educational trends in 1970

an international survey

prepared by the

International Bureau of Education

Unesco : IBE

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Paris—Geneva
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Preface

International Education Year 1970: through the General Assembly of the United Nations the countries of the world had proclaimed that the time had come for a fresh look at the way education was evolving. Such an effort at reflection was to bear not only on the arrangements and institutions that go to make up a ' system of education ' but also on the goals that are being pursued in schools, colleges, universities and training centres. The result, it was hoped, would be a better understanding of the nature and potential force of education in the modern world—in order to bring about progress, to ' mobilize energies and inspire initiatives in education and training '.

The role of Unesco during International Education Year has been to facilitate exchange of information between countries and to build up, from the store of national experience, an over-all view of the movement of education. In view of the mass of facts, the vast scope of education and differing social and economic conditions around the world, the international task is no easy one. But it needs to be done, as one indispensable means of providing national educators with a framework of reference, the better to situate the form and the direction of their own efforts.

The present survey, made during 1970, is a first attempt by Unesco to present a brief synoptic view of the world educational scene; its focus is trends looking towards the future rather than the current status of education. It is based for the most part on official sources. During 1969 the International Bureau of Education, now an integral part of Unesco, invited Member States to

report on national trends in education; the 75 replies received have already been published in the *International Yearbook of Education*, Unesco, 1970. At the 32nd session of the International Conference on Education, Geneva (July 1970), convened by Unesco, the delegations engaged in a discussion of recent policy changes and educational reforms in their respective countries. Chapters 1 to 3 of this survey are based on the information thus gathered over the past year by the IBE. Chapter 4 consists of the text of the report drawn up by the Rapporteur-General of the 1970 International Conference on Education, Mr. J.-G. Zaarour (Lebanon). The contents of the earlier chapters may, indeed, be regarded largely as explanatory and introductory to the authoritative report from the Conference. At the level of generalization attempted here, it has been possible only to cite significant illustrations; they do not cover the totality of Member States, and the reader will probably find cases in his own country or experience which seem to illustrate better, or which perhaps seem to run counter to, the general statements. The Secretariat would welcome comments on this present survey in themselves and for consideration in the preparation of possible future surveys of a similar kind.

Contents

1. A few figures

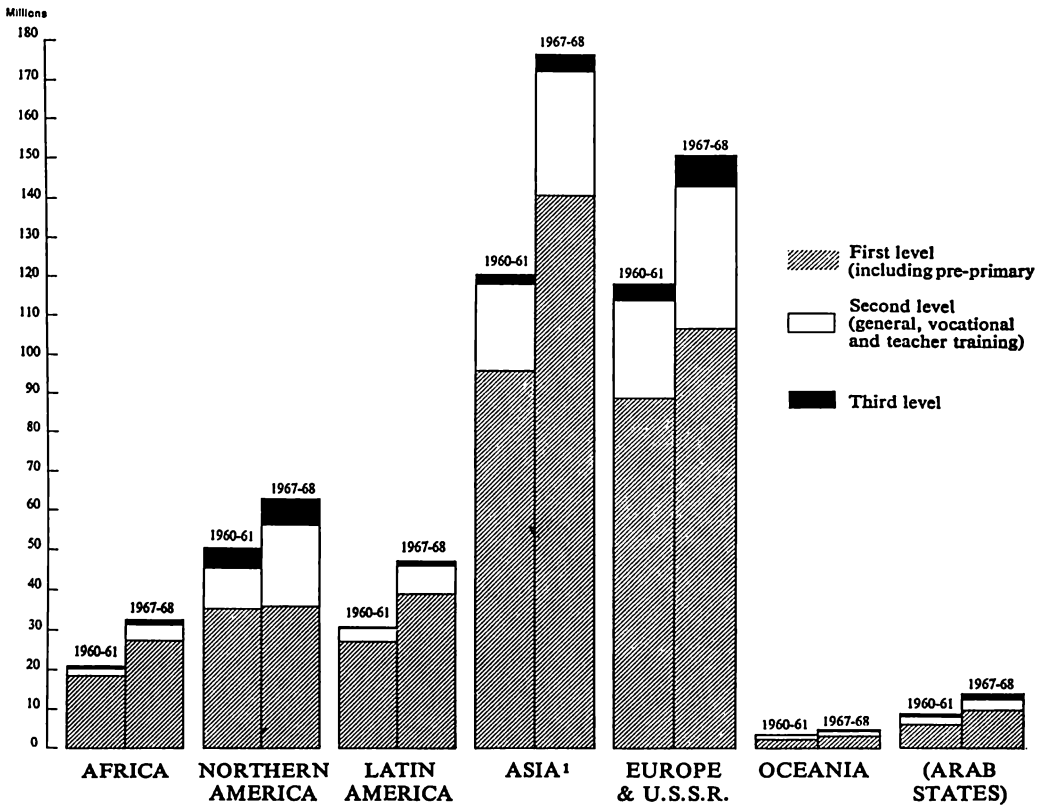
The starting point is to put some simple numerical questions: what is known of the size and the growth of the world's schools? To provide answers to these questions Unesco's Office of Statistics compiled eleven summary tables—aggregated for the world as a whole and for the major regions—which are shown in the Appendix. The rhythm of collecting international statistics is governed, as is well known, by the rate of reporting of the slower countries. Hence, the most recent year for which figures can be given with any degree of confidence is 1967/68.

The tables, then, set out the quantitative movement of education in the first seven years of the 60's. By showing the trends and the position reached by 1967/68, the statistics lead on naturally to an examination of the main qualitative features of education in the past three years.

If the reader places himself in 1968, scrutiny of the tables would produce an impression along these lines. In the seven years between 1960/61 and 1967/68 the total number of persons enrolled in education has risen from nearly 350 million to almost 480 million—an average annual increase of 4.7 per cent. Although the largest part (*i.e.* 85 million) of this increase has been in primary education, it is in second and third level education that the greatest proportionate increases have occurred—6.8 per cent per annum and 9.8 per cent per annum respectively. The accompanying diagram sets out these trends in graphic form. The increase in female enrolment has kept pace with that of total enrolment and at the third level female enrolment has increased at an even faster rate than total enrolment. At the present moment,

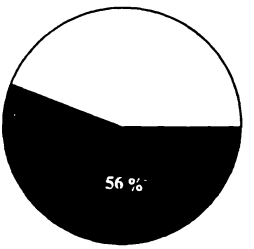
TOTAL ENROLMENT BY LEVEL OF EDUCATION 1960-61 AND 1967-68

(in millions)

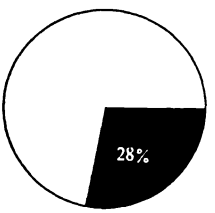


1. Not including China (mainland), Democratic People's Republic of North Korea and Democratic Republic North Viet-Nam.

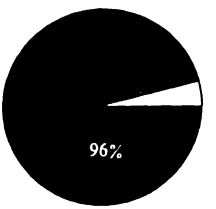
PERCENTAGE OF CHILDREN
OF PRIMARY AND SECONDARY SCHOOL AGE (COMBINED)
ATTENDING SCHOOL AT ANY LEVEL: 1967-68



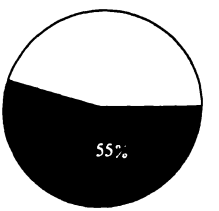
WORLD



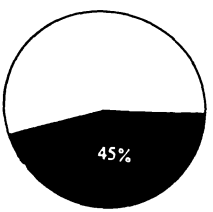
AFRICA



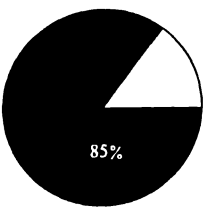
NORTHERN AMERICA



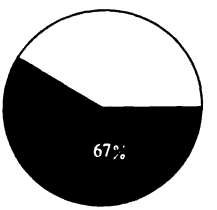
LATIN AMERICA



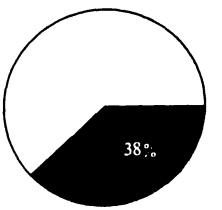
ASIA [1]



EUROPE & U.S.S.R.



OCEANIA



(ARAB STATES)

1. Not including China (mainland), Democratic People's Republic of North Korea and Democratic Republic of North Viet-Nam.

43 per cent of all persons enrolled are female and 37 per cent of all students at the third level are female.

Relating these enrolments to population it can be seen that the percentage of children of primary school age attending school has risen in this period from 63 per cent to 68 per cent and the percentage of children of secondary school age attending school (although sometimes still the primary school) has risen from 34 per cent to 40 per cent. At the present moment, 56 per cent of children of primary and secondary school age are attending school. The most remarkable increase has been in connexion with third level education: whereas in 1960/61 there were only 480 third level students per 100,000 inhabitants, now in 1967/68 there are 772 per 100,000 inhabitants.

Some impression of the percentage of young people enrolled at school is given in the second diagram—which serves also to demonstrate the differences in educational provision between the world's major regions.

The number of teachers has risen at about the same rate as the number of enrolments, from 12.5 to 17.5 million—an average annual increase of 4.9 per cent. Again, the biggest absolute rise (2.25 million) is at the first level, but the largest proportionate rises are at the second and third levels.

The percentage of adults who are illiterate has fallen during the seven-year period between 1960 and 1967 from 39.3 per cent to 34.2 per cent, but because the total adult population has risen by over 400 million, the actual number of adult illiterates has risen by nearly 50 million. On the other hand, the number of adult *literates* in the world has risen by over 350 million. The present male adult illiteracy rate is 28.0 per cent, whereas the present female adult illiteracy rate is 40.3 per cent; the trend is still for the male rate to fall faster than the female rate.

An index to the enormous efforts being made by governments in the area of education is given by the amount of money they are spending on it. A summary table, expressed in U.S. dollars, shows that in the year 1967/68 public expenditure on education throughout the world amounted to 136 thousand million dollars. This compares with 63 thousand million dollars in 1960/61.

2. Policies and problems

Global and regional estimates of schooling, literacy and costs bring out sharply the immense size of the effort, while pointing also to what still remains to be done. It suffices to note the gaps and differences revealed by the statistics and to recall that children and young people are being summed up so briefly in figures; to heed the warning of the schoolboys of Barbiana: 'A university professor of education doesn't have to look at school kids. He knows them by heart, the way we know our multiplication tables.' [1]

Problems

In surveying the official reports on education over the past three years, one is struck by the frequent reference to problems. That public authorities express awareness of a wide range of problems is an indication of growing dissatisfaction with existing arrangements. Various sectors of the public—students, teachers, parents, and the educational authorities themselves—believe that the achievement of educational systems falls short of expectations or aspirations.

In an abridged and somewhat abstract form, the shortcomings may be expressed in terms of certain basic aims: democratization, efficiency, relevance to life.

1. Schoolboys of Barbiana. *Letter to a teacher*. New York, Random House, 1970, p. 7. (Original Italian edition appeared in 1967.)

