme. The need for special training of head-masters, supervisors, teacher-educators, writers, etc. must also be taken into account, as is done for example in Botswana. The production and adaptation of films has received less attention than other media in UNICEF-aided projects, although the limited experience available (e.g. in Afghanistan and the Syrian Arab Republic) indicate that this might well be worth exploring further. Certainly, short films of demonstration lessons in actual classrooms could extend the range of influence of teacher-training institutions.
- 116. An interesting experiment in teacher-training without reliance on audio-visual media is being tried in Nepal with the aid of a UNESCO adviser. This requires untrained teachers, designated "teaching assistants", to go for two days a month to a local central location (larger primary or secondary school), and work with other teachers in a "study group" under a selected trained teacher on a programme supplied by the Ministry. A travelling team of specialists also provides on-the-spot teacher-training courses of one-week duration to help primary- and middle-school teachers solve their daily classroom problems.

# A strategy

- 117. From the foregoing, the elements of a strategy begin to emerge as follows:
- (a) Definition of the target group as indicated above in paragraph 6, in terms of children deprived of education;
- (b) Assistance extended beyond the target group for the special concerns of UNICEF in a comprehensive view of child development and the interlocking of education with child health, nutrition and welfare;
  - (c) Assistance with most pressing needs of the ongoing systems;
- (d) A thrust toward new solutions by promoting innovation in educational patterns and delivery services, and assisting innovatory projects already in operation, and the imitation and adaptation of new methods in use elsewhere;

- (e) The creation of the capacity to innovate and the strengthening of the facilities by which innovation may be promoted (training and research and experimentation at both the international and national levels);
- (f) The phasing-out of support by UNICEF to secondary education progressively as this becomes feasible, or as other sources of aid can take over, and the redeployment of resources for educational solutions affecting the target group.

To review the priorities of the ongoing systems, it is necessary to examine the present joint UNICEF-UNESCO guidelines and how they have worked out in practice, and the scope and direction of UNICEF's aid. This is dealt with in section III.

# III. TREND AND DISTRIBUTION OF UNICEF'S AID; THE JOINT UNICEF-UNESCO GUIDELINES; ACTIVITIES UNDER THE GUIDELINES AND THEIR CRITIQUE

118. The trend of UNICEF's aid for education and its distribution by age group, region, and types of aid can be seen from the following tables:

Table 1

Distribution of UNICEF commitments to education 1968-1971

(a) - in thousands of US dollars

	1968	1969	1970	1971	1968-1971
Primary	6,702	4,333	6 <b>,</b> 266	8,912	26 <b>,</b> 213
Secondary	3 <b>,</b> 277	1,041	2,767 <b>*</b>	5,421 <del>**</del>	12,506
Undifferentiated a/	2,709	1,202	1,198	3 <b>,</b> 538	8,647
Total	12,688	6,576	10,231	17,871	47,366

# (b) - in percentages

	<u> 1968</u>	<u> 1969</u>	1970	1971	1968-1971
Primary	53	66	61	50	55
Secondary	26	16	27	30	27
Undifferentiated $\underline{a}/$	21	18	12	20	18
Total	100	100	100	100	1.00

<sup>\*</sup> Including \$1.4 million for Nigeria rehabilitation.

<sup>\*\*</sup> Including \$3.6 million for India science education.

a/ Mixed primary and secondary education.

<u>Table 2</u>

<u>Distribution of UNICEF commitments for education</u>

<u>by country per capita income level</u>

Per capita income level a/	Percentage distribution of total		Percentage increase of total per level	
	1964-1967	1968-1971	1968-1971 over 1964-1967	
\$107 and under	32	٧-1	80	
Between \$101-300	63	54	24	
Over \$300	5	5	58	
All income levels	100	100	7+5	

a/ Income levels based on GNP per capita figures (source, World Bank Atlas, 1971).

Table 3
Commitments 1964-1967 and 1968-1971 by region and types of aid

- in thousands of US dollars -Supplies a/ Other types of aid  $\frac{b}{}$ Total Per-Per-Percentage centage centuge 1968-1971 1968-1971 change 1964-1968 1968-1971 1964-1967 change 1964-1967 UNICEF Region change 16,839 2,818 13,738 1,971 43 15,709 19,657 25 Asia c/ 23 3,343 6,334 7.031 12.350 10,374 18,684 Africa d/ 80 3,523 2,602 2,188 920 83 (-16)3,522 62 5,711 Latin America 2.492 1.826 (-27)679 1,263 Eastern Mediterranean e/ 86 3,089 (-3)3,171 Europe 15 15 Interregional 300 225 (-25)225 3C0 34,538 8,895 12,828 24,196 43 44 47,366 TOTAL 33,091

a/ Including ocean freight.

b/ These consist of stipends for trainees (within the country), honoraria for teachers and instructors, fellowships for training outside the country, cost of project personnel, etc.

c/ Bangkok, Delhi regions.

d/ Abidjan, Lagos, Kampala regions and Algiers area.

e/ Beirut region and Ankara area.

- 119. The distribution of aid, if examined in terms of the changes in policy we have suggested in the section II shows a favourable trend of more attention to the least developed countries, and an unfavourable trend as regards the proportion going to primary education. The assistance to secondary education would have been limited, under the suggested policy, to the aspects of the curricula dealing with health and nutrition, home economics, and child rearing and welfare and have been therefore much smaller.
- 120. The distribution for the period 1968-1971 results partly from the joint UNICEF-UNESCO guidelines, but it includes some contribution to continuing projects started previously under earlier decisions. If policy changes are to be introduced, they have to be grafted on to existing activities and to replace them progressively. It is desirable therefore, to consider what types of activity would have to be aided to implement the new policy, and to what extent such activities are already being pursued under the guidelines.

# The joint UNICEF-UNESCO guidelines of 1968

- 121. The rapid expansion of UNICEF's educational aid in the 1960s led to the establishment at the 1968 Executive Board, of a set of guidelines worked out jointly by UNICEF and UNESCO. The areas of educational aid delineated by the guidelines were as follows: (a) planning, (b) curriculum reform, (c) the training of teacher and teacher-educators, (d) the strengthening of national supervisory services, (e) problems of the improvement and extension of the school system such as wastage, rural education, provision for unenrolled children and disadvantaged groups including girls in traditional societies, (f) out-of-school education, (g) improved methods and techniques and innovation in education, (h) educational aspects of health nutrition, etc.
- 122. In reviewing the application of the guidelines, it has not been possible to make a precise distinction between projects initiated, since they were adopted in 1968, and those in existence then and which have continued. The latter have been influenced by the guidelines as and when the opportunity arose to amend plans of operation. Of the 77 educational projects at present being supported by UNICEF, 20 were begun in or after 1968 and the others before. The analysis has, therefore, been based on a study of plans of operation of all 77 projects, and on periodic progress reports and evaluative accounts both from UNICEF and UNESCO sources.
- 123. The 1968 guidelines indicated broad areas of priority for UNICEF aid, allowing considerable leeway for planning within them. It was stated that "projects should be derived from educational development, and reform plans and should be carried through with due regard to planning procedures". It was further stated in the guidelines that "UNICEF-UNESCO assistance to projects should be viewed by national authorities as an opportunity to concentrate resources on enterprises of an innovatory character". Considerable progress was made in this direction as can be seen from the examples which are listed in section II of the present review. In general, however, the nature of the innovation was not of a fundamental type. This appears to have been due partly to insufficient information about possible innovations, and a lack of new designs ready to be applied, and partly to the fact that the fields of assistance listed in the guidelines were numerous, leading to some dispersion of effort.

- 124. The guidelines also provided that "the design of projects may be on either long-term strategic or short-term tactical grounds". This distinction was not sufficiently borne in mind in project identification and preparation. Therefore, it has not been found possible, as part of the review, to divide projects up into the two categories and to study the different methods of aid involved for each.
- 125. A further item of the guidelines was that co-ordination and co-operation between agencies should be secured. This seems to have worked very well. In particular, the collaboration between UNICEF and UNESCO on the technical aspects of the project has given good results within the limits of the staff resources available. The rapid increase of UNICEF's assistance to education has, however, moved ahead of the supply of the necessary resources of staff to ensure fully effective identification and preparation of "best possible projects". While project choice has, on the whole, been good, it could benefit from improved data collection and analysis, and a closer application of selection criteria. In difficult cases, it could have benefited from more protracted discussions with the initiators of the project, since the more difficult cases, which need time for handling in sufficient depth, may be the most useful and the most innovatory.

#### How the guidelines have worked

126. The results made of the analysis may be summarized as follows:

- (a) The guidelines have deflected UNICEF aid from the quantitative aspects of education to the qualitative, in accordance with current policy trends in the developing countries.
- (b) There has been little assistance to educational planning, this item having been left to UNESCO as recommended by the Executive Board. The guideline on planning should have been limited to those aspects concerned with health, nutrition, and other needs arising from a comprehensive view of the child, rather than to over-all educational planning.
- (c) Increased emphasis is visible on the role of education as preparation for life, and on diminishing the academic aspect of preparation for higher education. There are, however, many problems arising from the values held by both teachers and parents, which continue to make this difficult to achieve.
- (d) Increased interest has been directed to out-of-school education, though not enough is being done in practice. This is mainly due to lack of tested experience in non-formal education a generally neglected area of educational activity. It is also due to the insufficiencies in projects put forward of the necessary bridges and ladders linking non-formal education to the formal system.
- (e) Ruralization of education has been recognized as an outstanding need, especially in Africa, and some useful projects have been supported.
- (f) In Asia, the main emphasis has been on curriculum adaptation to practical subjects through improvement and extension of science education. Progress towards curriculum reform is taking place, but there is evidence of insufficient provision being made for applied research, testing and evaluation; for materials production; for teacher-training in the use of the new curriculum; and related institutional bases for implementing the reform.

