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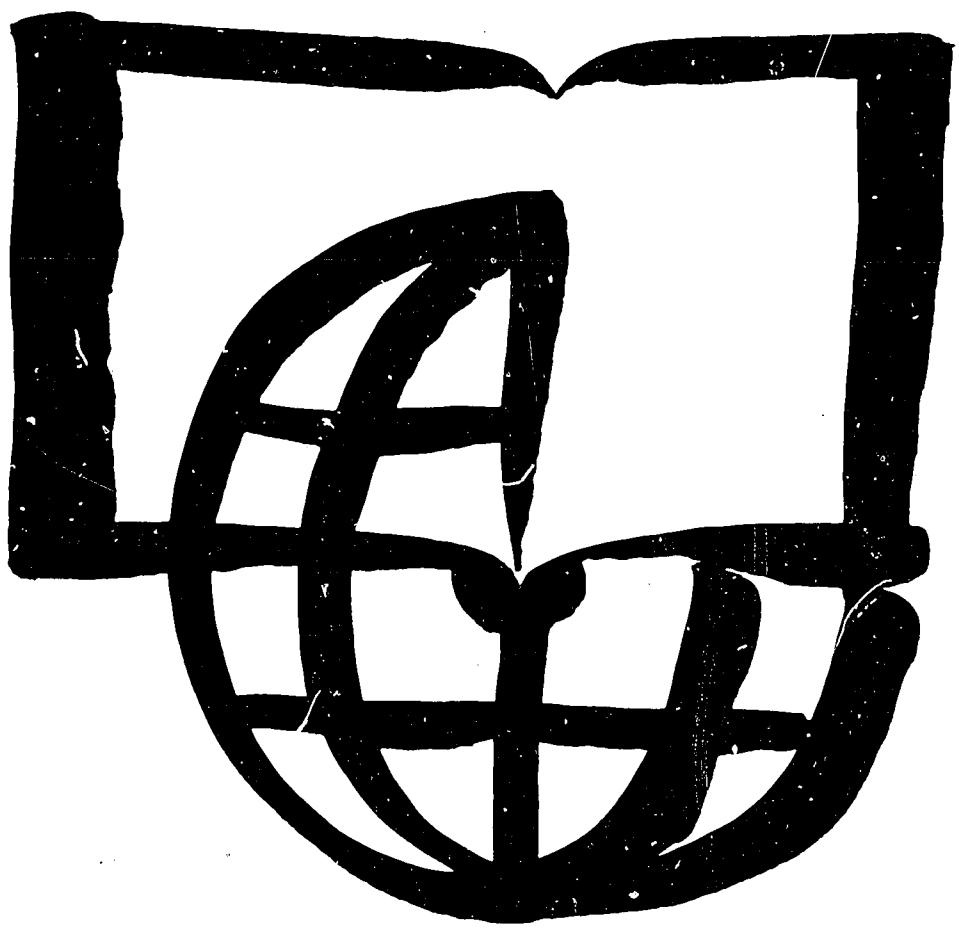
ABSTRACT

The purpose of this publication is to bring up to date the statistical analysis of illiteracy in the world, to study some general patterns and trends, to record new developments in methods and techniques, and to show correlations between national programs and the Experimental World Literacy Programme. No attempt has been made to give detailed accounts of all the literacy activities reported to the Secretariat by the Member States. The information given is based on replies to a questionnaire sent to Member States and Associate Members on UNESCO and to selected international nongovernment organizations. Ninety three of the Member States and nine of the organizations replied. Topics discussed include; the world literacy situation; world opinion and the crisis of mass illiteracy; survey of literacy programs; international collaboration; mobilization of resources by governments and people; techniques and tactics in literacy; and research and evaluation. The appendixes contain data on illiterate population and the percentage of illiteracy, illiteracy percentages by age and sex, and laws and decrees that have been adopted since 1967 concerning literacy. (PT)

literacy 1967-1969

Progress achieved in literacy throughout the world



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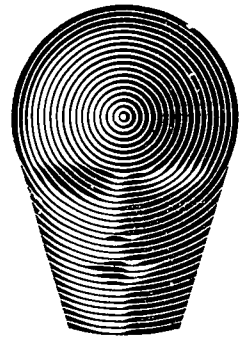

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Preface

The purpose of this publication, which is a sequel to *Literacy 1965-1967*, is to bring up to date the statistical analysis of illiteracy in the world, to study certain general patterns and trends, to record new developments in methods and techniques and to show correlations between national programmes and the Experimental World Literacy Programme. No attempt has been made to give detailed accounts of all the literacy activities reported to the Secretariat by Member States.

The information given here is based on replies to a questionnaire sent in February 1969 to the 128 Member States and Associate Members of Unesco and to selected international non-governmental organizations, of which 93 and 9 respectively replied by the date limit of mid-July 1969. It has not been possible to incorporate replies received after that date. The period covered is, therefore, mid-1967 to mid-1969. Information has in some cases been supplemented from reports received from governments or from Unesco experts who have assisted them in carrying out literacy activities.

The Member States, Associate Members and international non-governmental organizations which replied to the questionnaire are listed below. The Member States marked with an asterisk (*) indicated that illiteracy was no longer a major problem except in some limited groups or areas.

MEMBER STATES

Afghanistan
Argentina
*Australia
*Austria
Barbados
*Belgium
Bolivia
Brazil
*Bulgaria
Burma
Burundi
*Byelorussian Soviet Socialist Republic
Cameroon
*Canada
Central African Republic
Ceylon
Chad
Chile
China
Republic of the Congo
Democratic Republic of the Congo
*Cuba
*Cyprus
*Czechoslovakia

*Denmark
Dominican Republic
Ecuador
El Salvador
Ethiopia
*Finland
*France
Gabon
*Federal Republic of Germany
Ghana
Greece
Guatemala
Guinea
Guyana
*Hungary
Indonesia
Iran
Iraq
*Ireland
Israel
*Italy
Jamaica
*Japan
Jordan
Kenya
Republic of Korea
Kuwait
Laos
Lebanon
*Lesotho
Liberia
Libya
*Luxembourg
Malaysia
Mali
Malta
Morocco
Nepal
*Netherlands
*New Zealand
Niger
Nigeria
Pakistan
Paraguay
Philippines
*Poland
*Romania
Saudi Arabia
Singapore
Spain
*Sweden
*Switzerland
Syria
Tanzania
Thailand
Togo
Tunisia
Turkey
Uganda
*Ukrainian Soviet Socialist Republic
United Arab Republic
*United Kingdom of Great Britain and Northern Ireland
*United States of America
Venezuela
Republic of Viet-Nam
*Yugoslavia
Zambia

ASSOCIATE MEMBERS

Bahrain
British Eastern Caribbean Group

NON-GOVERNMENTAL ORGANIZATIONS

The Associated Country Women of the World
International Council of Women
Women's International Democratic Federation
World Assembly of Youth
World Association of Girl Guides and Girl Scouts
World Confederation of Organizations of the Teaching Profession, Washington
World Federation of Teachers' Union
World Federation of Trade Unions
World Young Women's Christian Association

Contents

The world literacy situation

In 1957 Unesco published an estimate of the extent of illiteracy in every country and territory of the world.[1] This study, based on national census figures, revealed that around 1950 at least two out of every five adults—at least 700 million people of 15 years and over—were unable to read and write, and that in ninety-seven countries in Africa, Asia and Central and South America more than half of the adult population was illiterate.

LATEST ESTIMATES

Between 1950 and 1960, as new census returns were analysed, it became clear that although the percentage of illiteracy had fallen, the total number of illiterate adults was inexorably rising. By 1960, it had reached an estimated total of 740 million. Table 1 summarizes the situation.

The map on pages 12-13 shows how the problem of illiteracy is distributed with varying intensity and gravity in the world.[2]

The picture of adult illiteracy so far outlined has been based on national census returns or sample surveys. A national census is a vast and costly operation and is generally undertaken at intervals of ten years, usually at

TABLE 1. World adult population and literacy, 1950-60

Adult population (15 +)	Total (millions)	Literates (millions)	Illiterates (millions)	Illiteracy rate (%)
Estimated for 1950	1 579	879	700	44.3
Estimated for 1960	1 881	1 141	740	39.3

1. *World Illiteracy at Mid-Century. A Statistical Study*. Paris, Unesco, 1957. (Monographs on Fundamental Education, 11.)
2. The situation is given in greater detail in the following sources: *Unesco Statistical Yearbook. 1965*, Tables 4, 5, and 6, Paris, Unesco, 1966; *Unesco Statistical Yearbook. 1967*, Tables 1.3, 1.4, 1.5 and 1.6, Paris, Unesco, 1968; *United Nations Demographic Yearbook, 1963* and *1964*, New York, United Nations; *World Congress of Ministers of Education for the Eradication of Illiteracy, Teheran 1965*, Paris, Unesco, 1966.

7/8/9

the beginning of each decade. The only way to bring the picture of illiteracy up to date, therefore, is to make assumptions and estimates based on present trends.

Table 2 shows three such estimates of what the state of adult literacy may be in 1970: the first assumes that illiteracy continues to diminish at the present rate; the second that the rate of reduction is increased by half; and the third that the rate of reduction is doubled.

These figures indicate that the total number of adult illiterates in the world in 1970 could range from 710 million on the most favourable estimate to 810 million, if the present trends continue. Although the least favourable estimate represents an increase of 70 million between 1960 and 1970, this corresponds to a reduction of 4.5 per cent in world illiteracy over the same period. The problem is that the increase in population in the developing countries has been greater than the increase in literacy. Thus while the percentage of illiteracy continues to fall in all countries, in many parts of the world the net effect is only a slowing down of the increase in the number of illiterates. The situation is particularly critical in Africa and Asia. According to the estimates of future trends made by the United Nations, the population in Africa is likely to increase by 65 per cent and that in Asia by 60 per cent between 1960 and 1980.

CHANGES IN THE NUMBER OF ILLITERATES RELATED TO PERCENTAGES OF ILLITERACY

Literacy data based on the results of national population censuses made since 1960 have recently been published by twenty-seven countries and territories. The figures relating to population and literacy in nineteen countries are set out in Appendix A. These countries or territories give data on literacy which enable a comparison to be made between the most recent census and the preceding one, and in Table 3 these nineteen are listed according to their percentages of illiteracy around 1950; ten reduced the number of illiterates between the two censuses,[1] whilst in the other nine the number of illiterates increased.[2]

It appears that in the countries with high illiteracy rates the number of illiterates increased, whilst in countries with low illiteracy rates, it decreased. In fact, the top six countries, with a rate of 70 per cent or over, show an increase in the number of illiterates, and the bottom seven, with a rate of 35 per cent or less, show a decrease.

1. Bulgaria, Ceylon, Dominican Republic, France (Guadeloupe and dependencies, Martinique, and Réunion), Hungary, Turkey, Western Samoa, United Kingdom (St. Helena and dependencies).
2. Algeria, Bahrain, Brazil, Colombia, Guatemala, Iran, Lesotho, Libya, Nepal.