In order to implement the right to education, quantitative expansion is called for. But growing populations on the one hand and shortages within the educational system (teachers, buildings and funds) on the other form a major obstacle to the achievement of this aim. In developing countries the lack of qualified national teachers is felt to be the greatest single difficulty. Moreover, many countries are concerned about the unequal distribution of educational opportunity. The problem of culturally or socially deprived groups in the community and of individuals with certain physical or mental disadvantages is preoccupying public authorities. Such cases arise from the fact that social and economic forces and physical or health conditions may play a determining role in a young person's school career, despite a generous educational policy directed to equal opportunity. Certain remedial steps by the education authorities may be needed, even though the full solution lies outside the system of education.

The educational system is itself not efficient enough in achieving the goals set for it by each nation. A proportion of youth not at school at all, wastage among those who are enrolled, inadequate distribution of the school network over the national territory, and a lack of balance between the several sectors of education, these are the prevailing internal symptoms of ineffectiveness. At the same time, the expanding bounds of education involve an ever-growing share of public funds. The unit cost of education is rising (a Soviet Union estimate indicates that the figure of 82 roubles per student in 1960 reached 155 in 1969—and this is by no means exceptional). The result of increasing expenditure (estimated at 6 per cent of gross national product in the United Kingdom and over 9 per cent in Canada, for example) is a natural demand for greater attention to efficiency. Much the same pressure is found in developing countries, where scarce resources have to be allocated with strict attention to development possibilities: in many African countries between a quarter and a third of government expenditure is now devoted to the educational system. The regional conferences on education convened by Unesco in the recent past (African Member States at Nairobi in July 1968, the Arab States at Marrakesh in January 1970) stated clearly that lack of finances formed one

of the major constraints on the expansion and improvement of education. In a nutshell, the problem facing countries which have not yet achieved universal schooling is whether foreseeable resources will permit them to achieve their educational goals through a system of education as it is now constituted.

As the educational system is expected to meet each country's development needs, attention has been focused also on the quality of the products of systems. When university graduates or secondary school leavers, or even primary school leavers, are found to be unemployed in societies which are chronically short of trained manpower at all levels, there would appear to be an important gap between what society expects of the schools and what the schools are in fact delivering. In more general terms, this is not merely a question of better vocational preparation; it raises the issue of the relevance of much teaching and learning. How can the instructional process and the educational system as a whole be improved, so as to provide for new conditions (the 'explosion of knowledge' and the 'information revolution' are two often-quoted phrases) and to prepare students for a rapidly changing world? Symptomatically, student unrest and questioning by teachers have directed attention to the very foundations of education. The aims of education are being re-examined in an attempt to discover the source of the problem, of the lack of fitness or effectiveness. If what is expected of education is unrealistic, one should start by clearing the ground and establishing what education in the modern world is really intended to do. The concept of continuous learning or life-long education may offer the only basis for a satisfactory answer.

The focus on problems does not mean that ministers and ministries of education accept the view that education is in a state of crisis. Rather, it may be claimed that awareness of problems and clarity in stating them are essential steps to progress. At the international level, too, the possibility of achieving a fruitful dialogue between educators of different countries is enhanced by the problem-centred approach.

Any synthesis of world trends in education calls also for further remarks about the concepts involved. The first relates

to the international, political and economic framework. Within each country the continued progress of education depends to a great extent on the maintenance of world peace. This is evident in respect to the security and well-being of the peoples concerned; and appears no less true when one examines the use to be made of public funds. Increasingly, expenditure for military purposes is seen to compete with the claims of social programmes. Closely related is the need for mutual support and aid between nations. In the field of education, as in other areas of human endeavour, the sharing of experience across boundaries appears to be indispensable for progress. Indeed, at a time when education faces so wide and intense a series of challenges, a combined effort for finding solutions would seem to impose itself. In this view, the arbitrary distinction of countries into ' developed ' and ' developing ' has no sense; all can, and should, contribute to the free exchange of experience—for the simple reason that all are, educationally speaking, underdeveloped.

At the same time, the limitations of formally organized education must be taken into account. The system of education and training in a country is not the only way by which people are formed—or, to use the economists' phrase, human resources developed. The cultural and social influences of home and community, the impact of mass media, all of these play their part in shaping the individual. Recognition of the context of schooling is indispensable if one is to understand and analyse the problems faced today by education; and similarly, it has to be borne in mind when policies are worked out for education. Educational development by itself, not related to the directions of social and economic development, simply perpetuates and widens the rift between school and society which lies at the root of the problem.

The trend to change

In the past few years the notion of change has come to be an element of educational policies in a growing number of countries. Continuous change is with us, because of the reciprocal connexion between society and education, because of the scientific and

technological revolution which places ever new demands on education, since progress in these fields cannot be sustained unless the educational system produces the manpower that is needed. However, it may be easier to pay lip-service to the concept of change than to put it into practice—particularly when complex and well-developed systems of education are involved. Many educational authorities approach the question of reform by distinguishing between thorough and major changes and minor adjustments; a measure of caution and a certain amount of time are needed if change is to be planned and systematically carried through. On the other hand, the desire for sweeping reform is expressed by some public authorities as well as by particular groups involved in one part or another of the system. Both the acuity of problems and the absence of a vested interest in traditional patterns of organization may contribute to such an attitude.

Despite these differing approaches, it can be said that there have been widespread examples in recent years of the re-examination and re-statement of educational aims, with the intention, explicit or implicit, of effecting reform. Some examples may be quoted to illustrate various aspects of the movement.

The origins are varied, and some at least lie within the system of education itself. At times the process starts with a basis adjustment, such as the decision to prolong compulsory education. To keep the mass of young people at school for a longer period is to raise at once a series of questions about the purpose and content of their schooling.

In other cases, countries feel that they are reaching the end of one phase in their education history and need to prepare the next. This is evidenced clearly in Algeria, where 1968/69, the seventh year after Independence, marked the end of an emergency period and the completion of a three-year educational plan so that the stage was set for a new orientation of the system. A reform commission was created to make a complete revision of the content of primary and secondary schooling. In Austria a reform started in 1962 reached its term by 1969, thus leading the authorities to a fresh consideration of the system.

When public attention is focused on a particular problem, the result may be to provoke study of a wider range of educational policies. The issuing in the U.S.A. of the report ' Equality of educational opportunity ' (1966)[1] and in Britain of the Plowden Report (1967)[2] may be cited as examples. In many countries, too, university unrest has led to decisions which have a bearing on the entire system of education. Iran and Senegal are among the States which have seen that university reform may imply the general reform of schooling. The comprehensive change now being put into effect in Iran is based on other factors as well —notably economic considerations—but a powerful stimulus has been provided by higher education.

Without further examining causes, there is simple evidence that many States have recently started to make an over-all assessment of their systems of education. An extensive list of projects is to be found in the national programmes undertaken during International Education Year. Some instances over the past three years may further serve to illustrate the point. Albania in 1968 instituted a ' People's debate ' on the reform of the content, methods and management of school work, which led in June 1969 to a government decision on the aims and structure of education. In Romania the basic law of 1968 gave a long-term direction and a framework for modernizing the country's system; since then a series of measures have been adopted for implementing the change. Much the same intention of evaluating and reforming was reported between 1968 and 1970 from Ghana, Iceland and Yugoslavia. Brazil in 1968 adopted a ' Strategic programme for the development of human resources ' which led to an extensive study of school education and the draft of a new law in December 1969, the intention being to begin the reform in 1971. Spain has provided a well-documented case of a national assessment leading to reform. A comprehensive survey was issued as a White Book early in 1969 under the title *La educación en España:*

1. Coleman, J. S.; et al. *Equality of educational opportunity.* Washington, U.S. Office of Education, 1966.

2. Great Britain. Central Advisory Council for Education. *Children and their primary schools.* London, Department of Education and Science, 1967.

bases para una política educativa.[1] The principles and pattern of a reform were there outlined as a proposed educational policy. After comment by the public and by professional bodies, a Bill was drafted and submitted by the Government to the Cortes, and finally approved in 1970. The law represents a thorough revision of the school system; it introduces a common school of eight years, after which differentiated upper secondary education is provided, with an integrated final school examination *(bachillerato)* designed to maintain equal prestige for the several branches of study. The law also forecasts the development of education, and the estimated costs, for the decade ahead. In this way the notion of continuous reform is combined with an assurance that the required resources will be found.

The process of assessment is frequently linked to the preparation of development plans for education. To the extent that such plans form part of national plans for social and economic development, basic studies and the formulation of policies are called for. Thus in France the conclusions arrived at by the commissions studying the problem of educational reform and of training and re-training of teachers have been used as a basic document for the sixth plan (1971-1975). With a view to achieving an initial evaluation of needs and the means necessary for the implementation of the new pedagogical options, 20 planning groups were set up within the Ministry (*PIM* groups) during March 1969. Their regional counterparts, the regional planning groups (*PER* groups), were asked to make a list of the crucial points which had emerged from the implementation of the fifth plan. On the other hand, an over-all picture, which leaves aside immediate considerations, has been attempted by the ' Educational Frescos ' group which strives to define what education will become, its

1. Ministerio de Educación y Ciencia. *La educación en España: bases para una política educativa.* Madrid, 1969, 244 p. (The Ministry has also issued the White Book in translation, under the titles: *Education in Spain: bases for an educational policy* and *Education en Espagne: principes de base pour une politique éducative.*)

For the text of the Bill, see: *Revista de Educación,* Vol. LXX, No. 204, Julio-Agosto 1969. Madrid.

methods, means, costs and impact in a more distant future. In this attempt at projection into the future the ' Frescos ' group, which is made up of six specialized working groups, is assisted by permanent institutions such as the Committee for Educational Research and Development, which is to promote research, and the Standing Committee for Economic Synthesis, principally concerned with the estimated cost of the educational programme.

The mechanism for achieving a clearer view of national education has also received due attention. The establishment of high councils or central committees has been used, for example in Japan, Thailand and Turkey, as a means for ensuring inter-ministerial attention to the future shape of education. The Japanese Central Council for Education presented its interim report in May 1970 with proposals for far-reaching changes to the structure and content of the system: it recommends the trial of some of the new ideas in pilot schools before general policies are adopted.[1] Many countries have taken steps to strengthen the machinery for planning education within the responsible ministry—a trend particularly noticeable in the Arab States but found also elsewhere. The United Arab Republic has attempted not only to improve co-ordination at government level but also to strengthen the connexion between planning and implementation, in the belief that this has been a weakness in the past. Probably much the same conclusion would be true for most national experiences in the planning of education.

A few countries—but their number is growing—accept the idea that a mechanism should be sought to ensure the continuous reform of education. Sweden has for long been committed to policy-oriented educational research as a means of achieving this end; and more recently Ivory Coast and Spain have taken steps in the same direction by creating central research institutions.

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1. Japan. Ministry of Education. Central Council for Education. *Draft basic conception on the reform of elementary and secondary education.* (Draft interim report.) Tokyo, May 1970. 30 p.

The nature of change

The movement to reform can thus be illustrated by cases from all parts of the world. The question then arises whether any common patterns can be discerned in the policy statements of public authorities. Whenever serious change is undertaken, goals and purposes tend to be discussed. In other words, change is a prospective process, and to be carried out systematically requires an understanding of the direction sought and the rate considered desirable. From this point of view, recent reforms of education may be analysed in terms of the goals sought and of the procedures adopted.