- (g) Experience of the working of the guidelines points to the need for some shifting of the emphasis of UNICEF's aid from the heavily subject-oriented approach (as in the science subjects at the middle-secondary level) to more comprehensive curricula at the primary or immediate post-primary level in which science is combined with other aspects of child welfare, such as health, nutrition, home economics, and pre-vocational education.
- (h) It is encouraging that some of the UNICEF-aided projects have supported a pilot project followed by experimentation, e.g. in teacher-training. (Activities to link curriculum revision and classroom teaching to the environment have been particularly encouraging in a number of Eastern Mediterranean countries.)
- (i) Innovatory items have been promoted under the guidelines, but there have been few changes of a fundamental character. Useful examples of innovatory activities supported by UNICEF are: a few mass-media projects (e.g. the Ivory Coast project), the use of radio and films in teacher-training, the development of new educational materials, non-formal education and one-teacher schools, new patterns of teacher-training, and experimental rural vocational schools. Illustrations of innovatory action under the guidelines have already been given in section II.
- (j) The guideline on the importance of teacher-training has been heavily implemented, with success in most cases. It would seem, however, that an increased impact having regard to UNICEF resources, could be obtained by a greater concentration upon the training of teacher-educators and supervisors rather than on teacher-training generally, since the scale of the assistance required is smaller and the impact more catalytic. Further, the balance between aid for teacher-training in the present methods, and aid for teacher-training as an integral part of basic curriculum reform, could be progressively improved by concentrating more resources on the latter.
- (k) UNICEF's special attention to the least developed countries under the guidelines and earlier decisions, has been greater than that of most of the aid agencies, multilateral or bilateral. Only 3 of the 25 least developed countries on a United Nations list do not have UNICEF-aided projects. The countries of \$100 per capita and under received 32 per cent of UNICEF's commitments for education between 1964 and 1967 and 41 per cent between 1968 and 1971. During the same period those between \$101 and \$300 per capita showed a decline from 63 per cent of total commitments for education to 54 per cent. A further progression of emphasis towards the least developed countries would seem desirable.
- (1) There does not seem, however, to have been the same special attention to the least educationally developed sectors within individual countries, e.g. urban slums and shanty-towns, and educationally deprived rural areas. The emphasis in the guidelines on formal education, secondary as well as primary, and on the broader improvement of educational standards, rather than upon minimum standards, has been of benefit to children who were already proceeding through the school system, rather than to the most deprived.
- 127. Whether the suggested policy changes are adopted or not, certain major channels and areas of educational assistance are likely to be of high importance. It is therefore useful to give more details of such activities, especially in respect of ongoing UNICEF-assisted projects. Many of them would, no doubt, continue to receive assistance under the changes suggested. Assistance to others would need to be amended, adapted, or phased out to permit the redeployment of resources to the new objectives.

#### Some major activities under the guidelines, and their critique

#### Curriculum reform

- 128. While there is a widespread interest among Governments in curriculum reform as a part of qualitative improvement of education, the degree to which individual projects are able to give practical effect to these ideas varies greatly from country to country.
- 129. Curriculum reform may be viewed as a comprehensive revision of content and methods, or simply as an adjustment of subject matter and activities within it. There has until now been relatively little attempted on the lines of the former, but a great deal of the latter. For example, in one case, the broadening and enrichment of the curriculum in the primary I to V is integrated with environmental studies. But in another, "enrichment" was the addition of one weekly hour of science, which was taken from artistic education.
- 130. It is of interest in this connexion that a few projects now include special reference in their objectives and plans of action to the need for personal development of the child (e.g. Uganda, the United Republic of Tanzania, Ghana). Since the general pattern is to stress subject-matter revision, the fact that some projects are now stating their objectives in behavioural terms is an important change. The reformulation of the basic purposes of education in the United Republic of Tanzania, for example, so as to focus on "the development in each citizen of three things: an enquiring mind; ability to learn from what others do, and reject or adapt it to his own needs; and a basic confidence in his own position as a free and equal member of society" has influenced the design of the UNICEF-aided education project in that country. Similarly in Ghana, the focus on critical thinking and discovery learning rather than on subject matter per se, is helping teachers to reorganize learning situations in their classrooms to enable children to discover principles for themselves, not only in science but in other areas, such as mathematics and social studies.
- 131. A further valuable trend in following the guidelines, evident particularly in African projects, is ruralization of curricula so as to increase their meaning to rural children and to demonstrate that "agriculture can be interesting, scientific and profitable", (e.g. Malawi). Thus agriculture, in some form, comes frequently to be included as a major content area. At least 20 out of the 32 African projects receiving aid have as an important objective the ruralizing of the curriculum, since the convential education system ill-prepares young people to play an effective role in agricultural communities.
- 132. A criticism made of education projects in the 1967 assessment is that plans of action had, in some instances, been "based on hope rather than strictly on hard facts" with the result that local resources had proved inadequate to fulfill the original assumptions. This criticsm does not seem to apply as much to more recent field experience, partly as a result of better diagnosis of local situations with the help of UNESCO advisers and of greater care in planning projects in phases.

133. Regardless of the stage of development, a huge task in undertaking curriculum reform clearly remains to be done. As one field report puts it "the problem is not with the ideas, but how to apply them successfully, and what measures, preparations, materials, research adaptations and training they require if they are not to remain pious hopes". In the experience of one Asian country, the revision of the teacher-training curriculum in support of changes in the formal school system has involved enlargement of classroom accommodations; preparation of land for agricultural projects, and construction and equipping workshops. To complete the development of such a teacher-training school has required several years.

134. In another context, the writing and evaluating of new curriculum materials had to be undertaken before printing and distribution operations could begin; the period estimated for these activities being three to five years. The training of supervisors and teachers in new content and methods, together with the upgrading of practice schools and training centres, is another difficult task to be faced. The curriculum itself cannot be considered definitive, and provision must be made for continuous revision on the basis of classroom feedback. Pilot schools have therefore been set up with UNICEF aid to try out draft curricula (prepared with the help of the best available expertise) which may include (as in Dahomey)52/ a substantial amount of practical agriculture and other rural content. The training of supervisory personnel, headmasters and teachers is an essential part of such pilot projects.

135. The 1968 guidelines recognized that the goal of curriculum development is difficult to achieve, particularly since the participation of education authorities, teachers and the public must be ensured in a continuous process of revision, experimentation and adaptation. The guidelines also underscored the importance of a mechanism by which such participation could be facilitated. UNICEF-aided projects provide several examples of effective implementation of this through curriculum and subject committees (as in Iraq), study groups and study circles (India and Ceylon), and panels (northern Nigeria, the United Republic of Tanzania and Uganda). These involve education personnel at many levels, from university professors, education officers and teacher-educators to classroom teachers, the aim being to ensure high quality while interpreting the curriculum in a form which makes sense to the average teacher. Where this has implied the involvement of large numbers of classroom teachers, the end product may lack the sophistication of one produced by experts, but it has helped to reinforce the concept of self-reliance and to ensure realism.

136. Compared to this effort which has, in the instances cited, generated a great deal of enthusiasm at the teacher level, there is little evidence in project plans or reports of a similar organized effort to involve parents in the improvement of educational opportunities and programmes for children. Some of the out-of-school programmes in Africa that include adults, are, however, helping to bring about a closer identification of the rural community with the new education effort. One example is provided by the Upper Volta where, to permit the opening up of new rural education centres, interested communities have built schools and teacher lodgings out of local resources and given land varying in size from 2 to 5 hectares for experimental purposes. The new supplementary role as animateur for which teachers are being trained in countries such as Togo and Cameroon, should also help to increase parent and community interest in education affairs.

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<sup>52/</sup> The Dahomey pilot project includes home economics adapted to the rural environment.

#### Science education

- 137. Projects to strengthen science education, which began in the middle of the decade of the 1960s, were substantially at the secondary level. Since 1968, however, a number of new projects directed primarily to the earlier grades have come up. Latin American projects in particular, emphasize the improvement of science education at the primary level. At present, of some 41 projects which include modernization of science, 20 are comprehensively planned, i.e. include primary and secondary levels, 15 are focused on primary grades alone, and the remaining 6 are at the secondary level. In Asia, where the major portion of UNICEF aid to science has been received, the teaching of science in itself is generally the main target; while in the other regions, it is one among several aspects of the curriculum being strengthened or revised. Several of the African projects relate the teaching of science to agricultural studies as recommended in the guidelines.
- 138. Assessment of UNICEF assistance to science-teaching has been conducted in a few countries (e.g. in India and Ceylon). While drawing attention to some shortcomings, mainly in the matter of preparation of teachers, they indicate the usefulness and timeliness of UNICEF aid. In Latin America, the El Salvador project reports that UNICEF science laboratory equipment has had a strong impact on the revision of the curriculum in the country due to pressure put on the Government by schools which were not included in the programme. As a result, it has been decided to increase the number of schools teaching science and to locate them strategically throughout the country.
- 139. In Costa Rica the project to improve science teaching during the basic cycle, includes courses in science teaching methodology which have proven very effective. As a result, teachers from other schools have joined the courses on their own initiative and school children are participating voluntarily in the laboratory sessions. The Costa Rica project is one of those which set out objectives in behavioural terms, in this case the development of attitudes of inquiry and objectivity, as well as habits of observation and skills in experimental and group work.
- 140. In curriculum revision as well as attitude change and the stimulation of apprehension, science education plays an essential role. While a good deal of attention is given to new methods and equipment at the second level, less has been done to utilize science fully at the primary level. For pupils, for whom primary education will be terminal, a curriculum is required that integrates science

teaching with home economics, health and nutrition instruction, etc. in a comprehensive way, 53/ particularly in rural areas. This is a curriculum gap in many educational systems. 54/

141. The training of traditionally oriented teachers to accept and apply new scientific methods has not been easy, and many consider this to be the main constraint preventing the full impact of UNICEF's aid with science equipment. This has been the experience of countries as far spread out from each other as Indonesia, India and Tunisia, although projects in the Philippines and Pakistan have met with considerable success. Attempts are, however, being made, e.g. through the relay teacher experiment in Uganda and the mobile demonstration teams in Ghana, to find better ways of training teachers in this specific area. Success in this regard should go a long way towards helping the improvement of teachertraining in other curriculum areas as well, along modern lines of student inquiry and experimentation.