TABLE 2. World adult population and literacy estimates for 1960

Rate of reduction (1950-60)	Adult population (15+) in millions			Illiteracy rate (%)
	Total	Literates	Illiterates	
Rate maintained	2 335	1 525	810	34.8
Rate increased by half	2 335	1 575	760	32.6
Rate doubled	2 335	1 625	710	30.5

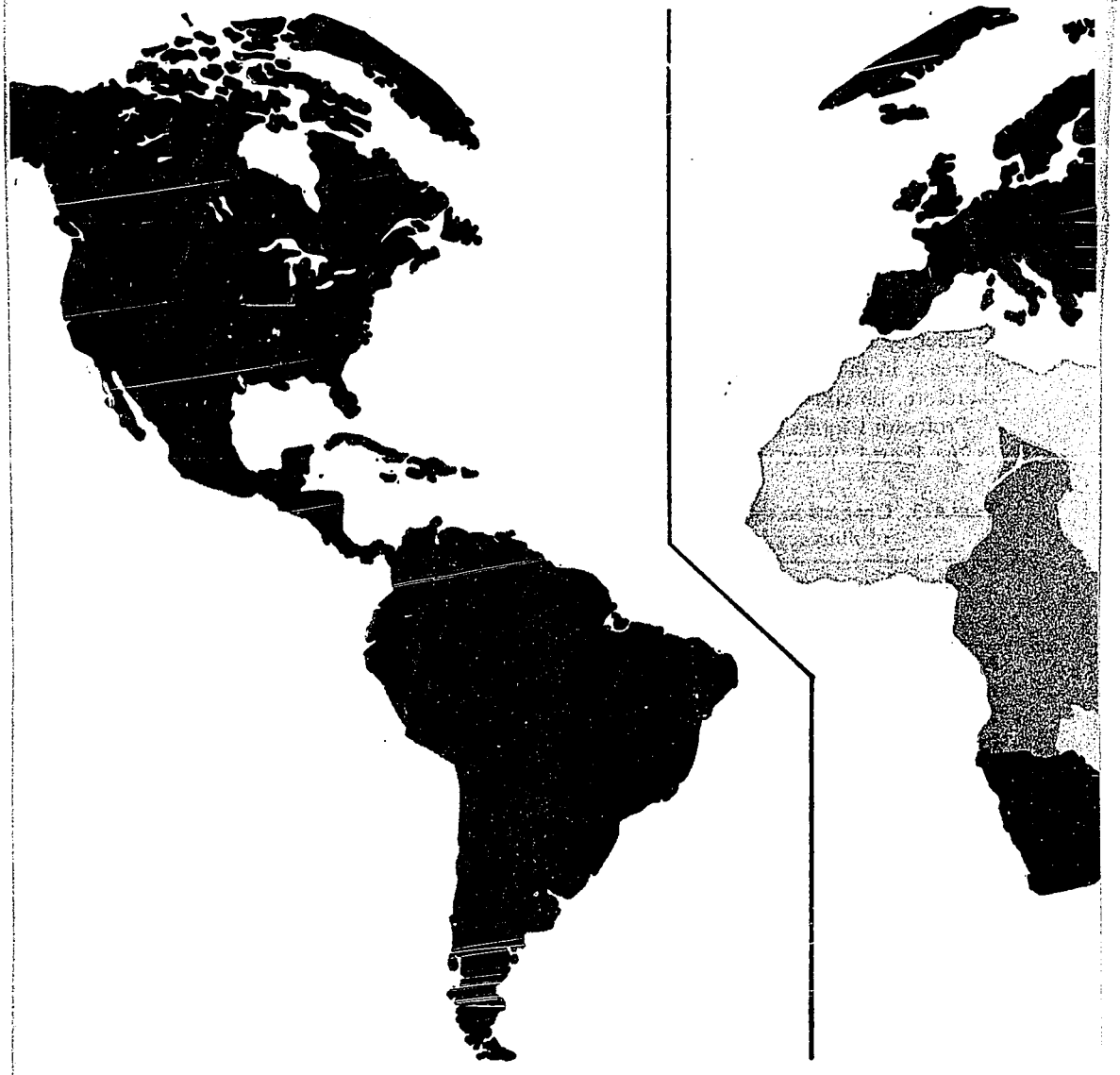
Thus illiteracy rates of 70 per cent and 35 per cent might be regarded as two critical points in the progress of literacy. If the illiteracy rate in a country is about 70 per cent or over one cannot generally expect a decrease in the number of illiterates; but once the rate drops below the 35 per cent level a decrease in the number can be expected. A 35 per cent illiteracy rate might therefore, be considered as a target figure in the battle against illiteracy.

Professor Cipolla bears this out in his new book, *Literacy and Development in the West.*[1] 'When, in about 1750, England started on the road to indus-

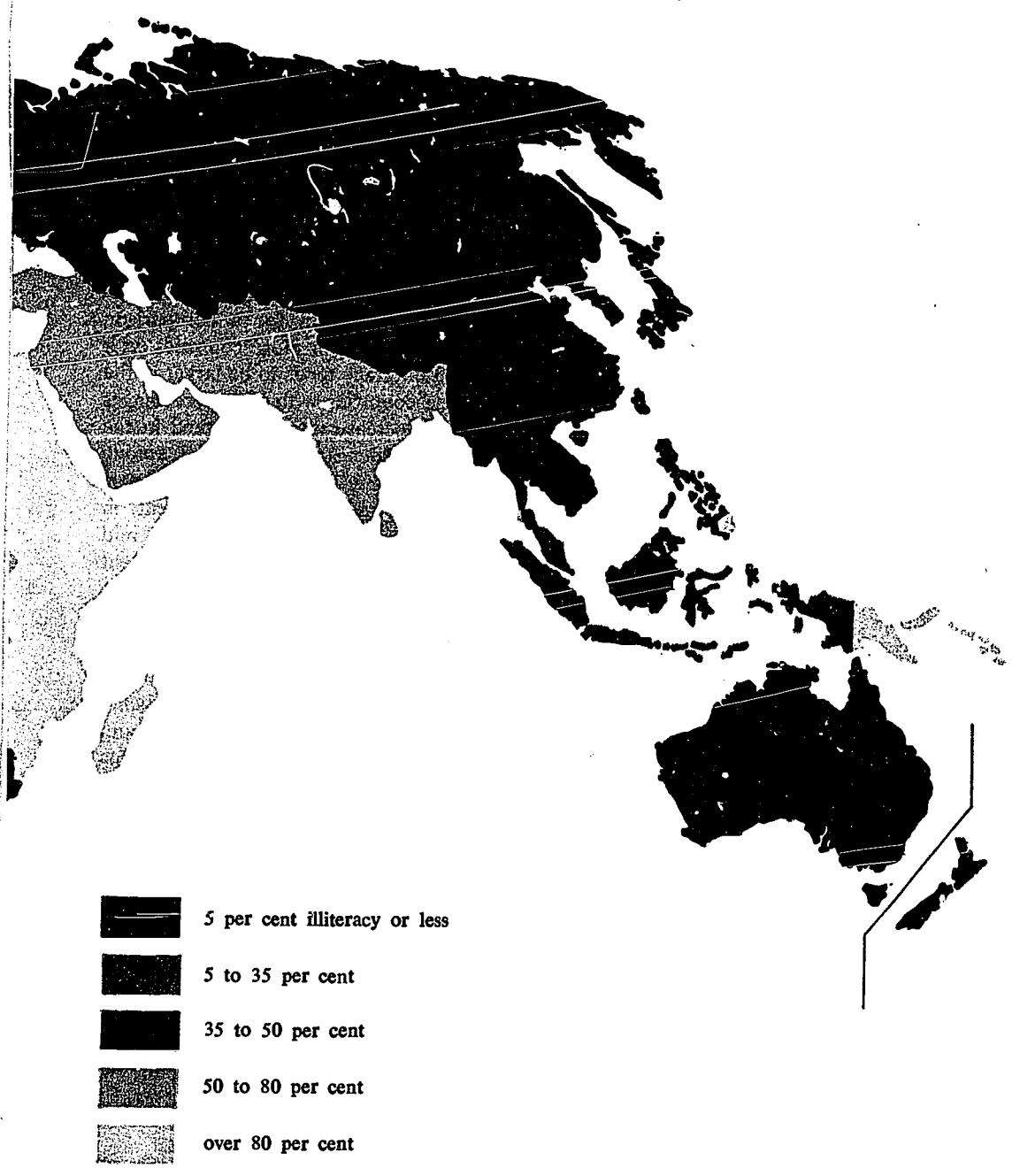
TABLE 3. Changes in the number of illiterates compared with percentages of illiteracy in nineteen countries or territories

Country or territory	Percentage of illiteracy *c.* 1950	Increase/decrease in adult (15+) illiteracy since *c.* 1950
Nepal	94.9	+
Algeria	92.3	+
Iran	87.2	+
Libya	87.1	+
Bahrain	74.7	+
Guatemala	70.6	+
Turkey	61.9	—
Réunion (France)	60.6	—
Dominican Republic	57.1	—
Brazil	50.6	+
Lesotho	41.4	+
Colombia	37.7	+
Guadeloupe and dependencies (France)	34.8	—
Ceylon	32.3	—
Martinique (France)	26.1	—
Bulgaria	14.7	—
Western Samoa	14.4	—
St. Helena and dependencies (United Kingdom)	4.5	—
Hungary	3.2	—

1. Carlo M. Cipolla, *Literacy and Development in the West,* Harmondsworth, Middlesex, Penguin Books, 1969.



World map of illiteracy


5 per cent illiteracy or less
5 to 35 per cent
35 to 50 per cent
50 to 80 per cent
over 80 per cent

trialization, those who could neither read nor write totalled 30 to 35 per cent of the adult population. This meant that there was a reserve of literacy larger than in most of the developing countries in modern times.' He goes on to remark that 'the Industrial Revolution was not the product of one or two high priests of science: it was the outcome of the daily down-to-earth experiment and tinkering on the part of the literate craftsmen and amateur scientists'.

ILLITERACY BY AGE AND SEX

Appendix B sets out the percentage of illiteracy by age and sex for five selected countries which have provided the necessary data for a comparison between previous and recent censuses.[1] It shows that in those countries with low percentages of illiteracy, the decrease in illiteracy tends to be larger in the older age groups and among women. In the countries with high percentages of illiteracy, on the other hand, the rate of decrease is most marked in the youngest male age groups, and least in the older age groups and among women. In Libya, for example, between 1954 and 1964, the illiteracy percentage for males in the age group 15-24 was reduced by 32 per cent; in the same period, however, the gaps between illiteracy among males and females in the population as a whole increased from 22 per cent (77 per cent for males and 99 per cent for females) to 33 per cent (63 per cent for males and 96 per cent for females).

It would seem, therefore, that in countries which have largely reduced their illiteracy rates and established universal primary education, there remains only a residue of older illiterates, especially older women, which is now being reduced. However, in countries which have more recently begun to expand their education systems, it is mainly the younger age groups that have benefited. The difference between sexes is apparent in almost all countries with high illiteracy rates and raises serious issues in regard to the status of women and their access to education.

Detailed study of the census results, wherever separate data are available, also shows a marked difference between urban and rural areas; rural illiteracy rates are always higher.

TWO WAYS OF ESTIMATING ILLITERACY

The picture revealed so far is that given by census results and by estimates or projections based on them. It is possible, however, to view it from another angle, by regarding literacy as a product of educational attainment.