Broadly speaking, national goals for the community as a whole produce a complex set of imperatives for the system of education. At the political level, national unification or identity is a need recognized in government policies, especially in the younger countries. From this stems the importance that is attached to language in education, to the teaching of the mother tongue, at times also of foreign languages. Strengthening the place of the national language in education is felt to be essential in a number of countries seeking to foster national unity. In this regard the Arabization policies of Algeria and Sudan may be noted. Countries with plurilinguistic societies may adopt a more complex approach—and here India, Malaysia and Pakistan provide illustration. But whatever the conditions may be, the issue of a language policy in education appears to be a major element, although by no means the only one, resulting from the inter-penetration of education and politics.

Economic goals are contained in statements to the effect that education is expected to contribute to national development. The desire to promote higher standards of living for the people is recognized to depend upon greater production, one of the main factors of which is adequate preparation of those working in industry, agriculture and commerce. To establish some sort of equation between the educational system and the manpower needs of the nation has been the object of most recent reforms. In certain cases a strong insistence on technical and vocational

schooling and training is designed to produce the middle-level technicians which, for example in Guyana, Thailand and Turkey, are badly needed for industrial growth. Elsewhere, and notably but not exclusively in Africa, the view has been expressed that education should have a rural orientation. The Regional Conference of African Ministers of Education (Nairobi, 1968) produced a reasoned account of this policy and action to implement it has recently been taken by many of the States concerned. The Cameroon Government has emphasized that primary education should 'contribute to the rehabilitation of manual work by demonstrating the importance of the role of agricultural workers in the general economic growth of the country and at the same time should ensure development of the child's attitudes and moral character'. On the whole, policies directed to ruralization stem from a realization that the improvement of agriculture and of rural trades is an economic as well as a social necessity.

The decision for economic reasons to stress industrial or agricultural aims in education is clearly part of a wider movement, to lead schooling away from a traditional bookish pattern. It is equally clear that policies of such a nature meet with considerable difficulties, whatever the source of the resistance to change may be. For this is more than a matter of the types of school provided, their curricula and teachers. Educational authorities refer repeatedly to the need for changing attitudes—among their people at large—to manual work and to technology itself.

In respect to social goals, perhaps the most characteristic trend in recent policies is that of ensuring regional equality in the provision of education. Both national unity and social mobility require that the educational system be equitably distributed across the country. Frequently the majority of institutions are clustered in the capital city or in the larger population centres. The drive to extend the network of schools or secure equality between regions is found as much in developed as in developing countries, and is particularly evident in the large, federative systems of education. Thus, in India one of the main functions of the central authorities is seen to be to redress imbalance in the stage of educational development of different parts of the country.

It is in this area of social goals that the importance of the individual is stressed. For some time past educational policies have been directed towards implementing the right of all children to education. More recently, awareness of the inequalities resulting from the socio-economic background of students has raised the questions of how far the existing school system can be a compensatory mechanism—and of whether indeed the educational pattern is not itself biased in favour of particular groups. Although the answers vary with countries, the starting of extensive programmes for the disadvantaged or the culturally deprived has been a characteristic trend of the past few years. In the last analysis, this concern for equal opportunity amounts to a public acceptance of the need for education to suit individual differences, and it is here that the preoccupation of policy-makers rejoins that of practising teachers. A provincial committee (Ontario) in Canada on the aim and objectives of education reported in these terms: 'Education is designed to ensure the right of every individual to have equal access to the learning experience best suited to his needs.' There follows a 'responsibility for every school authority to provide a child-centred learning continuum that invites learning by individual discovery and enquiry'. Similar statements, if less broad, occur in several other countries. And as part of the same trend, a steadily growing concern is being expressed for special education for the mentally and physically handicapped, while in a few countries the special needs of talented students are also being stressed.

A survey of the goals of education should, in conclusion, point to the new emphasis on cultural values and the moral aspects of education. In some cases a source of ethical values is found in the prevailing religious systems; elsewhere, it is character formation and civic responsibility that are defined afresh. In both forms, there is insistence that education, and particularly schools, should organize deliberately to develop certain attitudes and values among the students. The attempt to come to grips with the ends of education is certainly as old as organized education; but the frequency with which public authorities refer to moral education in their policy statements in recent years is striking.

In practice, the several goals analysed here are woven together in a form characteristic of each country.

The present reform movement is novel in its extent and degree, as an expression in most countries of the intention to change. It calls into question existing patterns and modes of organization. And in seeking the sources for a better system of education, it produces a broader range of concepts than has been the case in earlier years. To illustrate the point, one may recall that the 1970 message on education of the President of the U.S.A. to Congress was entitled ' Message on educational reform ' and opened with the phrase: 'American education is in urgent need of reform.' A striking instance is provided by Tanzania, where President Nyerere's Arusha Declaration in 1967 outlined the main principles of his Government's policy. It was followed shortly after by a policy booklet which dealt in detail with education.[1] To change education to meet national conditions and needs represented a systematic reform in the content and spirit of schooling; it involved a new rural bias, since most of the people are settled on the land; and it was directed to the goal described by the President: education for self-reliance.

In regard to procedures for implementing educational policies, a few major conclusions may be summed up briefly.

Public authorities continue increasingly to use planning as a means of charting the future development of education and of taking policy decisions in the present. In fact, the sharper focus on change which has characterized the past years has been caused in part by the adoption of educational planning as a modern form of management. This process emphasizes the reciprocal relationship that exists between educational and social and economic development, and has brought to the attention of authorities the need for examining productivity in educational systems. Hence the growing concern with aspects of ineffectiveness, whether they be external or internal. Among the latter may be classed the various forms of grade repetition and premature school leaving covered by the term ' wastage '. It is significant that

1. Nyerere, Julius K. *Ujamaa—Essays on Socialism.* Dar-es-Salaam, Oxford University Press, 1968, 186 p. Chapter 4: ' Education for self-reliance '.

in 1970 the major international conference on education [1] devoted its time to the discussion of this theme.

But while the use of planning has revealed, at the level of studies, some of the shortcomings of educational systems, it may be noted that experience has brought greater sophistication to planning itself. In particular, the less mensurable outcomes of education, broadly described as the qualitative aspects, have been singled out for attention. And since planning is conceived as a continuous process, forward-looking but based on past experience, it has contributed to the emerging doctrine of continuous or permanent reform in education.

The administrative patterns of countries tend to be deeply rooted in tradition, and important changes are unlikely over a short period of time. Nevertheless, there does appear to be a trend towards re-examining the functions of decision, control and execution in the educational enterprise. Improved planning has caused a number of countries, like the United Arab Republic, to set out to devolve certain functions from the central to regional and local authorities.

Perhaps the most striking reform in organization in recent years has been the growth of ' participation ' in the majority of European and North American countries. Student councils with functions varying from advisory to deliberative have been set up in secondary schools and higher establishments, and in certain cases, like France and Italy, these arrangements have been codified in official regulations. In France, secondary school students take part in class and school councils in which teachers, the administration, parents and community leaders also have a place. At higher education level, councils have been created in individual establishments and at regional and national levels. Teachers, students and persons from outside the institution take part in university councils. In Sweden, student councils are now obligatory in all upper secondary schools; the aim of policy is ' to obtain the collaboration of all concerned in reaching increased participation and co-responsibility '.

1. See: International Conference on Education, 32nd Session, Geneva, 1-9 July 1970. *Final Report.* Paris, Unesco, 1970.

3. Changes

Whether reforms are prepared by a fresh statement of educational policies or not, they certainly appear to have as their first target the structure or organization of the educational systems. It is on this point that a survey of recent changes may usefully begin. This is not to imply that structural aspects—the types of institution and their relationships—form a starting point for change itself. The reverse is probably true, that innovations within the system of education (in content, methods, teacher preparation) and forces in the social and economic environment have to build up considerable strength to bring about new structures. When a change of organization is embodied in official policies, it may fairly be said that the reform is under way.

Structures

Examining first the total period of schooling prescribed for all children—the duration of compulsory education—the trend is towards prolongation: for example, in the U.S.S.R. to the full ten-year course of secondary (general) education, in the United Kingdom to age 16, in Denmark to eight years of basic schooling (in 1972/73) then to nine (in 1973/74), in Cyprus and Malta to age 15. The addition of the 7th grade to primary education in the Philippines is a similar step.

Measures of this type pose the question of the content of education which is so closely related to structure. The Soviet

Union illustrates clearly the process of a systematic re-examination starting from the earliest grades. Experimentation showed that it was possible to recast the primary school stage of general class-teaching, reducing the period from four years to three, so that subject teaching could begin in the fourth grade. This structural change has been introduced along with the lengthening of compulsory education; and the content of schooling in the upper grades is now being worked out progressively in the expectation that the passage from old to new programmes will be completed by 1974/75.

The articulation of the school system, the ways in which various types and levels of school fit together, has occupied education authorities in a large number of States. To improve the connexion between primary and secondary stages, some countries like Ghana and Senegal are shortening the former. Such measures are usually intended to eliminate the effects of a double-track system, where primary schooling for the masses developed separately from secondary education for the chosen few. Many reforms in European countries have a similar purpose when they alter the structure of secondary education. With greatly enlarged enrolments and a consequent spread of abilities, interests and needs, there is an increased risk of diversified and unco-ordinated types of secondary school which fail to meet the requirements of society and of the individual student. The trend at this level is to a common school of general education at the lower level, leading to specialization at the higher. And the pattern of the comprehensive or multilateral school is favoured in some countries as the best way of facilitating the transfer of students between branches. Much of the structural reform in secondary education is designed to enhance the status of practical, technical and vocational types of schooling, and to provide students with opportunity for finding the most appropriate course of study.

A significant development which appears on the increase is the emergence of new types of institution, usually situated at the points of junction of the traditional school plan. Thus kindergarten or pre-primary classes are being added to lower primary classes, to form what may be termed infant schools.

Middle or intermediate schools, grouping upper primary and lower secondary grades, are reported in several countries. In structural terms, this amounts to a 4-4-4 plan or some variation of it, in place of a rigid 6-6 plan. It is interesting to note that the Japanese Advisory Council on Education in its preliminary report of May 1970 recommends that pilot schools be set up on the 4-4-4 scheme to obtain experimental evidence of the merits of this organization.

Again, at the point where upper secondary joins higher education, new institutions are developing, some regarded as second level (such as the sixth form college in Britain and the *Kolleg* in the Federal Republic of Germany) and others as higher level (the junior college is reported to be the fastest growing type of institution in the U.S.A., and other countries like the Philippines and Singapore are also adopting it).

Within the broad area of higher education, structural changes have been even more striking. The principles which are laid down in France and Italy for the development of higher education —autonomy, participation and the multidisciplinary approach— exemplify the search for new forms of institution. In Yugoslavia the process has taken the course of a search for mergers, as between institutions and even between subject fields taught in a single institution.