#### Training of educational personnel

142. Teacher-training is a major component of all UNICEF-aided education projects, and this reflects the priorities attached by Governments to upgrading and expanding the teaching force. An important difference in respect of training may however be noticed as between some of the continuing and the "new" projects. In earlier stages, teacher-training was often the central or dominant purpose of projects,

<sup>53/</sup> See for instance the experience of the USSR, Academy of Pedagogical Sciences, Programma srednej skoly. Nacal'nye klassy. A new primary school programme initiated in the USSR has as one of its emphasis the study of natural sciences to promote understanding of the local studies principle, whereby each of the three primary grades is taught the application of the natural sciences to a successively more complex environment. Whereas the first graders are concerned with their very immediate surroundings, the children in the third grade are already able to compare the nature and work of their town to that of the various zones of the USSR. See also L.V. Zankow, Razvities ucascibja v processe obucenija. An experiment was made in the USSR in which difficulty, speed, and comprehension of theoretical principles of learning were the major criteria. Primary-level students who had participated in the experiment were to identify an unknown stuffed bird. The results showed that their comments as compared to their initial observations before having taken the course, increased by 100 per cent while the increase was only 33 per cent for ordinary pupils. See also The New Curriculum, UK Schools Council, HMSO 1967.

<sup>54/</sup> The standard definition of primary education adopted by the UNESCO General Conference in 1958 is as follows: Education at the first level, of which the main function is to provide basic instruction in the tools of learning (e.g. at elementary school, primary school). While this definition is intended for statistical purposes and is no longer a policy statement reflecting UNESCO's view, it illustrates the concept of primary education not being regarded as terminal or related to the environment, which is at the origin of many of the educational problems of the developing countries.

and there was less evidence of training in relation to other qualitative components of education, such as reform of the content of the curriculum and the development of improved educational materials. Addends to plans of operation over the years gave fresh opportunities for projects to develop along more balanced and comprehensive lines. Most of the newer projects start from the advantage of a more comprehensive approach as recommended in the guidelines.

143. Aid to training has been substantial in all regions, and in at least one (Latin America) is the major part of UNICEF's assistance to education. A general idea of the impact of this aid to training may be had by comparison of the number of education personnel helped to attend training courses in 1967 and 1971 (although these figures relate only to those trained with the help of local stipends, grants and fellowships). The number thus trained in 1971 (188,000) was three times that in 1967 (62,000).

144. Several basic problems have been identified, in regard to teacher-training, that have special bearing on the nature of inputs and the choice of strategies. A commonly recognized problem is that the academic preparation of most primary teachers tends to be poor, and this therefore increases difficulties of assimilating and communicating new content effectively. Field reports indicate that many primary teachers lack the most elementary scientific knowledge, and therefore training them to teach modern scientific methods becomes a particularly difficult assignment. In one country, the UNESCO adviser found that the majority of teachers had not mastered the subject matter at primary school level, and many lacked even the basic skills in multiplication and division. The prevailing inadequate methods of teaching are closely related to these factors. It is easier for the ill-equipped teacher to teach by rote and to rely on traditional content, than to involve students in exploration of new ideas and in arriving at conclusions on the basis of inquiry. As one field report puts it, new methods have to overcome the deeply rooted and tradition-bound textbook-memorization approach, to which, even after training, there is the tendency for teachers to revert.

145. Radical changes in the outlook and skill of teachers are needed to make curriculum reform effective, even where it is limited to the introduction of a single new component such as the teaching of science. This increases the importance of aid to teacher-training at this stage. In this respect, a highly pertinent general observation has been made in regard to implications of science teaching for the average teacher, which undoubtedly applies to other major curriculum changes: "In the past, a change of syllabus has involved the deletion of some content, the accretion of other; methods remained a constant parameter. Here, the development of the new syllabuses, even though they involve substantial additions of unfamiliar material, is the minor change; the major change lies in the revolution proposed in method. Unless teachers, through thorough retraining, are made familiar with the demonstrational, experimental and other teaching techniques involved, they will fail in using the syllabuses, learning will again take place by rote, and the basic aim of the project will not be achieved." 55/

<sup>55 /</sup> Centre for Educational Development Overseas, "Science Education in India - An Assessment of the UNICEF-Aided Project", London, (mimeo), vol. 1, para. 105, 1971.

- 146. Some of the main obstacles faced in planning training programmes have been identified as follows:
  - (a) Unwillingness of teacher-training staff to change old methods;
- (b) Shortage of time (particularly in in-service programmes) to assimilate a vast amount of materials;
- (c) Inadequacy or total lack of teachers guides and other materials that can effectively communicate the changes desired;
- (d) Inability on the part of teachers to comprehend the new material "although it has been expressed in the simplest terms", due to their own limited academic preparation;
- (e) A tendency to revert, after training, to the traditional theoretical approach by force of habit, lack of experience, or pressure of examinations.
- 147. Important qualitative changes have taken place in teacher-training programmes with UNICEF aid, particularly as regards revision of the content of the teacher-training curriculum and utilization of new methods and media in such training. In some instances a uniform curriculum for all of the country's teacher-training institutes has been introduced (as in Ecuador in 1970). The emphasis placed on practical training and facilitated by the provision of equipment, is also a new and crucial change in many instances. On the principle of learning by doing, numerous training colleges offer teachers opportunities for direct practical involvement in activities which they will subsequently be expected to promote among school children. An example of how this is actually happening in a teacher-training college may be cited from a field report from Thailand: "The visiting team was particularly impressed with the amount of activity that is going on at the teachers' colleges... The campuses at Ubon, Udorn, Mahasarakham and Sakol Nakorn are like bee-hives, from before dawn until well past dark. Groups of students could be seen gardening, digging ditches, running races, doing art work, reading in the library, etc."
- 148. An important component of such practical training is the numerous demonstration and experimental primary schools which have been established or strengthened with UNICEF assistance. The purpose behind these demonstration schools is to serve as a laboratory as well as a training ground for teachers. They are therefore closely linked with teacher-training institutions, and readily provide feedback on the effectiveness of content, methods, and means of teaching.
- 149. Since the 1968 guidelines underscored the importance of pre-service training of teachers, special attention has been given in UNICEF aid to ways of increasing the effectiveness of existing training institutions. Upgrading has in practically all instances included the provision of prototype materials and essential equipment, which has been gene ally put to good use. However, some cases are cited where better correlation needs to be established between supplies to training colleges and pilot schools, so that teacher trainees can be fully familiarized with the materials they will later use. To a lesser extent, assistance has been provided for strengthening the staff of training colleges, e.g. in some Eastern Mediterranean countries, where a severe shortage exists.

- 150. Consolidation of teacher-training colleges is another type of solution being ttempted with UNICEF aid in a number of countries, (e.g. United Republic of lanzania, Kenya, Cuba, British Honduras). The concentration of students in fewer centres offers the advantage of pooling staff and library resources, demonstration materials and services, although at times it may create a new problem (as in Cuba) of the sheer number of student teachers (some 2,000) to be moved daily for practice teaching.
- 151. In view of the massive nature of the problem of teacher-training, the 1968 guidelines urged the delimiting of objectives and criteria for international aid; strengthening of teacher-training institutions was to be the broad strategy. Where there was a high proportion of unqualified teachers, in-service training should also be supported and after completing the upgrading of unqualified teachers, it should be converted to professional refresher courses for qualified teachers. 56/
- 152. Governments have requested assistance for both purposes, and particularly for in-serivce training. Attention in the earlier stages focused primarily on the mass training of teachers through vacation courses, but has now noticeably shifted to experimentation with mass-media, correspondence courses and other such means. In the long run, these might prove both more economical and more feasible for bringing training within reach of large numbers of teachers. Many of these programmes are still highly experimental and results have yet to be assessed in depth. For example, in the experience of some countries, correspondence courses may not be the means most indicated for rural teacher-training, while in others (e.g. Uganda and Botswana) the experience has been very encouraging, especially where correspondence courses are combined with short periods of residential training, visits of mobile teams, and weekly radio programmes.
- 153. In all such efforts the importance of follow-up training and continuing support is underscored. While the multiplier effect of teacher-training is recognized, there is now clearer recognition, at the project level, of the dilution of quality which can result as the number of trainees increases. For this reason, there has been a noticeable shift in project aid from the training of classroom teachers to the training of supervisors, administrators and teacher-educators. This shift of emphasis is most evident in Latin America, which is also the region where most UNICEF-aided training effort in education has been concentrated.
- 154. Despite this trend much more attention still needs to be given to aid for training at the teacher-educator and supervisory level, particularly in view of the changes that are being made in teacher-training curricula. The analysis of objectives reveals that some 60 per cent of the projects now being assisted include reform of the teacher-training curriculum, but only around half that number include training of teacher-educators.

<sup>56/ &</sup>quot;Assessment of Education Projects Assisted by UNICEF and UNESCO, Recommended guidelines for UNICEF assistance to education: joint conclusions of the Director-General of UNESCO and the Executive Director of UNICEF" (E/ICEF/L.1270) 1968, paras. 36-43.