1. Algeria, Bulgaria, Colombia, Iran and Libya.

Before considering the results, it may be as well to examine the two ways of obtaining the data which are to be compared. The first of these, the national population census, is carried out by trained enumerators, who are expected to visit and question every household or family in the country or, where this proves impossible or too expensive, to visit a representative sample of families. In remote rural areas, the enumerator may be unable to do more than assemble the people of each village and put questions to the village leaders. In some communities, especially in isolated areas where the rate of illiteracy is often highest, people frequently resent being questioned by strangers and may prevaricate or deliberately deceive the questioner. Sometimes an illiterate person may not fully understand the questions, for 'literacy' is a relative term and the enumerator should know, and explain to each person, what he means by it. A definition prepared by Unesco for the United Nations has now been adopted by all countries for national census purposes.[1] It defines as literate a person 'who can, with understanding, both read and write a short simple statement on his everyday life'. It is normally assumed that he may do this in any language he chooses, but in some countries people are not counted as literate if they are only able to read and write in so-called 'vernacular' languages which are spoken by minority groups of the population. Even if the standard definition is explained, there remain such questions as: what is a 'simple statement', and how is 'understanding' to be determined? Further, reasons of social prestige may prevent a person from admitting illiteracy. Ideally, the enumerator should administer a test to determine whether each person reaches the required standard of literacy. This, however, is seldom possible, and it is more likely that he will simply ask the head of the family how many people in his household are able to read and write. So the census figures on which this picture of world illiteracy has been built are probably over-optimistic.

The second way of looking at the situation is to regard literacy as a result of educational attainment. Educational research suggests that a minimum of four years primary schooling is needed to make a person permanently literate. If, therefore, the number of people who have completed four years of primary schooling can be ascertained, this might indicate approximately the number of literate people in the population, or in a given age group. 'Approximately' is the operative word, for there are a number of variable factors which affect the accuracy of this method. First of all, the effect of four years of primary school will inevitably vary with the quality of the teaching, which in turn depends on the status, motivation and training of the teachers and the attitudes of the pupils. It varies also with the language of instruction. In

1. 'Recommendation concerning the International Standardization of Educational Statistics', adopted by the General Conference of Unesco at its tenth session, Paris, 1958.

many areas of high illiteracy, a multitude of local languages and dialects are spoken. Indeed, this is often one of the causes of mass illiteracy. It is not uncommon in certain parts of Africa to find children in a single primary school coming from four or five different language groups. Many of these languages have never been written. So, whether for reasons of national policy or sheer necessity, children are often forced to learn in a language which is not their mother tongue. Clearly this takes longer and is more difficult. Again the children of illiterate parents will have had no pre-school experience of reading and writing and are thus handicapped in comparison with children from literate families.

Then the question also arises of what happens after the child leaves school. Four years of primary schooling do not necessarily make a person literate for life. 'Permanent' literacy is not quite the same as 'functional' literacy, though the one follows logically from the other. If a child has not learnt to use, and enjoy using, reading and writing, he will quickly lose the skill he has acquired at school. So, if his literacy is not functional it is not likely to be permanent. Again the question of language comes in. If he is literate in a language which is not used for practical purposes in the community, he will gradually forget the language he learnt at school and the skills of reading and writing that went with it. The social environment also influences the permanence of literacy. The child who leaves school and goes out into an illiterate society where the written word is seldom seen, where reading matter may be unavailable, where people who have no command of literacy may also pretend to despise it, will quickly regress into illiteracy. Whilst, however, regression is a negative factor, there is also the positive factor that adult literacy and adult education may keep a number of people literate and make others literate who have had less than four years schooling or even no schooling at all.

Unfortunately, the data needed for an analysis of educational attainment over a period of years are seldom available in countries with high rates of illiteracy. Only seven countries, all in Latin America, have provided sufficiently complete statistics over a long enough period of time to allow such a study. An analysis of these figures is set out in summary form in Table 4.[1]

A comparison of figures in the second and third columns show that the number of people who were recorded as illiterate is in all cases close to the number who have not been to school at all, or have attended for not more than a year. It therefore seems probable that the census enumerators recorded as permanently literate every person who ever enrolled in a primary school.

One must then consider whether an appreciable number of persons were

1. From an unpublished thesis by G. Carceles, based entirely on data published in the *United Nations Demographic Yearbook, 1955, 1956* and *1964.*

TABLE 4. Illiteracy and educational attainment in seven countries

Country	Adult population (15+)	Reported illiterates (%)	No school or less than one year (%)	Completed less than four years (%)
Brazil, 1950				
Males	14 869 694	45.1	59.4	77.4
Females	15 263 097	55.7	65.4	79.4
Total	30 132 791	50.4	62.4	78.4
Costa Rica, 1950				
Males	225 513	19.9	18.9	60.9
Females	231 708	21.3	19.9	60.3
Total	457 221	20.6	19.4	60.6
El Salvador, 1950				
Males	528 640	55.2	61.0	84.7
Females	562 670	62.6	67.2	87.4
Total	1 091 310	59.0	64.2	86.1
Guatemala, 1950				
Males	803 288	65.6	65.5	87.2
Females	807 963	75.6	75.6	89.1
Total	1 611 251	70.6	70.6	88.2
Paraguay, 1950				
Males	352 111	24.5	23.8	72.8
Females	395 001	42.9	42.2	79.7
Total	747 112	34.2	33.5	76.3
Chile, 1960				
Males	2 144 688	15.1	15.7	36.3
Females	2 306 909	17.6	17.9	37.6
Total	4 451 597	16.4	16.9	37.0
Honduras, 1961				
Males	479 833	51.3	51.4	79.7
Females	503 167	58.5	58.6	81.9
Total	983 000	55.0	55.0	80.7

subsequently made permanently literate by adult literacy programmes. As an illustration, it may be mentioned that in 1966/67 in Brazil, 289,771 adults of all ages are reported to have completed four-year adult-school courses, including literacy. Unfortunately there are no data available about the output from literacy courses before 1950.

If, therefore, four years of schooling is taken as the minimum needed to make a person permanently literate, additions ranging from 18 per cent to 40 per cent would have to be made to the percentages of illiteracy recorded by these seven countries in Table 4.

This comparison of the two methods of arriving at the picture of illiteracy in seven countries cannot, of course, be generalized for the world as a whole, but it does indicate that the census figures on which our estimates have been

based may be over-optimistic and that illiteracy rates are probably higher than these estimates have led us to believe.

It is expected that much more literacy data will be available from the United Nations 1970 World Population Census Programme, since more countries will be participating and more details on literacy will be included.[1] Further, recommendations have been made by the United Nations that languages used should be recorded and advice has been given on practical tests to establish literacy.

THE INEXORABLE GROWTH OF ILLITERACY

Already the pattern of illiteracy begins to emerge as a motion picture, with population age-groups moving through, or bypassing, the school system.

This may be graphically shown by using flow charts. The two charts (pages 20-21) depict what has happened, and is happening, to two generations of children born in 1945 in two regions of the world: one, Middle Africa,[2] with a high rate of illiteracy, the other Europe,[3] where primary schooling has largely eliminated illiteracy.

The African picture, which depicts the 1945 generation from its year of birth, shows that out of 100 births there are 21 deaths in the first five years. Of the 79 who survive beyond the age of 5, only 38 enter primary school and only 12 complete their first-level education (six grades) ; 16 pass the fourth grade which is generally considered to be a minimum condition for effective literacy. Of the 22 who do not reach this point, 2 later reach literacy by means of adult education courses. Of the 12 completing first level, 5 go on to second level and 0.5 per cent, that is, 1 out of 200, go on to third level.

The European picture presents a sharp contrast. Out of every 100 children born in 1945, only 4 die in the first years. Of the 96 children who survive from the age of 5, 94 enter primary school; 93 complete it, and thus become literate. At this point, 12 leave school and 81 enter the first stage of second-level education; 21 complete the final stage of secondary education, and out of these 21 there are 9 who go on to the third level.

A Unesco survey carried out for the 1968 Conference of Ministers of Education in Africa (Nairobi, July 1968), indicated that the average increase in primary enrolment over the five years between 1961 and 1966 was only 1.8 per cent. The average loss through drop-outs was 21 per cent. Expressed cumulatively, the proportion of drop-outs in grades I to VI in primary schools was 68 per cent. Assuming that the minimum educational requirement for

1. *Principles and Recommendations for the 1970 Population Censuses.* New York, United Nations, 1967. (ST/STAT/SER.M.44.)
2. Includes all countries south of the Sahara except the Union of South Africa.
3. Excluding the U.S.S.R.

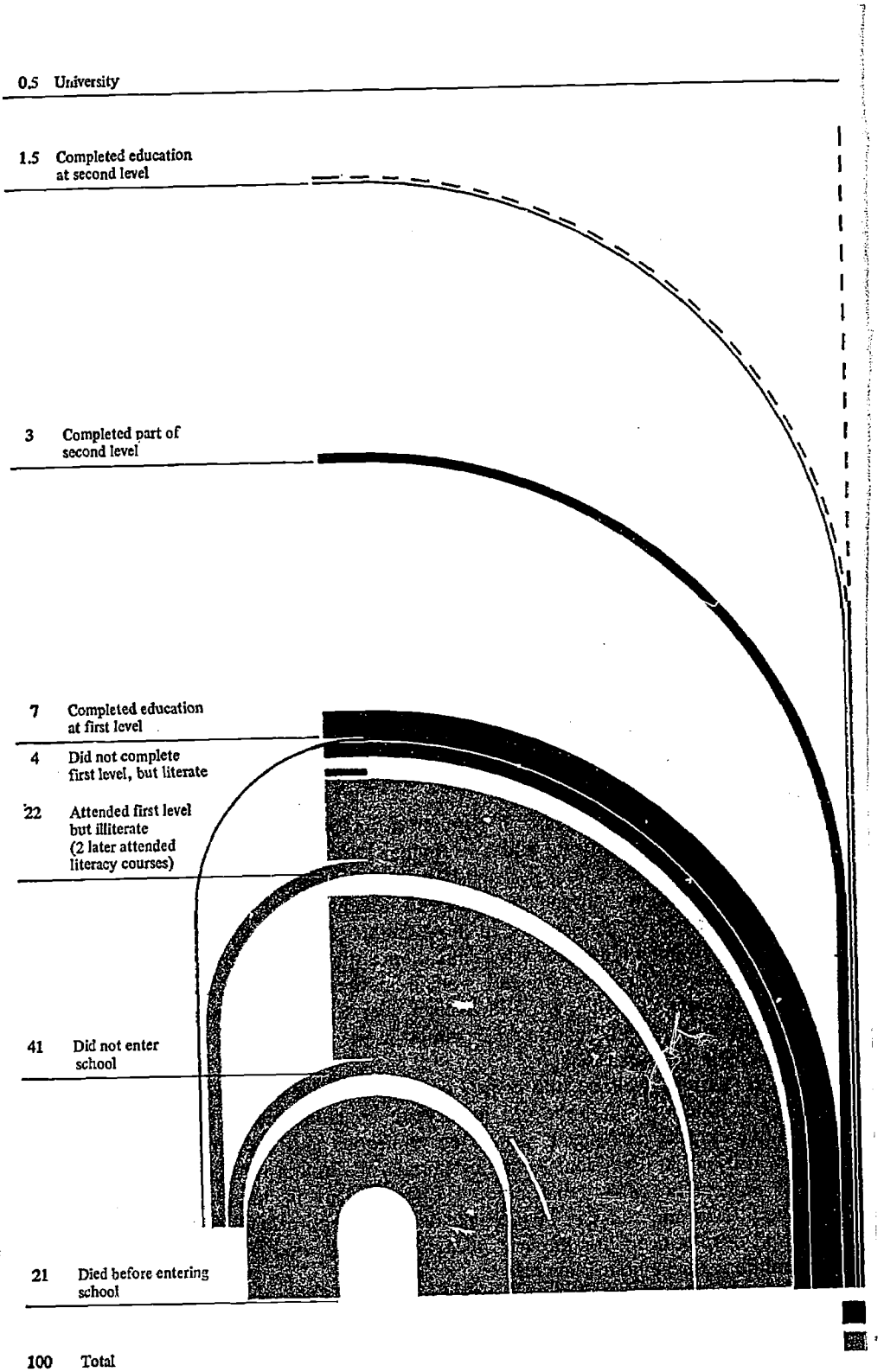
the achievement of permanent literacy is completion of fourth grade, it appears that only 1,235,000 reached this level. This means that of the 1960 total of 5,350,000 African children aged 6 years, at least 4,115,000 or 77 per cent should have been classified as adult illiterates when they reached the age of 15 in 1969. Again, in 1965/66 it was estimated that only 4 million out of a total of 6 million 6-year-olds entered first grade. If the high drop-out rates persist, only 1,485,000 may complete fourth grade in 1968/69, which will mean that 4,515,000 or 75 per cent may become adult illiterates by the time they reach 15 in 1974.