The broadest generalization appears to be that education authorities are increasingly ready to re-open the question of organization with a view to obtaining better articulation between types of school. In some cases, too, the link between education, training and occupation (or between school, apprenticeship and work) has been cited as requiring a similar re-appraisal. The adoption of day release schemes or sandwich courses for giving general education and theoretical instruction to young workers has obvious implications for school organization, but few countries report structural reforms in this sense.

However, a statement in terms of types of school is probably too limited to reflect the growing points of education today. One of the significant features of the International Education Year has been the stress laid on the concept of life-long

education. This approach rejects the view of a formal schooling which occurs once and only once in a person's lifetime; consequently, it also obliterates the distinction which has hitherto been made between formal and informal, or school and out-of-school, education. Experimental projects in a number of countries attempt to apply this concept, for example to community schools and colleges, to combined school and work experience and to schemes of off-campus education. So far, though, the structural results of the life-long educational principle are not clearly visible.

The other aspect of organization is that relating to the internal work of schools. There appears to be a tendency to intensify school work and to make fuller use of premises. As a rule, traditional school calendars are hallowed practices, so changes in this direction are always striking. Hungary is examining the adoption of the whole-day school, and Yugoslavia the possibility of a five- instead of six-day week as well as a system of accelerated promotion for the talented. Argentina has started to introduce a full-time (two-session) primary school pattern as a means of adding foreign languages to the curriculum; and in Ecuador a more intensive school-year has been introduced, with less time for examinations and vacations. Yet it must be noted that in some areas the official research bodies are also preoccupied by the problems of fatigue and overwork among students.

At the same time, the school unit itself is growing. In such countries as Canada, Spain and the U.S.S.R. the authorities are deliberately increasing the size of schools, creating regional schools and closing down small local establishments. The trend is not new, nor is the argument yet settled between supporters of the small and the big school. But in recent years the growth of school populations has undoubtedly caused schools to increase in size; considerations of efficiency, for staffing and equipment, may also lead to consolidation, as has been the case with teacher training establishments in Uganda.

The unit of organization remains, without a doubt, the class or grade. While no reforms are evident in this area, some experimental work draws considerable attention. As an instance, the

'non-graded primary school'[1] in the U.S.A. attempts to permit each pupil to progress at his own rate of learning in each of the subject areas. The schools taking part in the experiment eliminate specific grade placement for the children and allow continuous promotion throughout the primary course.

Structural changes, associated with and sometimes the result of greatly increased enrolments, have placed a fresh importance on guidance and counselling. To the extent that measures to improve the vertical or horizontal articulation of the school system are designed to meet individual needs, the function of guidance becomes essential to a school system. The fact is recognized in some countries (e.g. in parts of Switzerland) by treating one stage of schooling—the lower secondary cycle which also forms the end of compulsory education—as a period for extensive educational and vocational guidance. The strengthening of guidance services is treated as a necessary part of the general reform in Algeria, Spain and Sweden, and Romania has begun a special programme for training guidance personnel.

Internal change

It may be borne in mind that educational change stems from two sources: the classroom and the education authority. Broadly speaking, internal matters such as curriculum content and teaching method develop in the classroom, while the education authority takes the initiative in external matters—input and output of the educational system. Since changes in the latter area are perforce more rapid and sweeping, they are also more striking. They are, however, closely linked with the internal changes. Until recently, education authorities' main concern was with input—pupils, teachers, and resources. Subsequently, sheer quantitative development has led to a closer scrutiny of output and therefore of the actual teaching process.

1. See: Goodlad, John. 'The non-graded schools in the U.S.A.' in: *Perspectives in education*, No. 1, 1969, Paris, Unesco.

As stated earlier, the result of increasing expenditure is a natural demand for greater attention to efficiency. As it becomes increasingly clear that education cannot achieve full efficiency in isolation, educational development is becoming more and more closely linked with social and economic development. A frequent procedure is for administration to be decentralized in order to obtain flexibility and rational utilization of resources. At the same time, pupils and their parents are being involved in the running of the schools. A Resolution adopted in March 1970 by the Yugoslav Federal Assembly, defining the aims and principles of education, involves pupils in the running of the schools and stresses the permanent connexion between the school, life, economy, environment and parents. Federal and republican laws, and curricula and syllabuses will gradually be revised in the light of this Resolution, and it is not surprising that the 1971-1975 Social Development Plan prepared in 1969/70 treats education as an element of long-term economic investment.

Similar measures are being taken in other countries. The United Arab Republic has given increased responsibility to regional bodies and has added a department of professional supervision to the education authorities in each zone. In Ethiopia a policy of decentralization is being considered with a view to increasing local participation and interest in schools. Elsewhere, a trend is evident to give head-masters, staff and students more power to decide matters affecting school life. The extension of participation in recent years, especially in European countries, has represented a striking reform at least in institutions at the second and third levels of education.

Educational provision

The conception of education as an element of economic investment clearly underlies the wide range of measures taken in all parts of the world to ensure that education actually reaches the greatest possible number of people. In order to ensure full provision, Argentina has open-air schools for children with health problems, evening schools for those up to the age of 15 who have not been

able to complete normal primary schooling, and first-grade instruction for illiterate soldiers. Mexico has 'concentrated schools' *(escuelas de concentración)* at strategic points for easy access. In Pakistan, where a wide discrepancy is reported between the stated aims of universal eight-year elementary education and adult literacy and their actual achievement, current policy is to reach universal enrolment up to class V by 1980, attendance gradually becoming compulsory up to this level for those already enrolled. In the Republic of China, free and compulsory education was extended from six years to nine as from the 1968/69 school year.

At the same time many countries are democratizing (*i.e.* facilitating access to) secondary and higher education. A case in point is the Sudan, where for the first time it has been possible to cater for all pupils qualifying for intermediate or secondary education. Primary education has been extended from four years to six, and investment is now being made in upper secondary education: to the traditional, academic section are added professional and technical sections with easy transfer between them. The broader curriculum is expected to raise the level of the Sudan School Certificate and so reduce expenditure on university education by covering ground formerly left for the university preliminary year. In the United Kingdom, on the other hand, it is the third level of education which is being enlarged, by the establishment of polytechnics. These are comprehensive institutions of higher education offering parallel courses to degree and sub-degree level, and in some cases having links with the universities.

As the 'traditional' sector of school education is strengthened, more efforts are extended to particular sectors of the population such as the handicapped and the culturally disadvantaged. The extension of educational provision is also supported in a number of countries, both developing and developed, by investigation of wastage and measures to reduce it.

Content and method

Turning from trends in the quality and scope of educational provision to curriculum content and teaching method, the same

concern to obtain a worthwhile return from the educational system is discernible. Syllabuses are becoming more practical in character and are based on the criterion of their validity as preparation for life. Essentially, the move is towards a broader, environment-orientated curriculum in the primary school and increasing regard at secondary level for pupils' vocational needs in the light of the country's economic development. This is seen clearly in the emphasis on ruralization in the educational policies of the majority of African States. In the implementation of these policies, the authorities have been led to the sources of the national community's way of life—cultural as well as economic—for curricula, teaching methods and the preparation of teachers have all to be worked out afresh. They cannot easily be derived from experience elsewhere.

Examples of the practical approach to content and method abound also in other parts of the world. In Mexico, emphasis is on ' learning by doing ' in primary schools, leading to ' teaching by producing ' in secondary schools. Basic changes in the Cuban elementary school organization are directed towards a better use of class time, strengthening of self-learning, better differentiation of cycles, ' re-adaptation of specific objectives in relation to their materialization as skills ' especially in grades 1-3, and breaking with the purely academic tradition in favour of integral education. Fundamental importance is therefore attached to pre-school education. The Soviet Union also recognizes the important social task of pre-school institutions, although attendance is not compulsory. Great importance is attached to the practical application of knowledge acquired in school. In some regions of Poland, vocational training is now compulsory (under the terms of a Council of Ministers order of 20 August 1968) for young people aged 15 to 18 who are neither attending school nor in employment.

This new orientation of the curriculum plays an important part in the evolution of methods. Language is approached essentially as a means of communication. Audio-visual methods of teaching continue to be widely introduced and experimented. Dahomey has adopted a new method of teaching French in

primary schools; in Luxembourg primary schools, French is now taught by the structuro-global method. The abolition of Latin in the sixth and fifth classes in France has made available more time for the teaching of French, to which great importance is attached as a means of expression. Some countries attach a particular significance to the actual choice of language of instruction. Thus Arabization is an important aspect of educational policy in Sudan and Morocco, while Ethiopia is investigating the need to develop the use of Amharic as a language of instruction in school and is to set up a National Academy of Amharic under the third five-year plan. Throughout Yugoslavia, instruction is in the mother tongue, but it is envisaged that minority groups shall also study the local language, history and culture. Similarly, ' cultural promoters ' teach Spanish to Indian-speaking children in Mexico so that they may attend school without disadvantage. The political determinants of an educational policy concerning the medium of instruction have been referred to earlier. Whatever the causes of the interest, it seems clear that innovatory action is vigorous in the language teaching field.

Much the same view emerges in respect to the introduction of modern mathematics in primary and secondary classes. Here experimental work has proceeded far enough for some education authorities to generalize the approach.

The importance of environmental studies has been exemplified in a number of countries by attention to newer aspects of problems—pollution for one, population control for another—with a demand that curricula take account of such issues.

Rôle of the teacher

In developed and developing countries alike, it is acknowledged that a new orientation in curricula and syllabuses cannot be effective, nor can the full benefit of advances in educational technology be felt, without a vast effort in the field of teacher training, both pre-service and in-service. In fact, the 1970 report on ' Progress of Public Education in the United States of America ' states that ' teacher education is gradually coming to be regarded

as a continuum with little or no distinction between pre-service and in-service education '. Following the critical shortage of teachers during the two postwar decades, due to the combined effects of the population explosion and the wartime halt on teacher training, the first phase of this new development is the shift of emphasis from quantity to quality. As a result of the rapid educational expansion in Cuba, for example, 60 per cent of teachers are non-graduates, but under the ' Diploma Plan ' all are expected to be qualified by 1975. The United Kingdom has now removed all unqualified teachers from schools and by 1974 all university graduates entering the teaching profession will be required to possess a teaching qualification for primary or secondary level. Scotland has even been able to consider improved staffing standards in primary schools.

The next step is to improve teaching standards beyond the point where they were depressed by difficult conditions, so that education can apply the results of research and also meet the requirements of the social and economic system. This is being done by lengthening and strengthening pre-service teacher training, or increasing the number and frequency of periods of in-service training. In Argentina, as in a number of other countries, teacher training is being raised from secondary to higher level.

In the countries of Eastern Europe, the establishment of special institutions for the continuing in-service training of teachers has become an accepted part of educational development. Such centres embody, and apply to the educational system itself, the principle of life-long education which teachers are expounding.

Among significant recent attempts to generate change by starting from the teachers, one example may suffice, that of the Rural Teacher Training School in Zinder, Niger. This takes into account not only the ruralization policy mentioned above, but also the broader role of teachers as community leaders. Educational advisers and inspectors of primary schools also undergo in-service training at the school, so that the new educational policy may be implemented throughout the country on the basis of a unified training. Future teachers must be deeply aware of the environment in which they live and are to work.