- 155. Beneficial effects resulting from improvements in training and the provision of modern equipment are reported for several projects. With the improvement of teaching standards, repeating pupils and drop-outs have been found to decrease noticeably in some pilot schools receiving UNICEF aid. It has been observed in some instances that the number of students graduating to higher classes is significantly higher (in Gabon, for example, more than twice as much) in classes where teachers have attended in-service courses, compared with classes where teachers have not received any in-service training.
- 156. In Honduras the number of untrained teachers decreased from 43.7 per cent in 1966 to 28 per cent in 1969; and 60 per cent of the supervisory personnel had been trained in regular courses at the Higher School of Education. UNICEF aid is considered to have played a decisive role in this achievement. The project has created a new attitude with regard to the value and importance of trained staff among the school administration. Similarly in a new project in Lesotho, quantitative targets in teacher-training have been set and met, while initiating improvements in the education system along other fronts as well (e.g. modernization of the school syllabus, extension of the school-inspection services). With some 250, attending refresher courses per year, it is expected that all the 840 headmasters will have received refresher training by 1973. Large increases in enrolment at training institutions are also reported in many instances, as a result of the upgrading of training institutions via the improvement of faculty equipment and facilities (e.g. as in Afghanistan and the Republic of Korea).

#### Health and nutrition

- 157. The 1968 assessment 57/ reported that the broad field of health education tends to be overlooked in educational programmes. The situation has not substantially changed since then, although some progress is evident mostly in the Eastern Mediterranean and African projects. For example, the positive effect of school feeding on improved attention of school children is observed in Lesotho since 1968. The most significant experience in this area continues to be in the North African countries, where nutrition education has been closely related to school feeding programmes and school gardens in which UNICEF and WFP have participated.
- 158. Teacher-training in nutrition education had lagged, but has begun to receive attention since 1968. Health and nutrition have been introduced as new subjects in teacher-training in Turkey, and will receive special emphasis, along with science, in the revised curriculum of normal schools. Likewise in Burundi, teachers are being trained as part of the new educational plan which emphasizes adaptation of education to real life. The Morocco project, which ties in nutrition education with the ruralizing of primary education, has been active since 1960, and currently incorporates 1,800 canteens, besides numerous school gardens, co-operatives, etc. In 1969, the important decision was taken to integrate nutrition education in teacher-training courses. In Algeria also since 1969, school diet and nutrition education activities are included in the curricula of teacher-training colleges. An interesting initiative in parent education has recently been taken in Peru by introducing health and nutrition in adult literacy classes. There is very little reference in Asian reports of UNICEF aid being utilized in this field, although malnutrition may frequently be a factor preventing children from benefiting as much as they could from existing opportunities for schooling.

<sup>57/ &</sup>quot;Assessment of Education Projects Assisted by UNICEF and UNESCO" (E/ICEF/L.1270) 1968.

#### Women and girls

159. Less than 10 per cent of the projects reviewed make special mention in their objectives of girls' education. In practice, however, older efforts to expand and improve girls' education have been sustained, and some new initiatives taken, with the result that some 20 per cent of the projects reviewed include some measures directly related to the improvement of girls' education. In the majorit of instances, the effort has been to give a basic practical and more relevant education (with emphasis on home economics) to girls who have had insufficient access to schooling or have dropped out. Such projects are reported in 5 Eastern Mediterranean countries and 11 African countries. To some degree, this has also involved the training of women teachers. The training of women teachers (Rwanda, Afghanistan) has on the whole, received more attention than parent education. The only notable examples of the latter are Indonesia (family-life education programme) and Yemen Arab Republic where girls' schools also serve as demonstration centres for adult education for women of the neighborhood.

160. The experience of training women teachers, though limited to a few countries, has proved highly significant. In northern Nigeria, for example, a special crash programme of in-service teacher training in home economics was introduced in 1970, since practically no women home-economic teachers were available prior to that date. A notable example of the response to increased opportunities to the training of women teachers is provided by the Afghanistar project where 230 out of 750 teachers enrolled in the teacher-training colleges are now women, compared with 68 women out of 305 teachers in 1967. Field reports say this will have important impact as more women teachers enter the primary schools. "By their presence they will encourage greater primary enrolment of girl pupils. Developments at the other provincial colleges will be watched with interest now that social barriers have been breached, and that an attractive professional course of training has been nationally adopted."

#### Wastage

- 161. Although the 1968 guidelines stressed the urgency of bringing about a better understanding of the causes of and remedial measures for wastage through experimental projects, this problem, as a specific target for action, appears in only two plans of operation (Turkey and Lesotho). However, recognition of the urgency and magnitude of the problem has led to wider efforts to resolve some of the more obvious causes of wastage, such as poor teaching and curricula that do not rouse interest because they are not sufficiently related to local needs.
- 162. The largest impact in reducing wastage is reported in Central African Republic, where in-service teacher-training is taking place side by side with the "ruralizing" of the primary school curriculum. Experimentation in new rural curricula and teaching methods is being conducted in 30 pilot demonstration schools and 120 satellite schools directly associated with teacher-training. In place of the construction of a new primary-teacher-training college as originally planned, the Government created a permanent in-service training centre. Some 1,000 classroom supervisory staff and teachers have attended refresher courses. This has helped to improve teaching standards and reduce wastage, with reportedly 80 to 86 per cent of the classes now being promoted each year. The high interest in agricultural activities generated among teachers is also an important factor in the reduction of drop-outs. 58/
- 163. The work on wastage has, however, tended on the whole to have been of a routine character, with insufficient attention to the family and the nonpedagogical causes, and over-concentration on teacher-training and the classroom. In this connexion it is of interest to note two activities, one in the United Soviet Socialist Republics and the other in the United States of America, which are relevant. The USSR has made efforts to reach people in its outlying districts and less developed areas, many of whom were illiterate. 59/ An 18 per cent higher educational budget per pupil is maintained for these areas, based on the need for a larger teaching staff to cope with more backward conditions; and in order to provide transportation and boarding facilities for pupils. Further, throughout the USSR, importance is attached to contact between school and family: parents' meetings are held; educational advice is given to parents to improve family education; parent committees meet to support the school in all its activities; and the more dynamic parents are recruited to help the school. Another interesting approach is being tried out in a number of large American cities. 60/ The educational authorities have initiated a programme designed to improve the education of "lagging" children in poorer neighborhoods by granting a stipend to both teachers and parents of children who score above a designated grade in a standardized test. The experiment is being evaluated by comparison with a number of control schools whose performance is matched against the schools where the experiment is being carried out.

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<sup>58/</sup> Drop-out rates in 1963 calculated over a four-year period were 50 per cent from grade I to II.

<sup>59/</sup> See "Gosudarstvennaja naucnaja biblioteka po narodnomu obrazovani" in K.D. Usinskogo; Social 'naja sreda uscaciksja i ih sansy na uspevaemost'.

<sup>60/</sup> See Report of United States Government Office of Education.

#### Pre-primary education

164. The education of the pre-school child does not figure in most projects. The few projects that include this age group, generally since 1968, have been concerned primarily with research and experimentation, e.g. in methods of early-childhood education. One example is the work of the National Institute of Pre-School Education in Indonesia which was established in 1969 with a number of regional training centres and demonstration kindergarten units attached. The "modules" of Peru, described earlier, are also experimental in character. Northern Nigeria has recently set up study panels on infant methods. This is an area in which the resources of university faculties are being combined with those of the Government for basic studies. In one case (Ceylon), pre-school facilities are being developed in collaboration with local authorities. The training of teachers to work with pre-school children is found in two projects, both of which are in Asia (Indonesia and Thailand).

#### Conclusion

165. This section has discussed the distribution and application of UNICEF's aid to education under the existing guidelines, which have been reviewed in considerable depth by Dr. Lyra Srinivasan. The summary given is a brief and therefore rather inadequate account of an important contribution made to educational development, in which the field work of UNICEF and UNESCO has been of high quality; the suggestions for a new strategy in no way denigrate the value of it.

166. In section IV, a picture is given of the totality of educational aid, and of the way UNICEF's assistance fits into the over-all effort. There is then a discussion of the problems of identification and appraisal of projects in the light of a revised policy.

#### IV. OVER-ALL EDUCATIONAL AID; PROJECT SELECTION AND APPRAISAL

#### Over-all aid for education

167. Aid for education at all levels is flowing to the developing countries at an estimated rate of between \$1,650 and \$1,750 million per year. It is not possible to break this total down into educational levels, but it is known that very little of it is directed especially to educationally deprived children and adolescents which, as suggested above, should be UNICEF's target group. Most goes to secondary, higher, and technical education, and improves and extends the existing systems at these levels.

168. About 40 per cent of educational aid is given bilaterally by the Development Assistance Committee Member countries (DAC)  $\underline{61}$ / and about 10 per cent by the centrally planned socialist economies. Multilateral aid comes to about 20 per cent of the total. The amount of aid from private non-profit sources is very difficult to estimate but seems to be nearly the same level as multilateral aid, though some recent estimates  $\underline{62}$ / might place it higher. The dollar amounts for 1970 are shown in the following table.

# Educational assistance estimated 1970

es	timated 1970	
Bilateral	\$US mil	lions
DAC countries Centrally planned economies Total	760 150 or 200	910 or 960
Multilateral  UNESCO regular budget  UNDP  World Bank Group  UNICEF  UNRWA  Other intergovernmental agencie  Funds-in-trust  Total  Private (non-profit) sources  Approximate Grand Total	4.1	402 350 to 400 1700 to 1800
		` /

<sup>61/</sup> Australia, Austria, Belgium, Canada, Denmark, France, Federal Republic of Germany, Italy, Japan, the Netherlands, Norway, Portugal, Sweden, Switzerland, the United Kingdom, the United States.

<sup>62/</sup> Edwin M. Martin, Development Assistance, 1971 Review, Organization for Economic Co-operation and Development, Paris, 1971, p. 11. Total private grants are there astimated at \$840 million for 1970. If half goes to aducation, private educational aid could slightly exceed multilateral aid.