Baldly, this means that in Middle Africa the primary schools are losing the battle against illiteracy because the rate of enrolment growth is not making enough headway against population expansion.

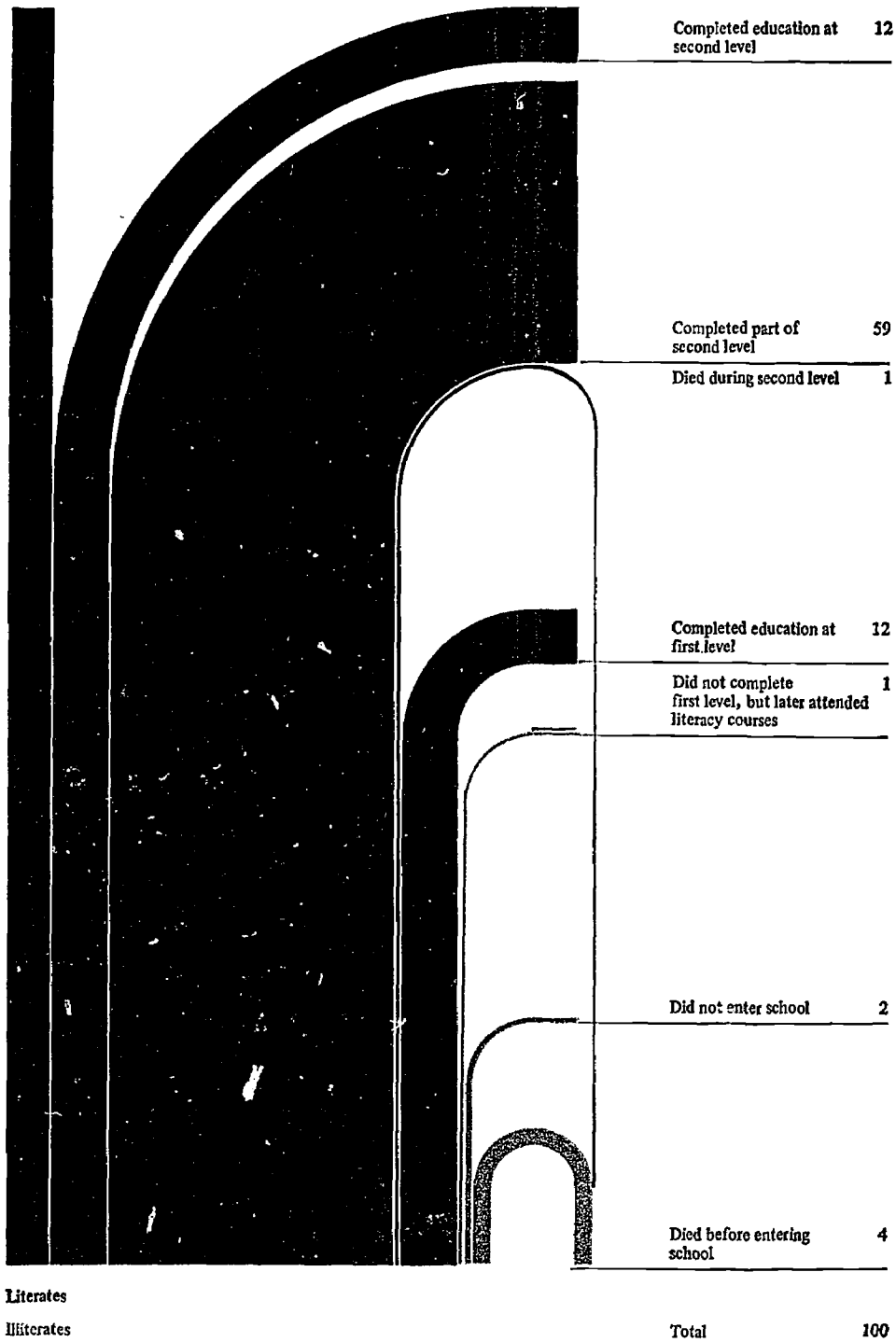
In the sixteen Arab States the situation is only slightly more encouraging. In a Unesco survey carried out preparatory to the Third Regional Conference of Ministers of Education and Ministers Responsible for Economic Planning in the Arab States (Marrakesh, January 1970) it was found that, in the Arab States, only 900,000 of the 2.3 million children of 10 years of age in 1960 entered the fifth grade, meaning that 1.4 million or 59 per cent may have become adult illiterates when they reached the age of 15 in 1965. The year-old cohort in 1964 numbered 2.7 million, of whom 1.4 million entered the fifth grade, leaving a potential 1.3 million illiterates, or 48 per cent, reaching the age of 15 in 1970. Thus the potential adult illiteracy rate of the two cohorts declined from 59 per cent in 1965 to 48 per cent in 1970, but the number of potential adult illiterates declined only from 1.4 million to 1.3 million.

The inexorable increase in population in the developing countries, due to the increasing birth-rate and ever higher survival rates, has outstripped the expansion of the school system. If the school system has failed to stem the flow of illiteracy between the sixth and fifteenth year, the remedial operation of adult literacy classes has, in most countries, had only limited success. In spite of tremendous efforts by education authorities, voluntary organizations and many dedicated men and women in the developing countries, some 4 million new illiterates are added each year to the total number of illiterate adults in Africa and another 1.3 million in the Arab States. No figures are yet available for other regions.

If, as may well be, the census estimates of the total previous number of adult illiterates in the world have been over-optimistic, then International Literacy Day 1970 will witness an enormous and ever increasing crisis in education. As President Kenneth Kaunda of Zambia reminded his people on 8 September 1968: 'International Literacy Day is intended to represent a very dark and sad day in the calendar of human affairs, a day of reflection and deep concern for the cries of agony, despair and frustration of countless millions throughout the world.'



General flow chart for Middle Africa, generation born in 1945.



General flow chart for Europe, generation born in 1945.

World opinion faces the crisis

The crisis in education—and the particular symptom of it, mass illiteracy—has outgrown the preoccupation of educational planners to become a matter of public concern throughout the world.

TEHERAN AND AFTER

Already in 1965 the World Literacy Congress in Teheran, which brought together the representatives of eighty-eight countries, had addressed 'a solemn and urgent appeal to international and regional bodies concerned with development and education, to non-governmental organizations, to religious, social and cultural institutions, to educators, scientists and scholars, to economic and trade union leaders and to all men of goodwill to do everything in their power to arouse public opinion with a view to intensifying and accelerating the world-wide attack on illiteracy'. This appeal has found a warm response in all parts of the world and in every walk of life.

In the years following the Teheran Congress, it was increasingly realized that illiteracy was much more than a merely educational problem. Economists and development planners have become more directly concerned with the relationship of literacy to economic development, its costs and benefits, its effects on productivity, and with the means of financing literacy as a component of agricultural and industrial undertakings. A number of governments are including literacy activities in their plans for economic and social development; ministries responsible for development—for industry, agriculture, agrarian reform, social welfare, community development, and transport—are becoming involved in the planning and implementation of literacy programmes; an increasing number of firms are organizing literacy activities, linked with vocational training, for their workers, and many trade unions are strengthening their support for literacy efforts.

STATEMENTS ON THE PROBLEM FROM MEN OF EMINENCE

President Kenneth Kaunda of Zambia, in a speech delivered on International Literacy Day 1968, said: 'The literacy programme should be accorded a high priority in the planning of the country's development.' Professor Gunnar Myrdal, the well-known economist of Stockholm University Institute for International Economic Studies, wrote in his book, *Asian Drama*: 'Many people, ourselves included, feel that it is of paramount importance for development that the underdeveloped countries in South Asia raise the level of functional literacy in their populations as rapidly as possible.' A similar idea was lucidly expressed by the late Mr. Herbert Tulatz, Assistant General Secretary of the International Confederation of Free Trade Unions: 'Literacy cannot have the top priority. If there has to be a choice between bread and books, bread will come first, but one should not forget that books can lead directly to more bread. Therein lies the fundamental importance of literacy work.' Mrs. Stana Dragoi, Secretary of the World Federation of Trade Unions, speaking to a conference held by the federation in Nicosia (Cyprus) in May 1969, emphasized that the battle for literacy cannot be dissociated from the general campaign for economic and social development and for better living and working conditions for the workers of the world, because if economic development demands machines, raw material and capital, it demands also and above all greater numbers of better educated men and women.

THE BANKERS' ROUND TABLE

In February 1969 a Round Table of Bankers, Economists and Financiers was convened in Rome by Unesco, with the co-operation of the Government of Italy, to discuss literacy as an economic investment. The Round Table concentrated its attention on the planning and financing of functional literacy programmes linked to development, and of projects which integrate literacy teaching with vocational training. The final report of the Round Table recorded that 'the meeting was unanimous in recognizing the economic and social importance of literacy and its rôle as a productive factor for development in industry, commerce and agriculture. It was felt that the huge total of illiterates represents a vast loss of human productive power, as well as an affront to human dignity'.

TOWARDS A NEW APPROACH

There were, at one time, many who considered adult literacy programmes a wasted effort, believing rather, in the expansion of the school system until universal primary education cut off illiteracy at its source. However, even in the early days of socialism, in the U.S.S.R., this view was

contested. In an address to the citizens of the Soviet Union, Mr. A. V. Lunacharsky, People's Commissar for Education, proclaimed that 'the fight against illiteracy and ignorance cannot be confined merely to organizing proper school teaching for children, adolescents and young persons. Adults too will want to be rescued from the humiliation of being unable to read or write. Schools for adults must occupy a prominent place in the general plan of education'. In the early days of Indian independence, Mahatma Gandhi predicted the importance of a more functional approach. 'Mass illiteracy', he said, 'is India's sin and shame and must be liquidated. But the literacy campaign must not end with knowledge of the alphabet. It must go hand in hand with the spread of useful knowledge.' The President of the Republic of Tanzania, Julius K. Nyerere, went even further in an official declaration to Parliament during the inauguration of the first Five Year Development Plan in May, 1964: 'First we must educate adults. Our children will not have an impact on our economic development for five, ten or even twenty years. The attitudes of the adults, on the other hand, have an impact now.'