Their training is therefore based on the humanities and on natural sciences, the approach to the latter being a practical one, founded on applications in hygiene, food, or the problem of water. The practical part of the teachers' training involves their participation in the social and economic life of the region.

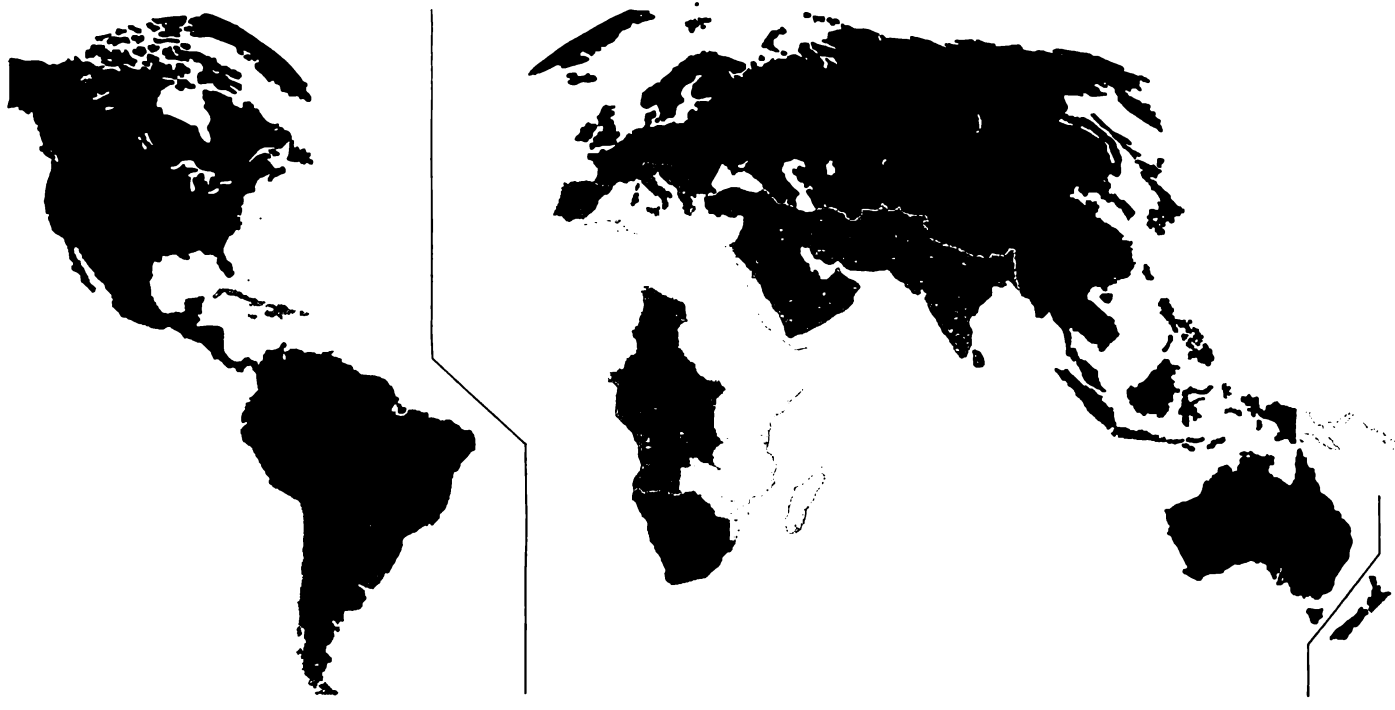
Educational technology

One of the main causes of the need for growing and continuing in-service training is the 'snowball' effect of technological progress. Just as new curricula provoke new teaching methods, so new teaching methods call forth further advances in educational technology, and these in turn lead to new methodological developments. The possibilities of technology are many-sided, leading on the one hand to better individual instruction by means of programmed teaching machines or language laboratories, and on the other to mass instruction on a scale which has never been known before. The Open University in the United Kingdom will begin teaching in January 1971. It will provide higher education for those deprived of it or not attracted to it early in life, and will combine all the potential of modern technology both in broadcasting and in the presentation of recorded material, with correspondence tuition, discussion and personal guidance.

Intensive use of advanced educational technology is not confined to developed countries, however. Niger, with one of the highest rates of illiteracy in Africa, is running an experimental school television programme based on a well staffed centre in Niamey. Despite the high cost, it is hoped to extend the programme to the whole of the country next year.

Functional literacy

Recognition of education as a vital factor in national development led to the rapid growth of educational systems in developing countries. In order to ensure that economic development was not restricted by the growth rate of the school system, nor social



World map of illiteracy

development by the adult population's lack of schooling, educational development was supported by parallel provision of functional literacy training. Despite the progress made in this field since the 1965 Teheran Conference on the Eradication of Illiteracy, the problem remains a considerable one: even now, the illiteracy rate for Africa stands at 73.7 per cent. In the Democratic Republic of the Congo the high number of illiterates gives cause for concern: 15,500 in the city of Kinshasa alone. Here, the Ministry of Education has set up the Directorate of Education for Adults, to organize functional literacy training for those involved in the development process. The aim is to increase and improve their productivity, gradually changing their attitude and so preparing the way for further development. By promoting and co-ordinating efforts in the whole field of education for adults, the Ministry hopes to adjust the adult population to the constantly changing world of today. It has obtained the collaboration of several international organizations and a literacy centre is already operating at Kimbanseke, near Kinshasa. With the assistance of the Directorate of Education for Adults, staff was trained for the production of teaching material and for the maintenance and use of audio-visual aids for the centre. A further centre is to be opened shortly at Kinkole. A study on functional literacy is being made in the province of Kivu, in conjunction with FAO and UNDP projects and with the Ministry of Agriculture, which hopes to revive cotton growing in the Ruzizi Valley.

Research

Despite the frustration of attempting to generalize on educational research as a whole, covering as it does a field as wide as that of education itself, certain categories of research emerge clearly: pedagogical research, problem-oriented and improvement-oriented; and research in related areas, sociological, psychological or organizational. Some concern is also apparent for the proper organization and co-ordination of research and its effective application.

It seems clear that controlled experimentation and observation, forming together the field of disciplined inquiry in education, are expected in many countries to provide an essential link between policy-makers and practising teachers. One evidence may be found in the number of measures taken to set up or strengthen educational research institutions. Recently, too, national projects for research and development centres have been accepted for support by the agencies of the United Nations system.

Moral and physical well-being

In spite of the over-all trend towards a more practical and less academic approach to education, however, pupils' moral and physical well-being is not lost sight of. One of the basic concepts underlying educational policy in Pakistan is ' the role of education in the preservation and inculcation of Islamic values as an instrument of national unity and progress ', and the same principles form an essential part of educational policy in Saudi Arabia. Hungary has been concerned to avoid pupils' mental and physical strain, and in physical training in particular the approach is now to encourage individual abilities instead of imposing general standards. France, in order to reduce strain on pupils, introduced the *tiers-temps pédagogique* in 500 classes in the northern region in 1968/69 and is extending this arrangement in 1969/70. It consists in dividing the school week into three parts, 15 periods being devoted to basic intellectual activities, seven to other indoor activities and between five and eight to physical education and sport. Belgian concern for the principle of *mens sana in corpore sano* is evident in the organization of ' sea, snow and forest classes '. The lightening of pupils' workload planned in Yugoslavia by deleting obsolete subject matter from syllabuses was offset by new demands, the weekly timetable increasing to 36 hours although, as stated earlier, the five-day week is being introduced gradually and experimentally.

School buildings

To a certain extent the design of older school buildings does not facilitate the adoption of new practices. The situation as regards elementary, secondary and higher school accommodation in Yugoslavia has improved in comparison with previous years but, as some buildings have been put up without laboratories, assembly halls, etc., teaching has been adversely affected. On the other hand, the appearance and lay-out of today's schools are changing in response to the demands of modern teaching techniques. Schools built in Cuba in 1968/69 were planned with consideration for current changes in the educational process with the application of new teaching methods which use the most modern educational techniques. An evaluation of these buildings, the aim of which was experimentation, from both the teaching and the architectural point of view, has provided the basic elements for future school design.

Concluding note

Such, in a highly condensed form, are some of the salient changes and innovations reported from the countries of the world.

In the limited space available, no adequate reference has been made to the international effort in education. Both the study and the development of education, essentially national in character, stand to gain from the exchange of experiences and resources. A fuller reporting on international co-operation should, in future, supplement the account of national developments.

Likewise, the other end of the scale, practical educational work in the classroom or with a group of students, is scarcely touched. A similar observation could probably be made about the majority of national reports from which this brief survey is derived. But in all these cases, the ultimate intention is to describe, explain and better understand the processes in which students and teachers are involved—precisely to contribute, in however small a way, to the improvement of education and to a wider opportunity for all to benefit from it.

4. Report from the International Conference on Education

The 32nd session of the International Conference on Education was convened by Unesco in Geneva, 1-9 July 1970. It was attended by 231 delegates from 87 countries. The Conference devoted a large part of its time to discussing the trends in education as seen by Ministers and senior officials. In the course of the debate the Rapporteur-General, Mr. J.-G. Zaarour, Director-General of Education in Lebanon, developed the general report which he presented to the Conference. As amended and approved by the Conference, the text is given in full below.

On the basis of a working paper on this subject, the Conference undertook an extensive examination of educational policies during this International Education Year. The majority of delegations reported on recent achievements, their current preoccupations and the direction and rate of changes taking place in their systems of education.

The prevailing spirit of the debate may first be noted. As one delegate phrased it: 'We are not faced with a crisis, but rather with a series of problems in certain fields.' The magnitude of the task confronting education authorities and the need for reforms were acknowledged. While focusing attention on problems, delegations gave detailed information on their national reports, giving these a degree of comparability which made it possible for participants to exchange their views on the major

trends. The debates on the main items produced a real dialogue between delegations, the members of which commended the new working method and expressed the wish that in future participating countries would continue to send in their national reports. All delegations appreciated the work done by the Secretariat in preparing the two Conference documents.

Next, there was general awareness of the fact that education systems are not self-contained and self-sustaining. At the international level, at a Conference such as this, exchanges between educators depend for their full fruition on prevailing world conditions. World peace is indispensable for the development of education. Equally necessary are mutual support and aid, stemming from a readiness on the part of more privileged nations to share their experience and resources with those still striving to develop.

The Conference dealt first with the question of major changes, as expressed in national education policies. The salient points of agreement and some divergent opinions, are summed up in the next section.

Education: change or evolution

Education has been in a state of continuous change, particularly in recent years. The validity of educational systems is being questioned by teachers, students and pupils and by the public, and this is reflected in the authorities' awareness of the gravity of the problems and the urgent need for solutions.

It has often been said at the Conference that one of the weaknesses of education was its lack of adaptation to today's society accustomed to the rapid development of science and technology; yet education, at both school and university levels, has been in the past and should continue to be the agent of scientific and technological progress.