<sup>63/</sup> Estimated. Including notably the Inter-American Development Bank, the Organization of American States, the Organization for Economic Co-operation and Development, the Commission for European Communities, the South East Asian Ministers Education Organization, the Commonwealth Fund for Technical Co-operation.

169. The UNESCO regular budget covers the promotion of education in the whole range of its member states, whether developed or developing countries. It provides the intellectual back-stopping and expertise necessary for educational aid for the United Nations family as a whole including the World Bank Group, as well as itself providing assistance in the developing countries by the sponsoring of some specific aid projects. Most of these concern teacher-training, curriculum reform and educational planning. But there are also sections in UNESCO whose task is to give special attention to youth and adult education, the education of girls, literacy and science training. The bulk of the activity has been concentrated upon teacher-training and curriculum improvement at the secondary level, in accordance with the requests of Governments, though attention is also given to the improvement of primary education.

170. Total educational aid amounts to some 13 or 14 per cent of the whole of the educational expenditure of the developing countries. This over-all percentage covers wide disparities in individual countries; in the least developed it is sometimes as much as 40 per cent. The total is also heavily weighted by the exceptionally large French aid in the form of teachers for francophone Africa. Educational assistance (with the exception of grants for study abroad) has been given predominantly to Africa, both on a gross and on a per capita basis. In recent years, two thirds of official bilateral expenditure - nearly half of the funds administrated by UNESCO - and three fifths of the World Bank Group commitments, have gone to Africa. On a per capita basis, Africa receives about nine times as much as Asia in official educational aid, and between three to four times that of Latin America. South Asia, because of its immense population, receives only about a twentieth per capita of what Africa receives. Latin America receives two and a half times as much per capita as Asia, and six times as much as Southern Asia. The geographical distribution by countries shows that with very few exceptions, African countries whose per capita GDP exceeds \$100 per year, receive more bilateral educational personnel in relation to their populations, whatever their attainments in terms of school enrolment, than countries with a lower GDP. This indicates the need for special action to help the least developed countries, as recommended in the International Development Strategy.

171. There has been a strong continuity in the over-all pattern through the last decade. Belgium, France and the United Kingdom concentrated on the countries with which they have historical links, mainly in Africa. The countries absorbed 77 per cent of the educational personnel and 56 per cent of the experts and advisers out of the total of DAC members' aid. Some 20 African countries are still dependent, to a considerable degree, upon teachers supplied under French and British schemes for their second and higher levels of education.

172. Aid to primary education was at one time considerable, especially from bilateral and private sources, through the provision of teachers. It is now, however, almost entirely limited to volunteers (e.g. Peace Corps), to help in teacher-training and the training of teacher-educators; to curriculum development; and educational administration. It is in the form of providing expertise and equipment rather than teachers. The main suppliers of aid of this kind for primary education are UNESCO and the UNIP/UNESCO programme, and some bilateral agencies and non-governmental organizations. The World Bank Group has contributed little to this area, but is showing an increasing concern that action should be taken for the reform of the curriculum, and may itself finance over the next few years non-formal education at the primary or adolescent level to supplement the formal system if suitable projects come forward. This will improve the present situation, under which aid for non-formal education is extremely limited.

173. The aid given by the multilateral agencies apart from UNICEF consists of technical and capital assistance, and the supply of experts and equipment. Materials required for recurrent use are provided, from time to time, as gifts by bilateral donors and by UNICEF. A number of countries experience bottlenecks in obtaining recurrent supplies owing to shortage of foreign exchange. While the foreign exchange components of educational expenditure of the average developing country is only around 6 to 7 per cent, the items are often of particular importance. Education ministries often find difficulty in obtaining the necessary priority under the countries' criteria for the allocation of foreign exchange. UNESCO concluded in the early 1950s some trade agreements for the reduction of import duties on educational materials; bilateral trade agreements also in some cases contain similar provision, and the UNESCO book coupon scheme is a funding arrangement enabling countries to buy books in their own currencies. But the impact of these various arrangements is small, and important needs continue to exist for paper, printing machinery, laboratory equipment and other teaching aids.

174. The World Food Programme's contribution to primary education is particularly important because of the known connexion between school meals and learning capacity and their effect in reducing wastage. In 1970, WFP committed \$161 million for primary schools, representing about 60 per cent of their commitments for education and training, or 15.7 per cent of their total commitments. The distribution by region was as follows:

### WFP commitments for primary education, 1970

Region	$\begin{array}{c} \frac{\text{Value}}{\text{million}} \end{array}$	Per cent WFP aid to education and training	Per cent of all WFP aid
Latin America Caribbean	51.5	76.0	36.2
North Africa Near East	50 <u>.</u> 3	83.3	14.6
West Africa	12.5	46.5	14.9
Mediterranean, Europe, East Africa	31.2	79.8	19.9
Asia	16.0	50.7	5•5

The bulk of this aid relates to projects of over more than three years' duration, nearly a third of it for those of over four years, and a fifth to projects of over five years, indicating that an enduring impact is being made. The number of primary school children covered by the 1970 projects was 3,169,018.

# Project selection and appraisal

175. There are five main criteria influencing project choice, derived from UNICEF's assistance policy and role as an organization:

(a) the first is to favour plans and projects of an educational nature that support the child's over-all development and are related to other fields of UNICEF aid;

a a na Joseph Talife na raka a na silika kifikifi kali a raka kifikifiki panin jiha jiha ka kiki kifikifiki ki

- (b) the second is that special attention has to be accorded to populations where the need is greatest, and to disadvantaged groups;
- (c) the third is the principle of equity of distribution between countries in accordance with need. (This matter was discussed at the 1970 session of the Executive Board on the basis of a report by the Executive Director, which sets out a tentative set of indices to guide allocations among countries.) 54/;
- (d) the fourth relates to the size of projects. If funds are dispersed too widely, results are not visible and are difficult to control. Some kind of critical mass is required for an impact to be obtained and registered, or for a multiplier effect to be created; and
- (e) the fifth is the principle of complementarity to other aid action both in the United Nations system and outside.
- 176. These five desiderata have to be applied in harmony with the technical criteria of project appraisal, especially (a) the project's place in the country's development plans; (b) the degree of interest and matching commitment of the Government; (c) the project's effectiveness (or where measurable, its benefit in terms of its cost); (d) its operational feasibility; (e) its need for the type of aid UNICEF can render; and (f) the timing and duration of the UNICEF aid required in relation to the maturation of domestic resources.
- 177. The strategic or tactical implications of the projects have also to be assessed. This involves asking such questions as: (a) is the purpose of the project to give an immediately needed tactical support to an ongoing activity (e.g. by opening a bottleneck)? (b) is it an innovatory project? and if so (c) is it based on available experience or experiment, and if not, what is the risk element? (d) does it aim at innovation, or at increasing the capacity to innovate? (e) is it a strategical long-term project aiming at bringing about changes to be spread over a number of years? (f) is it a medium-term bridging operation pending the growth of the domestic resources and skills? (g) is it purely a "starter" (or "pump-priming") project and if so is there enough petrol in the tank, or water in the well, to maintain it in action? (h) is it a "catalytic", "multiplier" or "breeder" project within known available resources?
- 178. The type of aid, as well as the programming and phasing of the operation, will often depend upon the answer to these questions. Projects under (b), (e) and (h) would normally be pilot projects and "extendability" would have to be a feature of their design; this would not necessarily be the case with the (a) and (g) types of project. Pilot and innovatory projects would normally call for special expenditures on evaluation, since in order to be "innovatory", "starter", "pilot" or "catalytic", their impact must be known before they can be imitated.
- 179. The criteria and the types of strategy employed should vary according to the level of educational and socio-economic development of the country. For instance, in the case of low-income countries with a small modern sector, some types of innovation may be difficult because of the lack of administrative infrastructure to devise and carry out reform. In low-income countries, criteria for aid should

<sup>64/</sup> See Report of the Executive Board, April-May 1970, (E/ICEF/605) paras. 96-106.

be more liberal (e.g. in respect of local expenditure) since their resources are so small. For the middle range of developing countries, a stricter application of criteria can be envisaged. For the top range of developing countries, action should perhaps be limited to advisory services and the transfer of their experience to help those countries lower down on the scale of economic development.

- 180. The task of project selection is difficult at present because of the very broad scope of the 1968 guidelines. Obviously, it is not feasible to undertake a scientific analysis of all the alternative merits and costs and benefits of each potential project, and there has to be a strong element of judgment as well as of fact-finding. Nonetheless, decisions are normally better when they are based on good analyses and clear criteria.
- 181. The general picture from the review of application of the guidelines given in section III above is that projects have been well selected and prepared, but there could be improvements e.g.:
- (a) The interrelation between education and the other sectors aiding the child has perhaps not been sufficiently explored. In view, for instance, of the impact of school meals on improving the child's learning capacity and reducing wastage, closer planning with the World Food Programme and other nutritional services is needed.
- (b) Some projects have gone on too long without revision or termination. Time cycles and arrangements for phasing out have not always been built into the project design.
- (c) Peripheral demands which cause undue administrative expense have not always been eliminated.
- (d) It would appear from the review that at times projects are accepted too easily on the ground that Governments have the right to settle their own priorities and know what they want. This is true. But it is equally true that aid-providing agencies have to have policies and priorities. The best projects tend to be those which fully satisfy both sides after a full dialogue in which each side is entitled to explain its own views.
- (e) Also more attention could no doubt have been given to the improvement of the requesting countries' educational expertise by the training of nationals to replace foreign experts. More support could perhaps have been given to the creation of domestic educational research institutions with the task of finding adequate solutions to deficiencies of over-all child development due to educational deprivation, if Government requests had been stimulated to move in this direction.
- 182. It seems clear, therefore, that there should be improvements in project diagnosis, especially of their time-span and operational objectives. Similarly, the timing and balance between aid given as equipment and other types of aid have to be better identified. It should also be made clear in each case how the project makes use of the faculties of flexibility and complementarity inherent in UNICEF's place in the United Nations family, and in particular as a partner of UNESCO. In making such changes, it is important not to impose criteria going beyond the local data and administrative possibilities. Nevertheless, the field instructions should be revised and should include examples of the types of analysis and projects likely to be favoured and those less favoured.