In more recent time the concept of functional literacy has been adopted and elaborated by Unesco. It was lucidly summed up by Professor Mark Blaug of London University. 'In a nutshell, the new Unesco approach is intensive rather than extensive, selective rather than diffusive, work-oriented rather than culturally oriented. It emphasizes functional rather than rudimentary literacy, continuous adult education fusing into genuine vocational instruction rather than once-and-for-all teaching of the three R's. It favours the use of diversified primers rather than single primers, in conjunction with follow-up material embodying specific knowledge of nutrition, sanitation, industrial arts, and agricultural science. It does not hesitate to assist the teacher with new educational media and to draw into the teaching process vocational instructors from the Ministry of Labour and extension officers from the Ministry of Agriculture. It regards literacy programmes as a first step in the creation of qualified manpower, as investment rather than consumption. It is, to say the least, a more than literacy Literacy Programme; in short, it is adult education in the fullest sense of the word.'[1]

LITERACY AND HUMAN RIGHTS

The International Year for Human Rights, 1968, offered an occasion to national and international bodies to link literacy with various aspects of human rights. Unesco called attention to this relationship in a booklet, *Illiteracy and Human Rights*,[2] which was translated into French and Spanish

1. Mark Blaug, 'Literacy and Economic Development', *School Review*, Vol. 74, No. 4, 1966, University of Chicago Press.
2. *Illiteracy and Human Rights*, Paris, Unesco, 1968.

and widely distributed throughout the world. Literacy as a human right was also given particular attention in the International Conference on Human Rights, convened in Teheran in April 1968 by the United Nations.

On the eve of the International Year, the Director-General of Unesco recalled in a broadcast message that '. . . in a world where vast areas are still in the grip of hunger and malnutrition, and where more than seven hundred million illiterate persons are shut out from the world of ideas mirrored in the written word, there are many people for whom the provisions of the Universal Declaration [of Human Rights] are nothing more than empty promises . . .'.

The fundamental importance of literacy in relation to human rights has, since been emphasized on many occasions. Mr. Tarso Dutra, Minister of Education of Brazil recently stated: 'Literacy, as the prerequisite of education, is the most important of the rights of man in society.' Mr. Benoît Malou, Minister of Labour and Social Affairs of Togo concurred with this view: 'In a world which is rapidly evolving and in which science is becoming man's important ally, the ability to read and write becomes a vital necessity for all who aspire to progress.' The Conference on World Co-operation for Development, co-sponsored by the World Council of Churches and the Pontifical Commission for Justice and Peace held in Beirut (Lebanon) from 21 to 27 April 1968, called upon Christians in both developed and developing lands to 'take an active part in literacy campaigns, to bring home to the people the conditions in which they live and convince them of their ability to bring about creative change'.

THE PART PLAYED BY NON-GOVERNMENTAL ORGANIZATIONS

The years 1967-69 saw a progressively deeper involvement of international non-governmental organizations in the planning of new strategies and in the mobilization of popular support for world literacy. The Eleventh Conference of Non-Governmental Organizations held at Unesco House in July 1968 adopted a resolution aiming at the association of non-governmental organizations in literacy projects run by Unesco and by governments, the training in greater numbers of qualified literacy instructors, and the exchange of information and research experiences in the field of functional literacy. The Standing Committee of Non-Governmental Organizations established also in 1968 an Ad-Hoc Committee for Literacy. Acting on its behalf, the World Assembly of Youth held a regional seminar on work-oriented literacy in Latin America at Bogota in April 1968 and a report entitled *Literacy as a Factor of Development* was published as a result of this conference. A list of some twenty-five such international and regional meetings, seminars and training courses is included in Appendix E.

The World Federation of Trade Unions organized an International Day for Functional Literacy in Turin (Italy), in February 1968, and a five-day World Conference on Functional Literacy in Nicosia (Cyprus), in May 1969. In October/November 1968, the International Confederation of Free Trade Unions held a literacy seminar in Ouagadougou (Upper Volta), for trade union cadres from African countries.

The International Council of Women helped and encouraged their national affiliates to raise funds and buy gift coupons for literacy teaching projects in Africa, Asia and Latin America. With the money thus raised, the council has been able to equip literacy classes in Cameroon, Colombia, Lebanon, Nigeria and Uganda.

The Young Women's Christian Association of the Lebanon organized a five-day course in the spring of 1969 attended by 100 young people who volunteered their services to teach adult illiterates. In July 1968, the Associated Country Women of the World and the International Alliance of Women held a seminar in Karachi (Pakistan), in co-operation with the All-Pakistan Women's Association at which participants from Ceylon, India, Iran, Nepal and Pakistan met to discuss many aspects of literacy work in their countries. Literacy also figured on the agenda of three other regional seminars organized by the Associated Country Women of the World.

A large and growing contribution to literacy has also been made by religious bodies. Indeed in many countries the first alphabets were developed by religious teachers and religious missionaries, the first written manuscripts were religious texts, the first books to be translated and written were often religious books, the first schools were established by religious bodies, and the first purpose of literacy was conceived as religious teaching. We now find many religious leaders regarding literacy not only as an instrument of religious teaching, of moral and spiritual development, but also, in a wider context, as a factor in social and economic progress. His Holiness Pope Paul VI wrote in his Encyclical on the Development of Peoples: 'Hunger for learning is no less degrading than hunger for food: an illiterate is an undernourished soul. To learn to read and write, to acquire professional training, is to gain self-confidence and to discover that one can progress as well as others.'

In May 1968, the World Confederation of Organizations of the Teaching Profession held a seminar in Cuenca (Ecuador), on the co-operation of teachers' organizations in literacy programmes to which representatives were invited from Colombia, Costa Rica, and Paraguay. The World Federation of Teachers Unions has sent out an appeal to all its members and published articles to encourage national teachers' unions and teachers to take part in the struggle against illiteracy. Plans have already been made for a seminar on functional literacy at the end of 1969 for the teachers' unions of Africa.

A growing interest in literacy has also been shown by youth organizations. The World Federation of Democratic Youth organized in May 1968 in Ulan-Bator (Mongolia), an international seminar for delegates from sixteen countries on the role of youth in the eradication of illiteracy. The World Assembly of Youth discussed the problem of the participation of youth and students in literacy action in a seminar held in April 1969 in San Jose (Costa Rica), for representatives from eleven Latin American countries.

Besides these international conferences and meetings, many hundreds, perhaps thousands, of national and local meetings, discussions and lectures have been organized throughout the world by government agencies, non-governmental organizations, educational institutions and individuals, to inform public opinion of the gravity of the situation, to discuss ways of combating illiteracy, to plan projects or activities and to train those who are to take part in them.

INTERNATIONAL LITERACY DAY

International Literacy Day, which had its origin in the Congress of Teheran is celebrated each year on 8 September and has continued to arouse widespread interest throughout the world. In 1967 and 1968 a special ceremony at Unesco Headquarters marked the day. Heads of State and ministers in many countries made speeches and public proclamations, which were given extensive coverage by press, radio and television.

The 1967 celebrations were largely organized by committees composed of governmental and non-governmental organizations. Popular demonstrations were held in many countries; in Kenya, the day had almost as much importance as Independence Day. Collections were taken with good results in Madagascar and Tanzania. In Nepal and the Democratic Republic of the Congo poets recited works on literacy to the public. Commemorative stamps were issued in the Democratic Republic of the Congo, Iran, Kuwait, Libya, and Mali.

Apart from these efforts to mobilize public opinion, International Literacy Day 1967 saw concrete measures taken for the eradication of illiteracy. Denmark set up a committee for bilateral literacy aid. In Jamaica a literacy pilot project on the intensive use of radio and television was started during the month.

International Literacy Day 1968 was taken as an occasion for announcing results achieved or new measures to be taken: 500,000 adults in Iran had been made literate in 1968; two more Mexican provinces were declared fully literate; a new law on literacy was voted in Guatemala; literacy classes were opened in firms, factories and villages in Syria and in the United Arab Republic, where an appeal was made to university students to volunteer time during the summer vacation for literacy work. Many countries made the day

the occasion for the launching of national literacy campaigns, the opening of literacy centres and the creation of local and national literacy committees.

Mass media played an important role in announcing literacy achievements and information, as well as stimulating and arousing public interest: in Nigeria and in Syria, radio and television covered ceremonies in which newly literate persons were awarded prizes; a special message to the Gabon people was presented by all mass media and read in all adult evening schools; films, plays and interviews with leaders of the literacy movement were broadcast in Iraq, Malta and the Sudan. In the Democratic Republic of the Congo the first issue of a newspaper published by the National Literacy Service for new literates was brought out.

In addition, contests, exhibitions, parades, sporting events and festivities were numerous: more than 6,000 persons attended a ceremony marking the day in Kamakunji Park in Kenya's capital, Nairobi, following a parade through the streets, which were decorated with literacy posters; trained literacy teachers were presented with their certificates during a ceremony in Thailand, attended by some 2,000 people. Among non-governmental organizations, the United Towns Organization issued an appeal to some 850 committees in 51 countries to mark the day.

THE MOHAMMAD REZA PAHLAVI LITERACY PRIZE

The Mohammad Reza Pahlavi Prize, made possible by the generous gift of H.I.M. the Shahinshah of Iran, is awarded annually on International Literacy Day to an individual or institution for meritorious work in adult literacy. In 1967 the prize was awarded to the pupils of the Tabora Girls' Secondary School, Tanzania, for their action in voluntarily organizing literacy activities for adults. Honourable mentions went to persons and institutions in Chile, Ethiopia, Italy, Morocco and Venezuela. In 1968 the jury awarded the prize to the Brazilian Movement for Fundamental Education, an organization that is teaching adults by radio in many of the more inaccessible parts of that country—another example of the importance of mass media. The jury also awarded honourable mentions to individuals and organizations in Guatemala, Jamaica, Pakistan and Spain.

In 1969, the prize was awarded to the National Technical Literacy Committee of the Kingdom of Cambodia for its work in the promotion of adult literacy and its encouragement of adults to take an active part in the economic, social and cultural development of Cambodia. Honourable mentions were given to the Summer Institute of Linguistics, Australia; the Bombay Social Education Committee, India; the Bambara Technical Commission, Mali; the Nepal Women's Organization; the Association of Pakistani Guides; the Adult Education Institute, Tunisia; the Belgrade Television,

Yugoslavia; and to Pastor Charles T. Hein, member of the Togolese National Literacy Committee.

THE NADEZHDA K. KRUPSKAYA LITERACY PRIZE

An offer has been made in 1969 by the Government of the U.S.S.R. to donate 5,000 roubles for the institution of an international prize, similar to the Mohammad Reza Pahlavi Prize, to be awarded annually for seven years to recompense outstanding work in the fight against illiteracy. This prize will bear the name of Nadezhda K. Krupskaya, wife of V. I. Lenin and one of the founders of the U.S.S.R.'s educational system.