Several countries are beginning or have already begun to rethink and evaluate their educational system in the light of their own experience and also of the serious events which have marked the development of schools and universities throughout the

world. After prolonged study some countries, however, have noted a serious disproportion between efforts made and results obtained, having regard both to the academic efficiency of schools and universities and to social and economic considerations. While certain countries are overhauling their educational system in order to bring it into line with economic and technical development, others—and they are the more numerous—are trying to make their educational system promote social and economic development. Some delegations remarked with bitterness that the school, instead of being the driving force of development, has adopted a passive or even a negative attitude to life, adding that whereas some countries consider that the task of the new education is to give young people a reason for living or a chance for better living, others continue to give them the means of living and to see that they can merely live.

Whatever the reasons may be, it is clear that the need for an over-all and continuous reform of education is widely accepted. For some time past a number of countries have set up agencies to prepare plans for educational reform and to supervise their implementation and adaptation, in order that the objectives of educational policy might be achieved. This trend is beginning to take shape more clearly, and the idea of reform is set forth in laws and regulations.

What directions?

Prospects in education. The prospective nature of educational reform is less and less questioned. Evidently, this poses a difficult problem at the outset: how can one establish the profile of society and technology in the future; for what society are the young of today preparing themselves, or being prepared? As yet, nothing can be stated with certainty—beyond the fact that rapid changes will continue in science, in techniques of production and in social organization.

A certain divergence of opinion appeared in respect of the rôle of the school as an agent of change. Some delegates felt that education had always followed in the wake of social change and

would continue to do so. For the majority, however, especially the developing countries, this was a matter of faith: education should contribute to progress and development, should itself be an instrument of change. In illustrating this view, one delegate remarked that a strategy of education was needed ' to make it progressively clear to the young and the families that aptitude for manual work on the one hand and a certain technological knowledge on the other are essential components of culture '.

Such differences did not prevent general agreement that educational policies should have a twofold aim: firstly to solve present problems and secondly to give education a prospective rôle. Even without any clear view of future society, it is possible to derive goals for education from the political, social and economic choices which nations are now making for themselves. However, the Conference agreed with the Director-General of Unesco who in his Message on the occasion of the International Education Year, observed that ' the need for new human models, both for society and for the individual, is making itself felt almost everywhere. And while inventions of such complexity may be beyond the power of education alone, we all realize that without education they would be quite impossible. For, when all is said and done, no progress has reality or meaning for man except in so far as it is projected and reflected in his education '.

Objectives: individual and society. Several delegates developed the concept of the ' autochthonous ' school, or school rooted in the social environment. In the context of this Conference it would be better to talk of education as a factor in national unity. This gives rise to a number of directives for the promotion of the educational system. Thus, the realities of the national population—cultural traditions, spiritual and ideological values, and language, as well as social patterns and organization—represent so many factors to be taken into account in educational policy.

In countries with plural communities and those lacking a single vehicular language, it is evident that a language policy is indispensable. This will of course vary with the situation of the individual country. In one case bilingualism is aimed at; elsewhere, a multiplicity of regional languages should be kept alongside

the national language; and in a third case, a single national language is favoured. Several delegations spoke on this particular point, and some of them proposed that the mother tongue should be the language of instruction.

Again, as has already been pointed out, the spiritual and ethical values of the national community affect the goals of education. Many delegations, in describing reforms now in progress, pointed to the importance attached to moral and civic education, character training or religious instruction. In one instance, a national study has been issued (under the auspices of the International Education Year) on the confluence of Buddhism and democracy. It is interesting to note the stress placed by the Conference this year on the moral aspect of education by devoting a special meeting to this question.

The individual right to education and the need for education to contribute to the full development of the individual, represent another major objective in the social field. As most delegations pointed out, this requires a policy for the extension of their educational systems: the increase of primary schooling to the target of universal compulsory education; the provision of more secondary and higher education.

In implementing the right to education, some central authorities see their rôle as that of redressing existing imbalances. Thus, to achieve regional and social equality of opportunity has become, in many countries, a major object of official policy. On the one hand this means giving attention to the geographical spread of educational provisions; and on the other, it leads to special programmes for such groups as the culturally deprived.

The same question was also approached from another point of view: education should meet the needs arising from individual differences. For most delegations, this objective was applied chiefly in the content of education and formed a criterion for deciding basic common courses of study and optional courses. Some delegates reported also the stress that their countries were placing on the development of special education for the retarded, victims both of their social environment and of the educational system, and on measures to develop the aptitudes of talented

pupils. The educational system will thus ensure the advancement of all without discrimination.

Economic objective. It was the opinion of the majority that, if educational investment is to be more profitable in the future, one of the aims of the new education would be not only the integration of the young in active life, but also and above all, the abandonment of an abstract didactic system of instruction in favour of increasing orientation towards practical life. Although the integration of educational planning in over-all social and economic planning has not been fully achieved in most countries, at least the principle itself is already universally recognized.

It was noted that changes in the world of employment in the developed countries and the requirements of an ever-increasing demand for new technology call for the training of highly skilled manpower. On the other hand, the leaders of some developing countries find that, despite the outlay on the educational sectors, the economic results of their educational systems are still inadequate and do not meet the demand for skilled manpower, particularly where the economy is based on agriculture. In the former case, fairly clear policies are taking shape: the various sectors of employment are playing a part in determining the aims of the educational system, and the tendency to integrate technology into general education is also becoming much more marked. In the second case, greater emphasis on vocational training in the educational system would enable the developing countries to remedy the lack of skilled technicians in a relatively short time. Experiments with pilot rural schools have been made, meeting at times with serious resistance from those around them. One of the delegates said that parents find this type of instruction rather amusing: they cannot understand why schools should teach children how to breed chickens or grow potatoes. It was often said during the Conference that the financing of education was at present giving rise to quite serious problems from the standpoint of national budgeting. But that is not the point. The change will necessarily have to be brought about within the system, *i.e.* syllabuses and methods, by applying the '*Contre-Education*' (Anti-Education) suggested by Jules Michelet in 1847.

What strategies?

In translating objectives into educational practice, the experience reported at the Conference showed that a variety of courses of action could be found for each policy choice. Time did not permit of an exhaustive exchange of views on the alternatives that are posed for choice by educational authorities; but some of the major items treated are grouped in the paragraphs that follow.

There is, in the first place, a certain juxtaposition of systems of education, some rigid and others flexible. The consensus favoured flexibility in respect to organization. Indeed, several delegations applied the same notion of flexibility to the very concept of a 'system of education'. In at least one case an attempt is made to integrate into the school system young people in the 14-18 age group who have left school. Thus, the education authorities, while taking responsibility for the in-service training of young people, are also aware that the rôle of education is not confined to the school, and that it is their duty to know and minister to educational needs outside the school.

The period of schooling, and notably the point at which it starts and its duration, have to be decided when education is made compulsory. A wide range of choices was represented by the countries present at the Conference. So much so, indeed, that no general trend or view could be identified. One of the tendencies is to increase the over-all period of schooling, by lowering the age of starting school or more often by raising the school leaving age. And on the other hand, it may be possible to organize programmes and teaching efficiently enough to achieve better performance without prolonging the period. Decisions on the initial age and the duration of compulsory schooling vary according to the country's resources and the children's degree of maturity.

Another choice appears to lie between extending primary education and generalizing adult literacy. The delegations who raised the problem of illiteracy agreed that simultaneous efforts on both fronts were needed. The rural school or 'community

school', with two tasks—education and social progress—is an original solution to the problem, and also avoids excessive expenditure of human and financial resources.

Again, a distinction may arise between providing education for the mass of pupils and special measures to assist particular groups. Those delegations which described policies for expanding opportunities for the handicapped and the culturally deprived pointed to the national value and economic importance of such measures—aside from purely humanitarian considerations.

Centralization, decentralization and deconcentration of educational systems and administration were widely discussed. But the new tendency is to consider them separately, while keeping them interdependent. It is true that traditions are already established in most countries. It seems that one central authority must be responsible for setting targets and practical standards at the national level. This is not incompatible with the participation of regional authorities at the various hierarchical levels and also teachers, pupils and parents' associations in the execution of plans, in accordance with national targets and norms. It should be noted that some delegations consider that traditional forms of administration are amongst the factors hindering educational development. Static administration should be replaced by more dynamic administration, and the narrow concept of administering by that of managing.

A question of a different order arises with the urban-rural classification. While many delegations saw a need for more adequate provisions for children in rural areas, particularly by giving a rural bias to the content of schooling, there was agreement that a common national school system was the most important objective. But such a system should, by definition, be flexible enough to meet local conditions and requirements; hence the choice between rural-agricultural and urban-industrial is rather a matter for the curriculum.

In the last resort, the problem of cost and productivity has to be faced. Must improved quality inevitably mean increased costs? The Conference at large reported on the fact of rising budgets and increased unit costs, but it gave no answer to the question. Two

specific points may be mentioned. First, there is general awareness of the need to study the economic aspects of education, and the insistence on planning is evidence of this trend. And second, the Conference during its discussion of educational wastage gave special attention to one aspect of the problem, that of the internal effectiveness of educational systems.

Having outlined the strategy, we turn in the next paragraphs to the Conference's approach to the internal aspects of educational systems—structures, content, staff and research.

Structure

The statements made by the vast majority of the delegations showed that there is an increasingly marked trend towards greater flexibility of structures. The excessively rigid structures of the past are being relaxed, and are yielding place to systems whose flexibility facilitates, on the one hand, co-ordination between the various cycles and, on the other, experimentation with new types of institution. Information about structural innovations such as the merging of pre-school and primary classes, the setting up of middle schools and the creation of post-secondary and pre-university institutions was placed before the Conference.

These new structures necessarily entail setting up a guidance system. The question remains as to who is to receive guidance and on what points, how guidance is to be given and when.

The need for flexibility in the organization of the school itself is also being realized. The problem of the horizontally compartmentalized school was discussed. Some speakers advocated a school ' without grades ', and others suggested an intermediate system—group teaching, in which teachers, instead of standing in front of the class, would encourage pupils to work as a team; this would also make it possible to effect considerable savings of both manpower and money. This new educational procedure is more active and more likely to encourage a community spirit on the part of both pupils and teachers.

The increased emphasis placed on pre-school education is due to considerations of social justice—the desire to enable all children to acquire the vocabulary, the power of verbal expression and the attitudes that they will need as a prerequisite for their integration into educational and social processes. Such preparation, indeed, means that pre-school education will increasingly become part of the compulsory course.

The constant expansion of primary education is giving rise to problems for all participating countries, problems that are not only quantitative but also—indeed predominantly—qualitative in nature. Many countries are trying to discover how they can best solve the problems of this level of education. Some advocate group teaching, others televised teaching or a succession of polyvalent teams of teachers (team-teaching). These innovations will obviously affect existing structures and even school architecture.

As regards secondary education proper, a twofold trend can be seen—first, a trend towards retaining a basic common core, and second, a trend towards providing greater variety in the upper classes, either by offering different courses in the same school or by establishing different types of schools. It should be noted that secondary education is being expanded in both vocational sectors—technical and agricultural—with all the changes in the existing structures that this implies.