183. The strength of the present procedure is its closeness to the ground. Projects tend to spring out of felt needs at the local level. The UNICEF field staff are usually in an exceptional position to weigh many aspects affecting the child since they deal with several different sectors. On the other hand, it is not so clear that the "best possible" projects have been selected, and the dialogue with Governments could no doubt be further intensified. The selection of projects of a deeply innovative character will, for instance, involve an intensive analysis of data and a sometimes protracted dialogue between the initiators of the projects, UNICEF and UNESCO.

184. It is not suggested that UNICEF embark on the very detailed procedures employed by the World Bank Group, which uses two or three missions composed of four or five experts. Each mission works for several months, so that altogether 18 months to two years is required. It is, however, desirable that a greater effort be made in terms of staff time by UNESCO and UNICEF, as well as by the countries themselves. UNICEF aid reached the total of \$18 million in 1971, and the educational aid policy of most of the assistance-providing agencies is becoming more sophisticated.

185. To some extent the additional effort can be latched on to the existing activities of project selection and sector analysis by UNESCO and other agencies. To do so promotes the complementarity of UNICEF's assistance and its closer link with the UNDP country programming procedures. Even, however, if the staff burden of more scientific project selection and preparation is shared with the other agencies, there will remain the need for strengthening the UNICEF-UNESCO cooperation in project selection at the earliest stage at the local level. Moreover, there should be, at least until the current new concepts of educational aid are widely accepted and understood, a closer contact between UNICEF regional offices and headquarters on project selection. While UNICEF's great asset of regional and area office responsibility and flexible operation has to be conserved, there should be a greater flow of ideas on educational innovations both between the field offices and headquarters, and among themselves.

186. At the Executive Board level, the presentation of projects for approval could also be improved. The presentation should justify the projects in terms of the new educational aid policy, which may be adopted as a result of the present review, and the complementarities with the other United Nations programmes now emerging. If there is a thrust towards the financing of innovation in education for the primary-age groups and for pre-employed youth, a close relation should be maintained between the UNIP and UNICEF assistance programmes, both at the local and the policy levels. UNESCO, as the technical advisory agency for both of the programmes, would have an important co-ordinating role to play in this respect.

#### V. SUMMARY AND CONCLUSIONS

#### Objectives and possibilities: new targets

- Figure 1 regard to objectives, content and organization, the need for comprehensive approaches covering both formal and non-formal education, and the work of different ministries. 65/ This is happening in both industrialized and developing countries, and it has been reflected in the outlook adopted in this review. Accordingly the review starts out with a reassessment of needs, then analyzes the existing guidelines, and as a result, suggests changes both in the target group of children to be covered and in the educational levels and activities to be supported.
- 188. "FIGEF's role in educational assistance springs from its concern with a comprehensive view of child development, and the additional resources and complementarity it brings to the common effort of the United Nations family of agencies. It has a special duty towards children deprived of basic services. Thus in the educational aid which it provides, its "target group" should be the educationally deprived children of the developing countries (i.e. those who have either dropped out of school prematurely or had no schooling at all, and therefore lack minimum basic education). Their number may be estimated at around 500 million. This involves a change from the existing scope of UNICEF's educational aid, which covers all children of the developing countries and does not concentrate on minimum standards. At present it includes the children already integrated into educational services as well as those outside, and therefore assists the over-all improvement of child education in the developing countries, including secondary education. It is not restricted to minimum standards and the reduction of deprivation.
- 189. The instruments by which educational standards are attained are educational services. Minimum standards are provided by primary education or its equivalent, which should therefore be the main service to be aided. A limitation of aid to these target services does not imply the exclusion of aid to the services at the other levels which feed the target services, e.g. teacher education and training of specialist personnel.
- 190. In the countries that are seeking UNICEF assistance for education, there is now a general concern with the extension of their education services to rural areas and urban slums and shanty-towns. In the least developed countries the problem areas may be even more extensive. (This situation is similar to the other fields of UNICEF assistance.) Within this context, there are two minimal steps of outstanding importance for children and adolescents in the next decade. The first is to acquire basic literacy, which is the initial stepping-stone to full citizenship, personal development, and employment, and is the prerequisite for further education. The second is some form of practical or pre-occupational education,

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<sup>65/</sup> Usually the Ministries that could be concerned include education, communication, health, agriculture and in some countries, community development.

to enable them to raise their levels of living by having the necessary basic preparation for their working lives, on which further training can be built. The same school system may be used for both the academic and the practical requirements; and both types of education may be combined at different times and in various ways over the educational period by formal or non-formal education.

191. Educational activities of these kinds are required as a minimum service for all children of primary school age (say, 5 or 6 to 14 years of age), though they do not necessarily have to be in a continuous cycle of 9 or 10 years, since minimum standards can be acquired in a shorter period. Until all children are provided for in this way, there is also a transitional requirement to provide for the backlog of adolescents, who have not attended school or only repeated the first grades and dropped out, or who have not received any form of instruction preparing them for their working environment.

192. This mass of children can only be fully integrated into adequate educational systems when the necessary rises in national and family income have taken place in their countries. Educational systems can and do move ahead of economic progress, but cannot move too far ahead, especially if the benefits do not match the costs. Nevertheless, great gains could be achieved if they were better integrated with the development of their environment, and so be a major motor within it, and if their cost efficiency could be improved since it is at present very low. In particular, important gains would be likely to result if they were supplemented more than at present, by non-formal education - a neglected educational instrument - and by utilizing the other various teaching and learning subsystems which are at the disposal of the community (mass media, community services, parent education, voluntary service organizations, etc.).

#### Problems and solutions

193. All of the developing countries that are members of UNESCO have subscribed to the objectives set by the UNESCO Ministers of Education Conferences in the 1960s. These envisage that by 1980, or 1985, facilities for six or seven years of universal primary education can be created for the least developed countries. Recent evaluations show, however, that while progress towards these objectives is taking place according to target in Asia and Latin America - Africa being behind schedule - nevertheless excessive rates of drop-out, lack of relevance of much of the education to both the child's and the country's needs, and serious cost-inefficiencies, have cast a heavy shadow over the whole perspective. High rates of drop-out and inequalities in the distribution of educational services make the over-all figures of progress misleading.

194. This appears to have come about because the objectives, although they contained provision for qualitative improvement, were fundamentally restricted to projecting the then existing formal systems in a linear manner. These systems, however, were, and still are, largely unintegrated with the basic needs of children in the developing countries, except perhaps for the population groups in the more modern sectors. While the existing systems are targeted to expand rapidly as economic and social progress spreads, there is a strong demand for fundamental reforms and innovations in education which will hasten the provision of the necessary minimum educational services by means of new solutions.

educational deprivation exists, and in those areas where education can be used to promote development. Thus a dual process can be envisaged. On the one hand, the existing formal system must spread out, and be renovated and regenerated as it goes. On the other hand, instead of educationally deprived children and adolescents being left without services, new forms of educational organization and learning patterns have to be evolved, and must advance outward from local beginnings to meet the formal system as it extends its delivery of the required services. In this process, the needs of the different population sectors have to be identified and integrated into a total system going beyond the formal education system as at present conceived. The total system should extend into all means for the transmission of knowledge and values at the disposal of the country. It should be pluralistic rather than monolithic, even though serving the nations' over-all needs. Its different parts have to be related with educational bridges and ladders to promote educational opportunity and democratization.

#### Innovation and adaptation in educational services

- 196. The obstacles to programmes of innovation must not be underestimated. Resistance may be expected from built-in interests, from the preconceived ideas of parents, and from part of the teaching force itself, although teachers are the essential element in all educational progress. There is also a paucity of tested innovations. What is needed therefore is a twofold programme for innovation. One should consist of giving priority to aiding innovatory projects wherever they appear, and progressively replacing the more traditional type of projects by newer initiatives. The second should be assistance in creating the capacity to innovate.
- 197. The latter means: allocating funds for educational research and development; designing and diffusing new patterns in the teaching and learning process; experimentation with pilot projects; special efforts to modernize teacher education and the training of teacher-educators; assisting the spread of innovatory ideas in the teaching profession, the training of educators and planners in methods and techniques of bringing about innovation and securing its implementation; giving special resources and incentives to research institutes to study innovation and work with the universities and institutions in other countries to develop the necessary body of tested knowledge to be applied; and the preparation of parents and the community, and of youth, to favour the promotion of new approaches to education.
- 198. At the international level, the pursuit of a programme means the allocation of funds and the creation of national and international teams of experts to support national efforts. They should be familiar with innovatory experience in other countries, tested designs and research results which can be conveyed to Governments under technical assistance programmes, and have the capacity to help countries work out models suited to their particular conditions. This, in turn may require concentrated efforts in university faculties and institutes of education, as well as facilities for in-service training.
- 199. Innovation is to be seen in relative rather than absolute terms. Adaptation and improvement are important and must be pursued, as well as fundamental reform bringing about major changes in structure and content, which take a good many years to achieve. The most rewarding adaptations in terms of educational

productivity are likely to be cases where changes can be introduced that will push out rapidly the margin of the existing educational system to meet the real needs of the educationally deprived children in new ways. Fundamental innovation needs are likely to be strongest in the most deprived areas. Success in both adaptation and innovation will depend upon careful preparation of projects involving both formal and non-formal education, and upon starting first where the economic and developmental prospects are most favourable, since the problem is so huge that it cannot be tackled all at cnce.