A survey of literacy programmes

Stimulated by the crisis of mass illiteracy, governments and non-governmental organizations, voluntary groups, and individuals in many countries of the world have been impelled to action.

The figures given by Member States in regard to the number of classes or courses provided, of adult students enrolled and of teachers employed in their literacy programmes are tabulated in Appendix C. It is clear that many of the countries which still have a high rate of illiteracy are making heroic efforts to reduce it. It is equally clear that the scale of the operations so far mounted, particularly in Africa and Asia, is still far short of what is required to eradicate mass illiteracy, and in a considerable number of countries even insufficient to check its increase.

Of the countries which reported the numbers of students enrolled in their adult literacy programmes thirty-one had previously given enrolment figures which enable a comparison to be made with the latest returns. This shows that the total enrolments in these thirty-one countries around 1968 are higher than the 1965 level by an average of about 25 per cent; twenty-four countries have shown an increase since 1965 whilst only seven have shown a decrease. The trend is evident particularly in Africa, where in five countries out of the ten for which data were available enrolments have been increased more than twice since 1965.

THE VARIETY OF LITERACY PROGRAMMES

A study of the full reports from all the Member States that replied to the Unesco questionnaire reveals a wide variety of strategies in the battle against illiteracy.

There are countries which have successfully eradicated mass illiteracy, and are changing and refining their literacy programmes and services to provide a variety of adult education and training facilities, which are equally available to newly literate adults and adolescents emerging from the school system.

In many countries where the victory over illiteracy is not yet in sight new mass literacy programmes have been launched. Others have consolidated or expanded existing programmes. Yet others have converted them to a more functional approach, while still retaining their extensive nature. Others again have been more selective and are providing programmes adapted to special groups of the population. Finally, there are a growing number of countries that have integrated literacy with technical training and injected this work-oriented functional literacy component into economic development schemes, both agricultural and industrial. These are the countries which have completely accepted and applied the selective-intensive strategy. In this last category are the eighteen countries where projects, either major pilot projects or more limited 'micro-experiments', are included in the Experimental World Literacy Programme.

COUNTRIES THAT HAVE OVERCOME MASS ILLITERACY

Because it completed its literacy campaign in 1961—the Year of Education—Cuba has undertaken no new activities in literacy since 1967. From 1962, it initiated the stage of post-literacy, which comprises educative activities for adults of both sexes in both rural and urban areas. The plan, known as the 'Battle of the Sixth Grade' is being systematically carried out under the direction of the National Advisory Service for Workers' and Farmers' Education in the Ministry of Education. At the same time, every effort is being made to reduce the small residue of adult illiterates, 3.9 per cent of the total population, left behind by the literacy campaign. In Cyprus, likewise, illiteracy has not been a serious problem since 1960, and here institutes of further education are enrolling the small residue of illiterate adults. Italy has organized reading centres which aim to avoid regression into illiteracy. The *Telescuola* literacy programme by television, with its popular title 'It is Never Too Late', has been suspended and replaced by an educational and cultural programme for adults. While literacy classes continue to be organized in the remote regions of southern Italy, most literacy programmes are gradually being converted to more comprehensive forms of adult education.

NEW MASS LITERACY CAMPAIGNS

Turning from the countries that have quite, or nearly, achieved victory over mass illiteracy to those that are still in the heat of the battle, a number have launched new mass literacy campaigns since September 1967.

Guinea has embarked on the task of putting into action and completing before 28 September 1971 a programme of mass literacy to engage the whole nation. At present, 17,000 literacy centres are operating, enrolling 80 per cent of the illiterate adult population. In 1968, 49,400 secondary school students,

5,000 school teachers and 600 university students received special training in order to work in literacy classes. The Government of Kenya also launched a national literacy campaign in 1967, beginning in ten districts, and designed to cover the forty districts of the whole country by 1970.

The Government of Burma reports 'a systematic attack on the problem of illiteracy', while three Arab States, Jordan, Kuwait, and Syria, have all prepared national plans to eradicate illiteracy. The Jordan programme was adopted by the Ministry of Education in 1968 and receives financial and technical aid from the Arab Regional Literacy Organization (ARLO). In 1967/69, 2,486 male and 3,486 female illiterates were reached by governmental literacy activities. Similarly in 1967 the Ministry of Education of Kuwait launched a new literacy programme. And in 1968, the Literacy Department of the Ministry of Culture of Syria set up a six-year plan under which eighteen voluntary organizations organized eighty courses for 1,414 adults during 1967/68.

In 1969, Colombia celebrated the one hundred and fiftieth anniversary of the historic battle of Boyaca, by which Simon Bolivar, on 7 August 1819, brought liberty to the country. One of the ceremonies to celebrate this year of victory was the launching of a literacy programme by the Colombian Civic Organization for Literacy (OCCA) in the towns and villages. The President of Colombia inaugurated this plan on 4 June 1969 at the town of Aranca, the first town which Bolivar freed on 4 June 1819. This programme, which will cover forty-four municipalities with a total population of 465,199, of whom 117,850 are illiterate, is aptly called 'La Segunda Libertad', the second liberation. Another Latin American State, Guatemala, has recently produced a four-year national plan for eradicating illiteracy; this has been approved and initiated in the Escuintla district in 1969.

NATIONAL LITERACY PROGRAMMES SUSTAINED OR EXPANDED

Appendix C indicates that at least twenty-two countries are continuing, and some are expanding, their literacy programmes. It is possible in this general review to mention only a few examples, taken region by region.

Turning first to African countries, it is a matter of Cameroon Government policy that all members of the party 'Union Nationale Camerounaise' attend literacy classes; these have a total of 148,000 illiterates enrolled. The Republic of the Congo has 50,089 illiterates enrolled with 33 full-time and 690 part-time instructors. Ethiopia is engaged in a national programme which has enrolled 173,456 illiterates; Mali and Tanzania likewise have enrolments of 60,000 and 363,700 adults respectively. Ghana, Liberia and Uganda have integrated their literacy programmes into general schemes of mass education and community development, as part of a general plan to educate adults in

order to enable them to take part in the economic and social development of their countries. Zambia has approximately 200 people trained and employed as full-time literacy workers and some 5,000 people trained as part-time volunteers. More than 2,000 literacy classes have been opened, providing courses for 40,000 illiterates.

Among the Arab States, Saudi Arabia has a five-year plan for extending and broadening its literacy programme; 600 Adult Education Centres now have a total enrolment of 41,000 adult learners, according to 1967 figures. Adding to these the military adult education centres and the classes run by the social service and community development centres, it is estimated that the total number of adult learners who attend classes regularly is around 50,000. More night schools are to be opened and summer campaigns are to be held in nomad zones and wherever the density of population admits and schools exist.

Asia has to tackle a vast illiteracy problem. The All India Adult Education Conference, presided over by the Deputy Director-General of Unesco, in December 1968, called for 'the liquidation of illiteracy within the country within a reasonably short and specific period of time'. India has one of the greatest literacy problems of the world, with, according to the last census report, 109 million of its 150 million adults listed as illiterate. Nevertheless, a great deal of literacy work is going on in the various states under both government and voluntary auspices. For example, great success has been achieved in the state of Maharashtra, where efforts are organized under the Village Literacy Campaign (Gram Shikshan Mohim). Village leaders discuss together the problem of illiteracy and its consequences on development, and plan a concerted attack. School-teachers and educated villagers volunteer to teach in adult literacy centres without remuneration. When illiteracy is eliminated from a village, the people celebrate the occasion and take a vow to continue their studies, as well as their collective efforts for economic and social development.

The success of the campaign in Maharashtra has contributed to the popularization of similar methods and techniques in other states. Since adult literacy campaigns generally lead to only a moderate level of attainment, action is under way to reinforce the participants' level of literacy through the publication and planned use of simple reading material for new literates. In Bombay a crash literacy programme was organized on the same lines as in the rural areas of Maharashtra. This has paved the way for a new type of reading material oriented to the needs of an industrial city.

The national literacy campaign in Iran covers the whole country and 493,247 students were enrolled in classes during 1968, increasing to 861,657 in March 1969. An interesting feature of the Iranian campaign is the scheme whereby recruits entering military service have a choice between soldiering and teaching. These young 'soldiers of the book' not only establish schools

for children in outlying districts, but also teach adults in evening classes. In 1968/69, in addition to the 8,873 teachers in uniform in the 'Army of Knowledge', 23,856 volunteer teachers from all walks of life were employed by the 161 literacy committees which organize local campaigns.

Pakistan has inherited illiteracy problems of the same magnitude as India. 'Even today, after twenty years of independent existence no less than 80 per cent of the country's adult population consists of illiterates or semi-literates.' No report of government literacy programmes is available from West Pakistan but in East Pakistan 7,604 literacy certificates (3,724 male and 3,880 female) were issued during 1967/68 and during the same period the number of public libraries rose from 749 to 1,471.[1] It is remarkable that, despite the Republic of Viet-Nam's war commitments, a literacy programme of considerable extent has been organized in that country, including sixty-six courses of adult primary education.

Europe and North America present, in general, a very different picture. Here there are residual pockets of illiteracy rather than national problems. Literacy teaching in Greece is carried out in night schools which award diplomas recognized as equivalent to primary school certificates. Education at night school is compulsory for those between 14 and 20 who are considered illiterate or who have not finished elementary school. Those over 20 may enrol on a voluntary basis.

The rate of illiteracy in Hungary has now decreased to under 0.6 per cent of the population. Here, the teaching of adult illiterates, especially among the semi-nomadic gipsy population, is achieved in two ways; by elementary adult courses within the system of school education, and by individual teaching under the direction of teachers and volunteers. The majority of literates who pass the final test with success proceed to the upper primary school for workers. The adult courses within the primary schools are given free and the students are issued with free textbooks.

Literacy classes for adults in Spain generally function in the national schools and in parallel with the primary school course, aiming to achieve the same level as the primary school leaving certificate. Since 1967, 208,379 adults have been made literate and 255,515 have obtained primary school certificates. Spain plans in this way, in not more than two years, to eliminate illiteracy, which now affects some 350,000 people.

Yugoslavia has also undertaken a systematic programme to eradicate illiteracy, on the principle that elementary education for adults is an essential factor in social and economic development, that it should be provided parallel with regular schooling, and as an integral part of the education system.

1. *Decade of Reforms 1958-1968*, Comilla, East Pakistan Education Directorate, Adult Education Section, 1968.

Literacy activities, therefore, are carried out in the ordinary educational institutions.

In some countries the teaching of literacy is regarded as a component of basic education or community development, and is becoming more and more related to general adult education and technical and vocational training. An example of this relationship between literacy and adult education and training is the vast programme of Adult Basic Education in the United States of America. In the words of the United States reply to the Unesco questionnaire: 'this programme continues to be the major educational programme for combating illiteracy and under-education. Established in 1966 as an important component in the Nation's War on Poverty, within four years of operation the programme has served more than 1.5 million adults at a cost of approximately 150 million dollars. It specifically offers "education for adults to enable them to overcome English language limitations, to improve their basic education in preparation for occupational training and for more profitable employment and to become more productive and responsible citizens".[1] It thus has features in common with the programmes for immigrants and vernacular language groups in other countries. Among the achievements reflected in the reports of the State Directors of Adult Basic Education for 1968 are the following: 62,000 adults learned to read and write, 28,000 registered and voted for the first time, 87,000 found jobs, got promotions or raises of pay, and 48,000 continued on into job training.'