In all countries, profound changes are taking place in higher education, changes that affect structures and organization, the content of syllabuses and certificates, due to the fact that the universities have been particularly affected by the unsuitability of the school system and the lack of life-long education. So far, no magical way of instituting the new structures has been found. The question of the nature of the 'New University' is being investigated.

The major innovation undoubtedly concerns the sharing of responsibilities. It is not actually such a new idea. In many universities, students' and staff councils used to have a purely advisory rôle. Not until 1968 in many countries did we see—with some dismay—the unrestrained, impulsive advance, the 'contesta-

tion ' of youth which unleased the crisis that Michel de Certeau has called ' la Prise de Parole '. The concept of ' participation ' appeared, and gave a new dimension to the concepts of sharing and of responsibility. The delegates of both teachers and students today have not only an advisory rôle to play, but also—indeed, supremely—an active rôle.

It was unanimously agreed that education should not stop at the end of the school course, nor indeed at the end of a university career. It was also agreed that the concept of life-long education is by no means being overlooked, but that all educational authorities are aware of it and its power to forestall the serious consequences which, in the future, might affect school and university education. The connexion between school or university education and the working world can no longer be disregarded.

Content

Quantitative and qualitative structural changes in the content of syllabuses were essential, particularly as both teachers and pupils are aware that the syllabuses are not adapted to the development of science, technology and culture.

The Conference considered that the greatest emphasis should be laid on the principle that the content of education should be constantly questioned and thoroughly examined so as to produce true reform. Next, any reform must begin from the basis of an understanding and formulation of the aims of education. Lastly, if education was seen as a process of acquiring knowledge, syllabuses would be very different from those evolved if it was regarded as a process of forming or even transforming the personality.

The discussion went on to deal with the criteria to be used in drawing up syllabuses and improving their content. These criteria, in order of priority, were: the child's needs; his intellectual, emotional and physical development; national or local conditions; and the rationalization of the choice of subjects.

A third stage in the discussion was reached when some delegates raised the question of the amount of knowledge an educated person should possess, which traditional subjects should be

dropped from the syllabus and which new subjects, especially scientific and technical ones, should be introduced. Some countries might be certain that their society will not go through any profound change and in such countries economists, sociologists and statisticians could assess future needs and plan education accordingly. Other countries, however, were unable to foresee exactly how their society would evolve, or even whether its foundations would be questioned. This meant that education could not be adapted as readily as was desirable. One of the delegates, in fact, thought that was why education had become one of the major issues in politics and why politics in turn had entered education at all levels. Some countries faced a different dilemma: should the acquisition of knowledge give the individual that extra effectiveness which would enable him to take his place in the world of production, or should it procure greater happiness for the individual? As one delegate rightly pointed out, the question was of the utmost importance, particularly as those who advocated individual happiness could not be accused of 'frivolity'. It was not the presence of the protest movements that made it all so difficult. The notion of happiness was very important in eighteenth-century philosophy, which in its turn had been the leaven of the great ideas behind the 1789 Revolution.

Thus, in order to achieve a balance, it seemed necessary to opt for a general basic education and to adjust its content as modern knowledge developed. Such education was receptive to information of all kinds, whether scientific, economic or social—information for educational purposes and for use as an instrument in training. The twofold function of information would enable syllabuses to be constantly reviewed and to evolve in the direction of multidisciplinarity. It was noted that the compartmentalization of subjects and the rigid traditional attitude towards subjects on the syllabus meant that the individual was imprisoned within the knowledge he acquired.

For that reason, alongside the universally compulsory subjects, there was a fairly clear trend towards the introduction of optional subjects chosen by the pupil or student in accordance with his intellectual aptitudes. Thus, the content of knowledge and the

process of acquiring it should give him an opportunity not merely to receive information passively but to select what he learns and assess its value; not to receive a training for a specific job shown in the tables worked out by some anonymous planner, but to be given a training which would enable him to choose his occupation and possibly change it in the future. The whole process made it necessary to eliminate the over-taxing of pupils, which was a serious fault in education today.

The twofold dilemma mentioned above and the at least apparent contradiction between happiness and efficiency are both resolved and illustrated by Edgar Faure's words: 'Active understanding itself, the assimilation of knowledge elaborated by others—all this contains an element of creativity. What it is most important to bear in mind is that the combination of the rational and the irrational is both productive and pleasant—that is, satisfying for the individual; it is the assertion of the personality in all its complexity—memory and imagination, theory and technology, efficiency and morality, reason and feeling.'

At what level of responsibility should syllabuses be drawn up? Here three tendencies could be distinguished. The first, a centralizing tendency, was to lay down one set of syllabuses for a whole country, with the twofold advantage that teachers would find it much easier to co-operate in organizing their teaching and research work and furthermore, that pupils' certificates would be of comparable value and could very easily transfer from one school or area to another. The Conference's attention was drawn to the existence of cultural, racial and religious minorities having their own values, which should be respected when drawing up nation-wide syllabuses. The second tendency is clearly a decentralizing one. Both the elaboration of the syllabus and the choice of the methods are the exclusive responsibility of the headmaster. The third tendency is towards functional decentralization. A regional or local authority is responsible for the implementation of the general principles applying to syllabuses, those principles being worked out at a national level.

Once the syllabus and learning process have been determined, the next question is that of testing. Participants did not lose sight

of this problem. It was agreed that testing was necessary. Yet the present system of examinations had an unfortunate effect, to a greater or lesser degree, on both pupils and the content of syllabuses. Some delegates pointed out that the pupil considered himself a victim of the present system and that he must be freed from his feeling of failure. His knowledge should be assessed so as to show not what he cannot do, but what he can do. A better assessment of pupils' knowledge should be accompanied by a corresponding improvement in the evaluation of the school as an intrument of education.

Teachers

The Conference adopted the view that the successful implementation of all educational reforms depends to a large extent ultimately on the teachers. Thus it was repeatedly pointed out that curriculum changes, and indeed the general advance of knowledge, make it imperative to give teachers and educational personnel life-long education. The importance of in-service training being accepted, several delegations outlined the types of institutions that had been set up for the purpose. Such further training was obligatory in some countries; and others applied the principle of granting recognition, or at least incentives, for in-service training.

Discussion of the preparation of teachers revealed a number of problems: a shortage of national teachers in many developing countries, accompanied by measures to expand (or in one case to improve by consolidation) the teacher training colleges both quantitatively and qualitatively. The growth of these establishments has created in turn the problem of finding adequate teacher educators; while certain emergency or ad hoc arrangements have been made for training teacher educators, including the establishment of special institutes and the participation of administrative staff in teaching.

Shortages occur in other areas as well. Several delegations pointed to the difficulty of staffing rural schools; even in cases where the supply of urban teachers was more than adequate.

Discussion of this problem showed that it had been solved elsewhere by official policies which gave assistance (housing, electricity, extra leave or pay or other advantages) to rural teachers—or by adequate social motivation.

The shortage of teachers in subject areas like mathematics or science might be overcome by offering incentives, the better to compete with other employment possibilities.

Educational research

The Conference dealt with educational research towards the end of its debate. In the context of a changing educational scene, delegates tended to draw a distinction between fundamental and applied research, and draw attention especially to the need for much more practical research which could be of use to the teacher in a school. A similar, but broader view was that research could give evidence on ways to improve education, and in at least one country important policy reform had been prepared by research work. Educational research, instead of remaining on the purely academic plane, should become more functional. In this respect, the university as a centre of reflection, should be at the service of education.

Since experimentation and studies of this nature were concerned with educational development, one delegate regarded them as part of the organization of the innovative process, rather than as research. A suitable development policy would enable schools to take part in the creative process of educational change.

The diffusion of information about research was touched on, and the Conference noted the importance of communication and of the rapid and systematic dissemination of the most original research results and of bibliographical information.

Technology of education

No full discussion was possible of this important aspect. Several delegations drew attention to the use of radio and television as well as of certain electronic devices in teaching and learning.

The widespread application of these aids in schools, experimental work on 'integrated instructional systems' where a variety of devices are used together, and the creation of a complete university based on broadcasting and television, these are some of the signs that educational systems and particularly the training of teachers and administrators are beginning to include initiation in the use of technological innovations.

Appendix

Table 1. TOTAL ENROLMENT BY LEVEL OF EDUCATION : FOR 1960/61 AND 1967/68

Average annual increase per cent 1960/61-1967/68 is shown in italics.

Major region		Number of pupils enrolled (in thousands)			
		Total	First level (including pre-primary)	Second level (general, vocational and teacher training)	Third level
World total [1]	1960/61	347 029	271 928	63 927	11 174
	1967/68	479 619	356 813	101 268	21 538
		4.7	*4.0*	*6.8*	*9.8*
Africa	1960/61	21 377	19 070	2 115	192
	1967/68	32 951	28 220	4 373	358
		6.4	*5.8*	*10.9*	*9.3*
Northern America	1960/61	50 954	36 072	11 157	3 725
	1967/68	63 464	36 555	19 547	7 362
		3.2	*0.2*	*8.3*	*10.2*
Latin America	1960/61	32 386	27 934	3 885	567
	1967/68	49 101	39 631	8 365	1 105
		6.1	*5.1*	*11.6*	*10.0*
Asia [1]	1960/61	120 583	97 128	21 325	2 131
	1967/68	178 688	141 374	32 724	4 590
		5.8	*5.5*	*6.3*	*11.6*
Europe & U.S.S.R.	1960/61	118 362	89 260	24 644	4 457
	1967/68	151 078	108 153	35 018	7 907
		3.6	*2.8*	*5.2*	*8.5*
Oceania	1960/61	3 367	2 464	801	102
	1967/68	4 337	2 880	1 241	216
		3.7	*2.3*	*6.5*	*11.3*
(Arab States)	1960/61	(8 745)	(7 337)	(1 248)	(160)
	1967/68	(13 955)	(10 915)	(2 734)	(306)
		(6.9)	*(5.8)*	*(11.9)*	*(9.7)*

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 2. FEMALE ENROLMENT BY LEVEL OF EDUCATION : FOR 1960/61 AND 1967/68

Average annual increase per cent 1960/61-1967/68 is shown in italics.