#### Types of recommended activity

200. The following are some examples of activities, which could well be supported by UNICEF aid, including both innovation in the fundamental sense, and activities of adaptation which are innovatory in a less strict sense.

- (a) Introduction of new organizational patterns of education, promoting a wider coverage of school-age children and adolescents; support at both the national and local level to finding solutions to hasten the spread of minimum educational services;
- (b) Trial and development of non-formal education schemes especially directed to out-of-school children, and to combinations of formal and non-formal education activities spread over different periods of the lives of children and adolescents of school age (e.g. community education centres in urban slums);
- (c) Support of practice areas attached to institutions of education or the equivalent, where new methods are tried out, evaluated and perfected; diffusion of successful projects;
- (d) Both pedagogic and non-pedagogic measures for reduction of wastage, e.g. reduction of the number of repeaters by revision of examination methods, provision of school meals, rearrangement of school hours, transport, etc.;
- (e) Changes in educational content (curriculum reform) in the ongoing systems which will relate teaching and learning better to the practical needs of the majority of children who will receive only a minimum primary education and who live in rural areas:
- (f) Science teaching, in particular, to be better integrated with education for health, nutrition, home economics, practical arts, and the needs of the environment, especially for pupils in the primary grades likely to terminate before secondary education. Local production centres for the supply of equipment to be supported;
- (g) Training of teacher-educators, specialist personnel, and teachers (especially by in-service training), and the introduction of improved teaching and learning methods for the acquiring of minimum standards of education;
- (h) Use of schools for literacy training of adolescents who missed schooling, or for literacy plus occupational training;
- (i) Use of schools for parent education, particularly in health, nutrition, child-rearing, and home economics and for getting teacher and parent support for new approaches to primary education;

- (j) Adaptation of the school system as a means of delivery of other relevant services, e.g. some services to the pre-school child;
  - (k) Means of bringing more girls into schools;
- (1) Reduction of discrimination, e.g. in the matter of languages and ethnic groups;
- (m) Means of introducing greater local support, financial and in the form of services, for educational activities, as a complement to national support;
- (n) Reduction of costs, savings on building and maintenance, more lasting and better designed equipment and more rational use of existing equipment, that is unused or misused;
- (o) Increases in cost efficiency (activities and incentives, extending down into the individual classrooms to promote educational quality and the personal and social development of the pupils; application of programme budgeting techniques and systems analysis);
- (p) Interventions in educational planning should be limited to the integration into educational activities of health, nutrition and welfare aspects of child development.

# Complementarity with other educational aid

- 201. Though educational policy is essentially domestic, the equivalent of \$1,500-\$2,000 million of educational aid is flowing annually to the developing countries. Little of this goes at present to primary education, or help for adolescents who have had no schooling. Only a tiny proportion is concerned with innovation and research and development directed at the deprived groups. There is thus a vital role for UNICEF in educational assistance, to be undertaken in even closer co-operation than hitherto with UNESCO in view of the increasing technical difficulty of the work.
- 202. The field staff af UNICEF, with their wide knowledge of the different sectors affecting child development together with UNICEF's experience as an organization, are particularly valuable elements in the total United Nations development effort whose use should be sustained and fostered. Possibilities of greater use of UNICEF's resources include proposals being examined by other United Nations agencies including the World Bank Group for using the UNICEF Packing and Assembly Centre (UNIPAC) at Copenhagen.

## Review of the joint UNICEF-UNESCO guidelines of 1968

203. The review of the guidelines has shown that they have worked well on the whole, in relation to the situation as it was seen at the time the guidelines were adopted by the Board and as a result many good and effective projects are in operation. Many useful pieces of innovatory action and valuable improvements were assisted. Little was done, however, in respect of more fundamental change through lack of Government requests and other practical initiatives favouring reform.

Further, the claims of the deprived population groups in urban slums, shanty-towns and rural areas, and the over-all problems of the very low-income countries did not receive the marked attention now suggested under the proposed new strategy. A criticism of the existing guidelines could be that they favour the selection of good projects but not "the best possible projects". More can be done in future, owing to the introduction of the UNDP country programming procedure, to ensure complementarity with the total United Nations effort, and more extensive dialogues should be envisaged with countries seeking aid for linear extensions of their educational systems, the effectiveness of which can be questioned.

## Suggested new strategy

204. The new strategy proposed is:

- (a) Redefinition of UNICEF's educational target. The target group should now be children deprived of basic education and adolescents who have missed schooling, particularly in rural areas, slums and shanty-towns, and the least developed countries. These groups have to be given basic levels of education as soon as possible;
- (b) Assistance to be extended beyond the target group in the area of the special concern of UNICEF with a comprehensive view of child development, through helping countries to bring health and nutrition education, childrearing etc. into their school programme at primary and secondary levels;
- (c) Aid to be concentrated on the services (formal and non-formal) which serve these ends, especially primary education;
- (d) Assistance to effective efforts to extend, adapt and improve the ongoing systems so as to cover the needs of the deprived groups;
- (e) A thrust toward new solutions by promoting innovation in educational patterns and delivery services:
  - (f) Assistance to innovatory projects already in operation;
- (g) Helping countries to improve their capacity to innovate, and the strengthening of the facilities by which innovation may be promoted (training, research and experimentation);
- (h) The progressive phasing-out of support by UNICEF to secondary education except as in (b) above;
- (i) Phasing-out of support for present types of solution in favour of support for innovation.

#### Implementation

205. The implementation of such a new strategy would involve a considerable redeployment of UNICEF's resources. Obviously in view of the number of valuable projects to which, assistance is being given under the present guidelines, this redeployment would have to be phased over a number of years and would involve perspicacious administration in order to ensure that the switching of funds would not damage vital projects and that other aid sources should take them over where possible.

- 206. The new strategy would involve more sophisticated project identification and appraisal procedures, as the other agencies providing aid for education, whether multilateral, bilateral or private, are also discovering. While remarkable efforts have been made in the field by both UNICEF and UNESCO over the last few years, the increase of UNICEF's assistance to education, together with a switch to a new strategy, will require the application of more expertise to project selection. The need to maintain a balance between short-term priorities and the longer-term work on innovation is of paramount importance. It will call for more staff activity and application of expertise.
- 207. When projects are submitted for approval there should be closer definition of their operational objectives and time span. The timing and balance between aid given as equipment and other types of aid will be particularly important when moving into innovatory fields. Improved methods of appraisal of projects would need to be accompanied by changes in the presentations made to the Executive Board in order to ensure that the hesitations which troubled the Board when it set up the existing guidelines are adequately answered.
- 208. It is for the Executive Board to decide on the desirability and feasibility of the suggested new strategy. In this connexion attention may be drawn to the fact that recent meetings of the Ministers of Education of the developing regions held under the auspices of UNESCO have emphasized the importance of thorough transformation of the educational system. 66/ They wish to see structural changes as well as improvements of content, particularly affecting the mass of children not being educated in the rural areas and shanty-towns. This would point towards a strategy on the lines of paragraph 201 above. Moreover, renewed efforts of complementarity among the United Nations agencies would seem to be assured in view of the interest that the other educational aid providing agencies have expressed in collaborating with a revised UNICEF policy as outlined above.
- 209. It remains for the consultant to summarize, as promised in the introduction, the answers suggested to him by this review to the six unresolved questions on which a variety of views were expressed when the guidelines were adopted in 1968. Question by question, the replies emerge as follows:
- (a) Is assistance to education too large as compared to that to health and nutrition? It would seem that no scientific answer can be found to this question except to say that the present balance appears to reflect the priorities accorded by countries. The UNDP country programming procedure, after it has been working for some time, may throw more light on this.
- (b) Should aid to education be concentrated more on the younger child and be limited to primary and pre-primary rather than include adolescents? In the review, attention is drawn to the importance of promoting pre-primary education, but it is pointed out that it is largely private and not yet recognized as a public charge in the developing countries, as it appears to be beyond their resources. This makes it unsuitable for a major thrust of international aid, as the local pre-conditions do not exist. The first priority for aid is the primary-school-age group, with the necessary follow-through for adolescents who have not been through the primary course.

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<sup>66/</sup> See footnote 23, section I, p. 16.

- (c) Whether formal education should have a lower priority as compared with non-formal? The analysis suggests that in present circumstances the most fruitful field for innovatory action to achieve the necessary minimum spread of basic education into rural areas and shanty-towns may be non-formal education. The distinction between the two, however, should be progressively applished.
- (d) Whether the guidelines made the priorities for UNICE aid sufficiently clear? Not entirely clear enough in terms of strategy and tactics. In particular project selection needs improvement, and a major drive for innovation is required.
- (e) Whether they took sufficient account of the respective roles of UNESCO and other aid sources? Complementarities are well established and co-ordination is working smoothly.
- (f) Whether UNICEF's aid should be more geared to quality rather than quantity, and to UNICEF's particular objectives? Yes. Traditional-type projects and those concerning upper secondary education in the formal system, should be progressively reduced in favour of support for basic minimum education, the former being left to other aid agencies.