Many countries, especially in Latin America, closely relate adult literacy teaching to the primary school system. In many cases the adults follow courses that are similar to those taken by the children, although they may be condensed into a shorter period and may concentrate more narrowly on teaching the 'three R's'. This is exemplified in Bolivia, Guatemala and Paraguay, where primary schools are used for adult classes and the teachers are engaged to teach them in the evenings. In Chile, the literacy programme has three levels, each of which corresponds to one year of general education. There is such a demand in Ecuador for primary schooling for children and adults that the government has decided to put into execution a Plan for School Construction, which foresees the building of about a hundred rural school units. Local communities will contribute construction materials, manpower and land for the building of these schools. The Dominican Republic established in December 1967 a plan of accelerated education for adults, reducing the normal cycle of primary education from six years to three.

1. Section 302 of the United States Adult Education Act of 1966.

NATIONAL PROGRAMMES CONVERTED TO FUNCTIONAL LITERACY

Many countries that have been running mass literacy programmes are now adopting more functional approaches. Some are simply training and re-training their teachers and literacy organizers in more functional methods and revising their media; others are instituting intensive work-oriented literacy projects in selected agricultural and industrial schemes or for specific occupational groups.

The Government of the Democratic Republic of the Congo is planning a project related to cotton growing and animal husbandry. Chad has three functional literacy centres operating in a brewery, a textile factory and an agricultural centre, and the Government of Gabon is likewise preparing three important projects of functional literacy, one in a new industrial sector for workers in petroleum, manganese, uranium and iron mines, another on the railways, and a third directed to women in a rural zone. Niger, where 9,000 adults are enrolled in rural literacy centres and 2,300 in urban centres in the mass education campaign, has now planned five 'micro-projects' of functional literacy; three were already started in 1968. Togo similarly envisages functional literacy projects for three rural areas to raise the production of manioc and cotton and to introduce ploughs and fertilizers into an area of low agricultural productivity. In Uganda, in addition to the general literacy classes (which had 29,721 adults enrolled in 1968) the Ministry of Social Welfare and Community Development has now adopted a new plan based on the selective approach to functional work-oriented literacy, whereby each district selects a project area and special groups and concentrates literacy work on these, without interfering with the general literacy classes.

The national literacy campaign in Tunisia was launched by President Bourguiba in October 1966. Recently, an experimental project of intensive functional literacy has been established in a new agricultural co-operative some 20 kilometres outside Tunis. This experiment is already getting interesting results and the government's policy is to extend functional literacy to 150,000 illiterates in the more productive sectors of the country during the period of the first five-year stage (1967-71). A second stage from 1972 to 1981 will include 900,000 participants from 15 to 45 years of age.

The United Arab Republic, which already has a mass literacy project in Greater Cairo intended for 600,000 illiterate citizens, has now planned experimental functional literacy projects in agricultural and industrial settings in four areas, aiming to make 100,000 workers literate.

Turning to Asia, literacy work in Afghanistan is done by three agencies: the Ministry of Education (Directorate of Fundamental Education and Community Schools), the Rural Development Department (Ministry of the Interior) and the Women's Welfare Society. Each agency runs two types of courses: simple literacy classes and functional literacy classes. The functional classes

are in fact literacy classes plus training classes in a craft; the latter, in the case of women, include home economics and child care. Teaching in literacy is invariably done by a primary school teacher while the craft training is given by a master in the craft. Both private and government enterprises and factories in the Republic of China have set up classes for literacy on behalf of their workers. Thailand, in addition to its national programme, is about to launch a pilot project in functional literacy in two districts and in Laos a programme of functional literacy has been agreed to by the government, within the framework of the general development plan and the regional project for the Mekong delta.

Most if not all of the literacy projects of the public schools in the Philippines are associated with various industries and occupations, mostly agricultural, but only to the extent of giving the students basic literacy and a little insight into the occupational activities they are engaged in. These are not necessarily new industries but rather the ordinary day-to-day economic pursuits of the people. The report concludes: 'the concept of functional literacy, as currently thought of by Unesco, is still in the planning stage in this country.'

The development in Malaysia is significant: since the target for the eradication of illiteracy is near (1975) and there is a need to change the spirit and substance of adult education from mere literacy to community development, community education and functional literacy, the necessary shifts are being initiated. The original policy was to provide courses in basic literacy with stress placed on an ensuing two-year post-literacy course. This policy was relaxed in order to divert finance and resources to the more popular need for the establishment of home economics and vocational agriculture, animal husbandry, rubber and fisheries classes. In 1968, 110 such vocational classes were opened and have been maintained for both 1968 and 1969. This is a shift of emphasis from the previous practice of merely passing over adult education students to be trained by the extension services under their normal programmes of extension education. Under the new practice, vocational classes become direct activities of the adult education programme and would-be teachers are trained under such extension services and upon qualification become teachers for the vocational classes.

The Ministry of Education and Culture in Israel has initiated an integrated approach towards development, by seeking the co-operation of other ministries (agriculture and labour) and of individual enterprises. Under the arrangements thus made, the Ministry of Labour participated in a literacy programme by paying a daily wage in lieu of a working day to workers attending an intensive full-day literacy course for three months; the Ministry of Agriculture agreed that the home economics guides adapt their programmes to the needs of the population as well as to the aims of literacy programmes, and the Sick Fund of the General Federation of Labour (the largest insurance

network in the country) regularly provides doctors for lectures in courses given to soldier-teachers.

LITERACY FOR SPECIAL GROUPS

A considerable number of countries have moved in the direction of providing literacy programmes for specific groups of the population, without necessarily adopting a work-oriented functional literacy approach.

In some countries literacy is provided for immigrants and other groups who wish to become literate in a second language. Such programmes concentrate largely on language teaching. France has more than a thousand associations and groups engaged in literacy work which is essentially aimed at teaching foreign workers and their families to speak, read and write the French language. The French National Commission for Unesco is undertaking a study to evaluate the work of private and public bodies in this programme. There are small pockets of illiterate adults in the United Kingdom, mostly immigrant workers. 'Wherever the extent of illiteracy indicates the need for remedial measures, the local education authority generally organizes classes for the teaching of English with such provision as appears necessary for the teaching of reading and writing.'

Korea, in 1968, introduced a novel re-education programme for mothers of school children which was implemented by establishing 'mothers' classes' in elementary schools throughout the country. From 1969 the classes were brought into the framework of adult education, and long-range plans are being formulated to include fathers and brothers of students in the classes.

Many other countries, including Paraguay and Turkey for example, have important literacy programmes for such specialized groups as army recruits and the police force. Yugoslavia, in addition to literacy carried out in the elementary schools, has introduced literacy classes in workers' universities and special literacy centres in factories and in the Yugoslav army.

SELECTIVE INTENSIVE FUNCTIONAL LITERACY EXPERIMENTS

Finally, eighteen countries have launched experimental intensive literacy projects related to technical and vocational training in selected development schemes; thirteen[1] have started major pilot projects, in most cases with two or more sub-projects in different areas, both urban and rural, and five[2] have started more limited experiments to evaluate new approaches to functional

1. Algeria, Chile, Ecuador, Ethiopia, Guinea, India, Iran, Madagascar, Mali, Sudan, Syria, Tanzania, Venezuela.
2. Brazil, Jamaica, Nigeria, Tunisia, Upper Volta.

literacy or test new methods and media. Of the eighteen countries, twelve[1] are continuing to operate extensive mass literacy programmes.

The intensive functional literacy projects are still in a pioneering and experimental stage. They will be examined more closely and critically in the next chapter, which describes how they came into being and are linked through Unesco into an Experimental World Literacy Programme.

1. Algeria, Brazil, Ecuador, Ethiopia, Guinea, India, Iran, Mali, Syria, Tanzania, Tunisia, Venezuela.

International collaboration

THE WIDE RANGE OF INTERNATIONAL EFFORT

The progressive adoption of the new concept of functional literacy has been encouraged and assisted by Unesco, with the collaboration of the United Nations and its Specialized Agencies and increasing financial support from the Special Fund component of the United Nations Development Programme (UNDP).

Regional organizations

Within the areas most affected by illiteracy, international regional organizations, such as the United Nations Economic Commissions, have taken an increasing interest in projects which relate literacy to development. A number of special organizations have been formed and are doing valuable work to combat illiteracy. Among these are the Arab Regional Literacy Organization (ARLO), formed in 1966; the Regional Centre for Adult Education (CREA) in Venezuela, which gives technical assistance on request to other countries of Latin America; the Ibero-American Bureau of Education in Madrid; the International Institute for Adult Literacy Methods, in Teheran (Iran), established by agreement between Unesco and the Government of Iran in 1968. The two Regional Centres for Training for Community Development in the Arab States (ASFEC) and Latin America (CREFAL), established by Unesco with the support of the United Nations and its Specialized Agencies in 1952 and 1950 respectively, were transformed in 1969 into Regional Centres for Functional Literacy in Rural Zones, and are playing a vital part in providing technical services of research, training and the production of media to the national literacy programmes in their respective regions.

International advisory committees

In 1966, the General Conference of Unesco at its fourteenth session authorized the Director-General to set up the International Advisory Committee for

Out-of-School Education. This committee in fact grew out of three former committees—the International Committee for the Advancement of Adult Education, the International Committee of Experts on Literacy and the International Committee on Youth—which had existed since 1961, 1964 and 1965 respectively. The new combined committee met for the first time from 18 to 24 March 1968, and included in its agenda 'a consideration of the concept of functional literacy programmes'.

In addition, the International Consultative Liaison Committee for Literacy, which was established in 1966 to contribute to the development of Unesco's programme in this sector, held its second meeting in September 1968, during which it approved a number of recommendations to the Director-General.

An Inter-Agency Meeting on Work-Oriented Literacy was held in December 1967 and again in November 1968, bringing together, at the invitation of the Director-General of Unesco, senior officials of the United Nations Development Programme, the International Labour Organisation, the Food and Agriculture Organization, the World Health Organization and the World Food Programme, to work out a policy for their collaboration in the Experimental World Literacy Programme. The fact that the United Nations and so many of its Specialized Agencies are directly concerned indicates that literacy is no longer regarded as the sole responsibility of an educational organization but as a vital factor in agricultural and industrial development, in the improvement of nutrition and health, and in the achievement of balanced social and economic development throughout the world.

THE ANATOMY OF WORLD LITERACY

This nerve system of international collaboration must not, of course, be seen as something separate but as a vital part of the anatomy of literacy in the world as a whole. Indeed the mutual aid between countries and groups of countries, the bilateral aid offered by the wealthier countries, the activities of the international voluntary organizations, and the multilateral technical assistance of the United Nations Organizations have no other purpose than to support the efforts of governments and people in the countries still suffering from mass illiteracy, on whom the main responsibility for literacy work must rest. We are witnessing, therefore, the progressive enlargement and fusion of national and international endeavours into a real World Literacy Programme.