Major region		Number of girls enrolled (in thousands)			
		Total	First level (not including pre-primary)	Second level (general, vocational and teacher training)	Third level
World total [1]	1960/61	140 200	108 871	27 558	3 772
	1967/68	192 739	140 744	43 984	8 011
		4.7	*3.7*	*6.9*	*11.4*
Africa	1960/61	7 630	6 935	657	39
	1967/68	12 481	11 007	1 390	84
		7.3	*6.8*	*11.4*	*11.6*
Northern America	1960/61	23 446	16 423	5 656	1 368
	1967/68	28 867	16 193	9 721	2 953
		3.0	*—0.2*	*8.0*	*10.9*
Latin America	1960/61	15 154	13 157	1 817	180
	1967/68	23 002	18 635	4 006	361
		6.1	*5.1*	*12.0*	*10.5*
Asia [1]	1960/61	40 908	32 974	7 437	497
	1967/68	61 939	49 177	11 473	1 289
		6.1	*5.9*	*6.4*	*14.6*
Europe & U.S.S.R.	1960/61	51 549	38 232	11 657	1 659
	1967/68	64 564	44 416	16 886	3 262
		3.2	*2.2*	*5.4*	*10.1*
Oceania	1960/61	1 513	1 150	334	29
	1967/68	1 886	1 316	508	62
		3.2	*0.9*	*6.2*	*10.7*
(Arab States)	1960/61	(2 765)	(2 423)	(313)	(30)
	1967/68	(4 661)	(3 824)	(770)	(67)
		(7.7)	*(6.7)*	*(13.7)*	*(12.2)*

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 3. PERCENTAGE OF GIRLS, BY LEVEL, IN TOTAL ENROLMENT: FOR 1960/61 AND 1967/68

Major region		Total	First level (not including pre-primary)	Second level (general, vocational and teacher training)	Third level
World total [1]	1960/61	43	44	43	34
	1967/68	43	44	43	37
Africa	1960/61	36	37	31	20
	1967/68	38	39	32	23
Northern America	1960/61	48	49	51	37
	1967/68	48	49	50	40
Latin America	1960/61	48	49	47	32
	1967/68	48	49	48	33
Asia [1]	1960/61	37	38	35	23
	1967/68	38	39	35	28
Europe & U.S.S.R.	1960/61	48	48	47	37
	1967/68	47	49	47	41
Oceania	1960/61	46	48	42	28
	1967/68	45	47	41	29
(Arab States)	1960/61	(32)	(34)	(25)	(18)
	1967/68	(34)	(36)	(28)	(22)

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 4. PERCENTAGE DISTRIBUTION OF THE ESTIMATED TOTAL ENROLMENT BY LEVEL OF EDUCATION : FOR 1960/61 AND 1967/68

Major region		Distribution of the pupils enrolled			
		Total	First level (including pre-primary)	Second level (general, vocational and teacher training)	Third level
World total [1]	1960/61	100	78.4	18.4	3.2
	1967/68	100	74.4	21.1	4.5
Africa	1960/61	100	89.2	9.9	0.9
	1967/68	100	85.6	13.3	1.1
Northern America	1960/61	100	70.8	21.9	7.3
	1967/68	100	57.6	30.8	11.6
Latin America	1960/61	100	86.3	12.0	1.7
	1967/68	100	80.7	17.0	2.3
Asia [1]	1960/61	100	80.5	17.7	1.8
	1967/68	100	79.1	18.3	2.6
Europe & U.S.S.R.	1960/61	100	75.4	20.8	3.8
	1967/68	100	71.6	23.2	5.2
Oceania	1960/61	100	73.2	23.8	3.0
	1967/68	100	66.4	28.6	5.0
(Arab States)	1960/61	(100)	(83.9)	(14.3)	(1.8)
	1967/68	(100)	(78.2)	(19.6)	(2.2)

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 5. SCHOOL ENROLMENT BY LEVEL OF EDUCATION AS PERCENTAGE OF POPULATION : FOR 1960/61 AND 1967/68

Major region	1960/61				1967/68			
	Children of primary school age attending school at any level	Children of secondary school age attending school at any level	Children of primary and secondary school age (combined) attending school at any level	Third level enrolment per 100,000 inhabitants	Children of primary school age attending school at any level	Children of secondary school age attending school at any level	Children of primary and secondary school age (combined) attending school at any level	Third level enrolment per 100,000 inhabitants
	%	%	%		%	%	%	
World total [1]	63	34	50	480	68	40	56	772
Africa	34	12	24	70	40	15	28	110
Northern America	98	90	94	1 875	98	92	96	3 356
Latin America	60	26	45	267	75	35	55	425
Asia [1]	50	22	36	216	55	30	45	395
Europe & U.S.S.R.	96	57	79	697	97	65	85	1 148
Oceania	95	28	66	650	95	30	67	1 191
(Arab States)	(38)	(16)	(28)	(170)	(50)	(25)	(38)	(270)

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 6. NUMBER OF TEACHERS BY LEVEL OF EDUCATION : FOR 1960/61 AND 1967/68

Average annual increase per cent 1960/61 - 1967/68 is shown in italics.

Major region		Number of teachers (in thousands)			
		Total	First level (not including pre-primary)	Second level (general, vocational and teacher training)	Third level
World total [1]	1960/61	12 598	8 176	3 527	894
	1967/68	17 455	10 403	5 503	1 548
		4.7	*3.5*	*6.6*	*8.1*
Africa	1960/61	598	480	106	12
	1967/68	925	700	197	28
		6.4	*5.5*	*9.3*	*12.9*
Northern America	1960/61	1 932	990	623	319
	1967/68	2 794	1 254	1 010	530
		5.4	*3.4*	*7.2*	*7.5*
Latin America	1960/61	1 175	782	330	62
	1967/68	1 920	1 185	601	134
		7.3	*6.2*	*8.9*	*11.7*
Asia [1]	1960/61	4 007	2 868	975	164
	1967/68	5 469	3 562	1 580	327
		4.5	*3.1*	*7.1*	*10.4*
Europe & U.S.S.R.	1960/61	4 754	2 978	1 447	328
	1967/68	6 163	3 603	2 047	513
		3.8	*2.8*	*5.1*	*6.6*
Oceania	1960/61	133	78	46	9
	1967/68	184	99	69	16
		4.8	*3.5*	*6.0*	*8.6*
(Arab States)	1960/61	(269)	(191)	(70)	(8)
	1967/68	(453)	(303)	(135)	(15)
		(7.8)	*(6.8)*	*(9.8)*	*(9.4)*

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 7. PERCENTAGE DISTRIBUTION OF THE NUMBER OF TEACHERS BY LEVEL OF EDUCATION : FOR 1960/61 AND 1967/68

Major region		Distribution of teachers			
		Total	First level (not including pre-primary)	Second level (general, vocational and teacher training)	Third level
World total [1]	1960/61	100	64.9	28.0	7.1
	1967/68	100	59.6	31.5	8.9
Africa	1960/61	100	80.3	17.7	2.0
	1967/68	100	75.7	21.3	3.0
Northern America	1960/61	100	51.3	32.2	16.5
	1967/68	100	44.9	36.1	19.0
Latin America	1960/61	100	66.6	28.1	5.3
	1967/68	100	61.7	31.3	7.0
Asia [1]	1960/61	100	71.6	24.3	4.1
	1967/68	100	65.1	28.9	6.0
Europe U.S.S.R.	1960/61	100	62.7	30.4	6.9
	1967/68	100	58.5	33.2	8.3
Oceania	1960/61	100	58.6	34.6	6.8
	1967/68	100	53.8	37.5	8.7
(Arab States)	1960/61	(100)	(71.0)	(26.0)	(3.0)
	1967/68	(100)	(66.9)	(29.8)	(3.3)

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 8. ADULT LITERACY (BOTH SEXES): AROUND 1960 AND 1970

(in thousands)

Major region	Around 1960			Illiteracy percentage	Around 1970			Illiteracy percentage
	Adult population 15 years old and over	Literate adults	Illiterate adults		Adult population 15 years old and over	Literate adults	Illiterate adults	
World total [1]	1 870 000	1 134 000	735 000	39.3	2 287 000	1 504 000	783 000	34.2
Africa	153 000	29 000	124 000	81.0	194 000	51 100	143 000	73.7
Northern America	137 000	133 000	3 300	2.4	161 000	158 000	2 500	1.5
Latin America	123 000	83 100	40 000	32.5	163 000	125 000	38 600	23.6
Asia [1]	982 000	440 000	542 000	55.2	1 237 000	658 000	579 000	46.8
Europe & U.S.S.R.	464 000	439 000	24 500	5.3	521 000	502 000	18 700	3.6
Oceania	10 600	9 400	1 200	11.5	13 000	11 800	1 400	10.3
(Arab States)	(52 700)	(9 900)	(42 700)	(81.1)	(68 300)	(18 400)	(49 900)	(73.0)

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 9. ADULT LITERACY (MALES ONLY): AROUND 1960 AND 1970

(in thousands)

Major region	Around 1960			Illiteracy percentage	Around 1970			Illiteracy percentage
	Adult population 15 years old and over	Literate adults	Illiterate adults		Adult population 15 years old and over	Literate adults	Illiterate adults	
World total [1]	916 000	609 000	307 000	33.5	1 127 000	812 000	315 000	28.0
Africa	75 900	20 200	55 800	73.4	96 000	35 100	60 900	63.4
Northern America	66 800	65 600	1 300	1.9	78 000	77 200	850	1.1
Latin America	61 300	44 000	17 400	28.4	81 000	64 900	16 100	19.9
Asia [1]	494 000	270 000	224 000	45.3	624 000	393 000	231 000	37.0
Europe & U.S.S.R.	213 000	205 000	7 700	3.6	243 000	327 000	5 800	2.4
Oceania	5 300	4 800	530	9.9	6 600	6 000	580	8.8
(Arab States)	(26 500)	(7 500)	(19 000)	(71.6)	(34 300)	(13 600)	(20 800)	(60.5)

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 10. ADULT LITERACY (FEMALES ONLY): AROUND 1960 AND 1970

(in thousands)

Major region	Around 1960			Illiteracy percentage	Around 1970			Illiteracy percentage
	Adult population 15 years old and over	Literate adults	Illiterate adults		Adult population 15 years old and over	Literate adults	Illiterate adults	
World total [1]	953 000	525 000	428 000	44.9	1 160 000	692 000	468 000	40.3
Africa	77 000	8 800	68 200	88.5	97 900	16 000	82 000	83.7
Northern America	69 700	67 700	2 000	2.8	82 800	81 200	1 600	1.9
Latin America	61 800	39 200	22 600	36.6	82 200	59 700	22 500	27.3
Asia [1]	488 000	170 000	318 000	65.1	614 000	266 000	348 000	56.7
Europe & U.S.S.R.	251 000	234 000	16 800	6.7	278 000	265 000	12 900	4.7
Oceania	5 200	4 500	680	13.0	6 500	5 800	780	11.9
(Arab States)	(26 200)	(2 400)	(23 800)	(90.7)	(33 900)	(4 800)	(29 100)	(85.7)

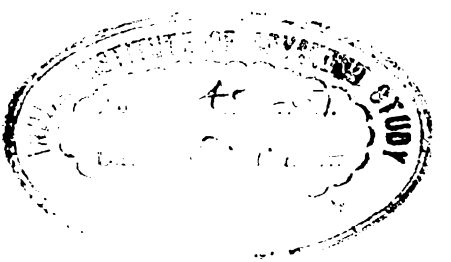
1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.

Table 11. PUBLIC EXPENDITURE ON EDUCATION : FOR 1960 AND 1967

(millions U.S. dollars)

Major region	1960	1967
World total [1]	63 260	135 900
Africa	1 110	2 170
Northern America	22 670	49 940
Latin America	1 650	3 360
Asia [1]	3 710	9 470
Europe & U.S.S.R.	33 520	69 560
Oceania	600	1 400
(Arab States)	(700)	(1 210)

1. Not including China (mainland), Democratic People's Republic of Korea and Democratic Republic of Viet-Nam.



$1.50; 45 pence; F.F. 6