ANNEX

Table I

Number of teachers who received some training with UNICEF stipends

C	umulative n	umber as at	end 1967	Cumulative number as at end 1970 (estimated)			
	Primary	Secondary	Total	Primary	Secondary	Total	
AFRICA	30 019	242	30 261	57 865	1 196	59 061	
ASIA	12 918	1 993	14 911	46 856	15 373	62 229	
EASTERN MEDITERRANEAN	4 316	-	4 316	9 509	11+2	9 651	
THE AMERICAS	15 061	2	15 063	28 658	8 417	37 075	
ALL REGIONS	62 314	2 237	64 551	142 888	25 128	168 016	

Number of schools and educational institutions that received UNICEF equipment
(a) as of end 1967

	Africa	<u>Asia</u>	Eastern Mediterranean	Europe	Latin America	Total
Primary schools	4 095	4 164	367	940	3 097	12 663
Secondary schools	239	<b>37</b> 2	41	-	12	664
Teacher-training institutions	300	83	132	1	278	794
Other education institutions	28	14	1		3	36
Total	4 662	4 623	541	941	3 390	14 157
		(b)	as of end 1970			
	<u>Africa</u>	<u>Asia</u>	Eastern Mediterranean	Europe	Latin America	<u>Total</u>
Primary schools	8 498	16 754	13 CO7	943	11 288	50 490
Secondary schools	1 003	3 651	368	-	95	5 117
Teacher- training institutions	510	1 393	223	3	425	2 554
Other education institutions	373	152	1 <sup>1</sup> 4	-	15	554

## Table III

## EDUCATION PROJECTS REVIEWED FOR REPORT

Region	New projects (beginning in or since 1968)		Projects begun before 1968			Total
Asia	Malaysia		Afghanistan Burma Cambodia Ceylon China (Taiwan) India Indonesia	Nepal Pakistan Papua-New Guin Philippines Rep. of Korea Rep. of Viet- Thailand		
		1			14	15
Eastern Mediterranean	Jordan Lebanon Saudi Arabia Turkey		Iran Iraq People's Dem. Rep. of Yemen Sudan Syrian Arab Rep. Yemen			
		14			6	10
Latin America	Chile Costa Rica Cuba Dominican Rep. Panama Trinidad and Tobago Uruguay		Bolivia Brazil British Honduras Colombia Ecuador El Salvador Grenada	Guatemala Haiti Honduras Montserrat Nicaragua Paraguay Peru		
Africa	Burundi Cameroon Ivory Coast Kenya Lesotho Liberia Togo United Rep. of Tanzania	7	Algeria Botswana Central African Rep. Chad Congo Dahomey Ethiopia Gabon Gambia Ghana Madagascar	Malawi Mauritania Mauritius Morocco Niger Nigeria (nothern states) Rwanda Sierra Leone Somalia Tunisia Uganda Upper Volta Zaire	14	21
		<u>8</u> 20			24 58	<u>32</u> 78

NOTE: The reconciliation with the total 80 projects including current assistance to education is as follows: the 78 projects reviewed include 7 to which assistance has been completed, leaving 71 currently assisted; 9 other currently-assisted projects were not reviewed.



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Ill Document Register Number [auto] CF/RAD/USAA/DB01/2001-05651

ExRef: Document Series / Year / Number E/ICEF/1972/L.1279/Add.1/Annex (PDF-Eng)

Doc Item Record Title

UNICEF Aid for Education, Review of Policy [PDF version]

Date Created / On Doc 1972-Mar-16

Date Registered 1997-Jan-01

Date Closed / Superseeded

Primary Contact Owner Location Home Location

Office of the Secretary, Executive Bo = 3024 Office of the Secretary, Executive Bo = 3024

Current Location Record & Archive Manage Related Functions=80669443

1: In Out Internal, Rec or Conv Copy?

Fd2: Language, Orig Pub Dist Fd3: Doc Type or Format

English, L.Avail: E,F,S..; L.Orig: E-?

Container File Folder Record Container Record (Title)

Nu1: Number of pages

Nu2: Doc Year 1972

Nu3: Doc Number

1279

Full GCG File Plan Code

Da1: Date Published 1972-Mar-16

Da2: Date Received

Da3: Date Distributed

Priority

If Doc Series?: CF/RA/DS/USAA/DB01/2001-0008

Record Type A04 Doc Item: E/ICEF 1946 to 1997 Ex Bd

DOS File Name

Electronic Details

No Document

Alt Bar code = RAMP-TRIM Record Numb : CF/RAD/USAA/DB01/2001-05651

Notes

Document Format Series/Year/SubSeries/Number/Rev: E/ICEF/1972/L.1279/Add.1/Annex; Series/SubSeries/Year/Number/Rev: E/ICEF/L/1972/1279/Add.1/Annnex

Doc Series: E/ICEF/L; Series Valid date on import: 01-Jan-1950; Doc Year: 1972; Doc Number: 1279; Doc

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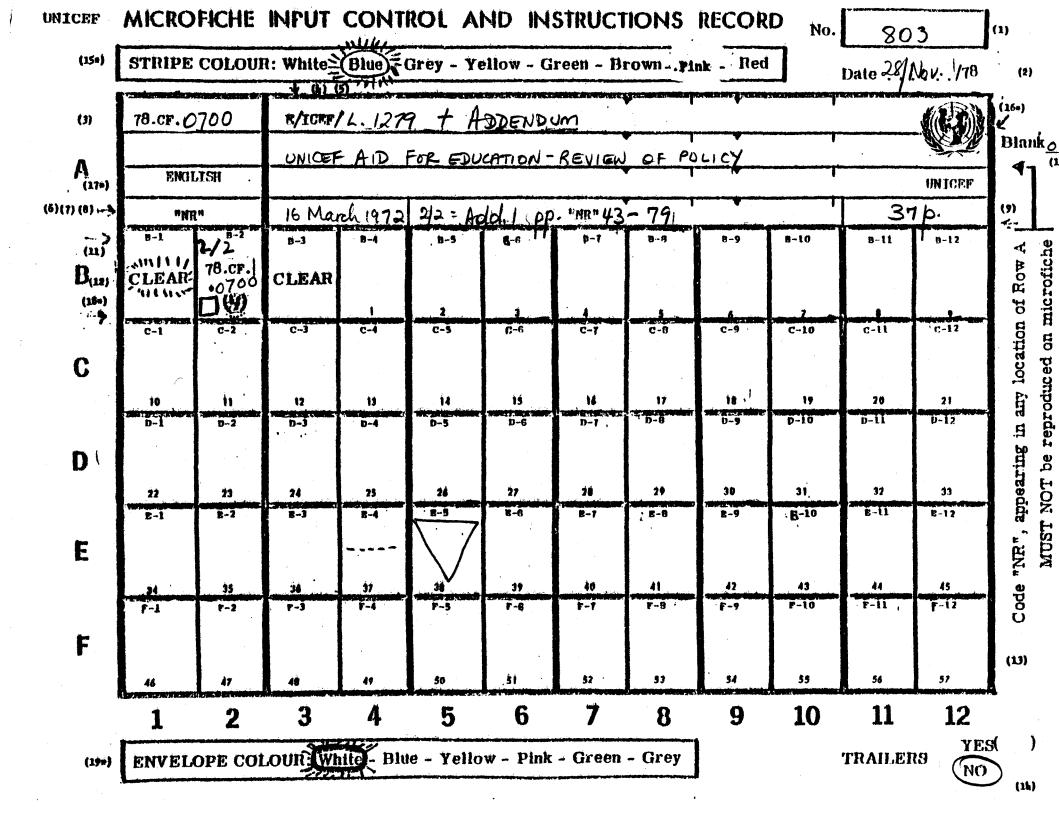
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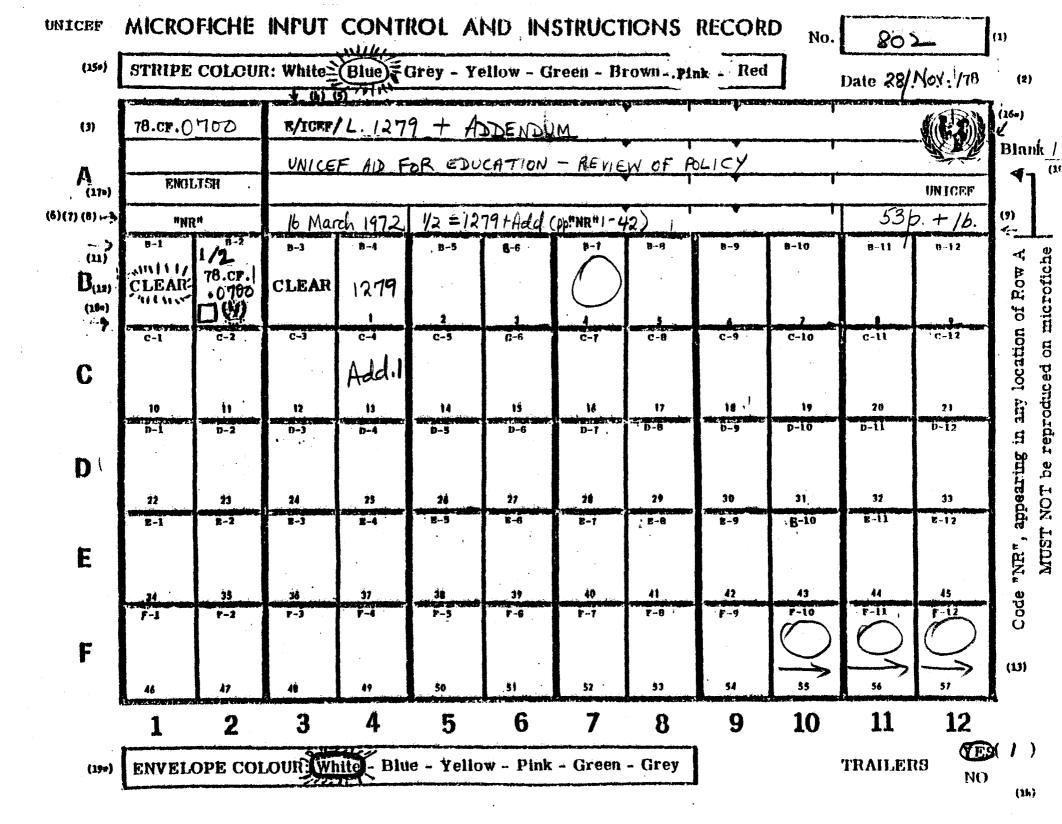
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