THE EXPERIMENTAL WORLD LITERACY PROGRAMME

In 1964, the General Conference of Unesco at its thirteenth Session authorized the Director-General 'to collaborate with the international organizations concerned in making a selection of projects for the eradication of illiteracy in not more than eight countries to be progressively developed as experimental

projects, and in obtaining financial and other support for this purpose'.[1] This was the birth of the Experimental World Literacy Programme. It has since grown beyond its original limits and received further endorsement by the General Conference at its fifteenth session in 1968, when the Director-General was authorized to 'continue to implement and extend the Experimental World Literacy Programme, and, in particular: (a) to continue to provide Unesco assistance, to the full extent of the resources available for current functional literacy pilot projects; (b) to encourage new projects and make maximum use of them in experimenting with new teaching approaches, methods and materials . . .'[2]

By the end of July 1969, fifty-two Member States had expressed a desire to take part in the programme.

When a request is received, it is Unesco's policy to send to the country in question a small advisory mission, generally composed of a development economist and an adult educator or literacy specialist, to work with the national authorities in drawing up detailed plans for literacy development as required by the specific needs of the country. Countries which have asked to participate in the Experimental World Literacy Programme are listed below (thirty-eight countries which have received missions are indicated in italics):

Africa : *Malawi, Mali,* Mauritania, *Mauritius, Niger,* Nigeria, Senegal, *Sierra Leone, Cameroon, Republic of the Congo,* Democratic Republic of the Congo, *Ethiopia,* Gabon, *Ghana, Guinea, Kenya, Liberia, Madagascar,* Somalia, *Tanzania, Togo, Zambia.*

Asia: *Afghanistan, India, Iran, Laos, Malaysia, Nepal, Pakistan,* Philippines, Turkey, Republic of Viet-Nam.

Latin America: *Bolivia, Brazil,* Costa Rica, Dominican Republic, *Ecuador, El Salvador, Guatemala,* Haiti, *Honduras, Panama,* Paraguay, *Peru, Venezuela.*

Arab States: *Algeria, Iraq, Libya, Sudan, Syria,* Tunisia, *United Arab Republic.*

As a result of the above thirty-eight missions a variety of experimental projects have been developed with the advice and assistance of Unesco and of other international organizations.[3] We can distinguish five main categories of projects:

1. Large-scale experimental and pilot projects which receive financial assistance from the United Nations Development Programme (Special Fund). These are now in operation in nine countries (Algeria, Ecuador, Iran, Mali, Ethiopia, Guinea, Madagascar,[4] Sudan, Tanzania), the last five having been functioning since June 1967.

1. 13C/Resolution 1.271.
2. 15C/Resolution 1.335.
3. Countries which have experimental projects are listed in Tables 5 and 6.
4. Preliminary operations started in October 1968.

2. Large-scale experimental pilot projects financed from national sources only, but assisted by international experts from Unesco and other Agencies. Only one of these projects has so far been established, that in Venezuela; another three, in El Salvador, Libya and Zambia, have been prepared.
3. Large-scale experimental pilot projects financed from national sources assisted by bilateral (public or private) funds. One such project, in Niger, with a contribution from a Swiss foundation, is about to be launched, and another in Afghanistan, with the assistance of the Swedish International Development Authority (SIDA).
4. Projects in which a functional literacy component is included in development schemes, the main responsibility for which lies with another Specialized Agency of the United Nations. This category so far includes agricultural development projects carried out with the assistance of FAO in India and Syria, with Unesco responsible for assisting the functional literacy service.
5. Smaller and sometimes shorter-term projects ('micro-experiments') in which Unesco experts are assisting the local authorities in carrying out research and experiments with teaching methods, the production of teaching aids and the use of audio-visual media. These have so far been established in seven countries, namely Algeria, Brazil, Chile, Jamaica, Nigeria, Tunisia and Upper Volta.

Table 5 below summarizes the situation of projects in the first four categories and Table 7 gives an outline of the micro-experiments in the last category.

Technical assistance to literacy projects outside the Experimental World Literacy Programme

In addition to those countries in which projects or micro-experiments of the Experimental World Literacy Programme are being undertaken, a number of other countries have received Unesco technical assistance for adult literacy programmes from 1967 to 1969. These are, in Africa: Chad, Republic of the Congo, Democratic Republic of the Congo, Gabon, Kenya, Liberia, Mauritania, Senegal, Swaziland, Togo, Uganda, Zambia; in Asia: Afghanistan, Indonesia, Laos, Republic of Viet-Nam; in Latin America: Guatemala, Paraguay ; and in the Arab States: Libya, Morocco, Saudi Arabia.

AIMS OF THE EXPERIMENTAL WORLD LITERACY PROGRAMME

Although they differ in size, scope and duration, the experimental projects in the World Literacy Programme have much in common. They are experimental in two senses: first they explore and evaluate the relationship between functional literacy and development, and second, they apply and test new

methods. These new methods aim at integrating literacy teaching with technical and vocational training and adapting this to the needs of specific occupations. They determine the content for functional literacy, and train and build this into appropriate media and into the training of teachers and instructors. In short, they explore a variety of new approaches to the education and training of illiterate adults.

The experimental aims of these projects account for the high *per capita* cost per adult to be made functionally literate, revealed by comparison of the seventh and ninth columns of Table 5. If in the course of the projects' implementation, these new methods prove successful, they will be progressively extended to greater numbers of illiterates and the cost *per capita* will decrease correspondingly as the initial costs of the experimentation and research are more widely spread.

Communicating the results of experiments

Since one aim of these projects is a cross-fertilization of literacy programmes throughout the world, an important element is evaluation and reporting, to enable the experience gained in each to be made available to every country and to planners and organizers of literacy programmes throughout the world. Unesco, with its world-wide network of communications, its facility for bringing together experts in conferences and meetings and for publishing reports and documents in many languages, is particularly well equipped for this role of cross-fertilization.

The responsibility of governments

Full responsibility for the policy and operation of projects is vested in the governments of the countries in which they are located. As indicated in Table 5, the national contribution to their financing is far in excess of the contribution from international sources, and national staff far outnumber the international experts engaged. In particular, the director of the project is always a national of the country, the senior Unesco expert having the title and functions of Chief Technical Adviser. His appointment, and those of all other international specialists, must be approved by the national government.

This operational responsibility of the national authorities is consonant with the cardinal principle that the international organizations are at the service of their Member States and are prohibited from intervening in matters which are essentially of domestic jurisdiction. Two obligations, are, however, implicit in the operational plans and agreements signed by the national authorities and Unesco: that the project should conform to the broad aims of the Experimental World Literacy Programme, and that objective evaluation should be carried out along established lines and published to the world.

TABLE 5. Situation of projects in the Experimental World Literacy Programme: major pilot projects

Country	Projects	Starting date (plan of operation signed)	National ministry or authority responsible	International organizations involved	Total number of international specialists	Total cost of projects (U.S.$)	International contribution (U.S.$)	Estimated number of adults to be made literate
Algeria	Staoueli (rural area); Arzew (industrial); Bou Namoussa (rural and industrial)	3.I.1967	Centre National d'Alphabétisation (Ministry of Education)	Unesco ILO	6 2	4 160 676	1 076 200	100 000
Ecuador	Canton of Cuenca (artisanal); Canton of Milagro (co-operatives); The Pesillo Hacienda (rural)	13.IV.1967	Co-ordination Committee attached to the Ministry of Education	Unesco ILO FAO	6 2 2	2 896 250	1 050 300	32 900
Ethiopia	Marma and Gourma sub-districts (agriculture); Wollamo (Soddo) (agriculture); Chillalo district (mixed agriculture); Shea Province (industrial)	31.VII.1968	Ministry of Education	Unesco FAO ILO	7 4 2	3 577 950	1 369 850	100 000
Guinea	Conakry (industrial); Lower Guinea; Central Guinea; Forest Guinea (agricultural)	28.X.1968	Secrétariat à la Formation	Unesco	8	2 428 100	1 092 500	78 500

India	Functional literacy in districts: 3 in 1967-68; 10 in 1968-69; 75 in 1969-70; 100 in 1970-71	Not signed as yet	Ministries of Agriculture, Education, and Information	FAO Unesco	5 2	Not yet specified	1 433 100	Not specified
Iran	Greater Dez (agricultural); Isfahan (rural and industrial)	24.I.1967	Ministry of Education	Unesco ILO	11 1	2 890 346	1 212 900	100 000
Madagascar	Farafangana; Befandriana Tulear (rural)	Not signed as yet	Secrétariat d'Etat au Développement	Unesco	8	2 013 688	789 500	Not specified
Mali	Segou Area (rural); Bamako area (industrial)	11.II.1967	Ministry of Education	Unesco ILO	7 1	4 247 112	1 067 100	110 000
Sudan	Khashm Al-Qirbah (agricultural); Khartoum-North (industrial)	19.II.1969	Ministry of Education	Unesco FAO	5 2	1 193 200	471 000	70 000
Syria	Ghab region	Not signed as yet	Ministry of Agriculture and Agrarian Reform	FAO Unesco	5 2	426 050 (literacy component only)	262 850	30 000
Tanzania	Mara; Mwanza; Shinyanga; West Lake (agricultural)	20.IX.1967	Ministry of Regional Administration and Rural Development	Unesco FAO ILO	7 1 1	6 411 231	1 065 800	250 000
Venezuela	Lara; Trufillo; Portuguesa	28.V.1968	Ministry of Education	Unesco	1	11 000 000 (approx.)	120 000 (approx.)	280 000

TABLE 6. Situation of projects in the Experimental World Literacy Programme: micro-experiments

Country	Brief description	Starting date	National ministry or authority responsible	International organizations involved	Number of international specialists
Algeria	To assist in the effective use of new mass media and techniques in correspondence courses for in-service teacher training and out-of-school education	September 1968	Centre National d'Enseignement par Correspondance et Institut Pédagogique National	Unesco	2
Brazil	To define functional literacy methods in order to integrate vocational, socio-economic and literacy training	March 1968	Companhia Vale do Rio Doce	Unesco	1
Chile	To plan, carry out and co-ordinate a programme of training and research for agrarian reform within the framework of over-all national development	February 1968	Corporación de Fomentó de la Producción (CORFO) Consejo Superior de Fomento Agropecuario	FAO Unesco	6 1
Jamaica	To develop, inform and diversify functional literacy programmes through radio and television	November 1968	Literacy Office Ministry of Youth and Community Welfare	Unesco	1
Nigeria	To impart reading and numeracy skills to illiterate and semi-illiterate adults engaged in tobacco growing	October 1967	Nigerian Tobacco Company and the Government of the Western State of Nigeria	Unesco	1

Tunisia	To produce and evaluate simple, low-cost efficient functional literacy material	January 1968	Institut d'Enseignement pour Adultes (Secrétariat d'Etat et Affaires Culturelles)	Unesco	1
Upper Volta	To promote the possibilities of women's access to education, including literacy component	March 1969	Ministry of Education	Unesco	4

NEW PROJECTS IN THE WORLD LITERACY PROGRAMME

Seven major UNDP-assisted pilot projects have been started in the past two years. These are in Ethiopia, Guinea, India, Madagascar, Sudan, Syria and Tanzania. In this review of recent developments it is relevant to give some emphasis to these new projects.

The programme in Ethiopia concerns three agricultural sectors and one important industrial area. The object of the programme is to achieve functional literacy among 100,000 adult workers. Training is given in Amharic and covers not only basic communication skills, but also emphasizes the current vocabularies of agricultural and industrial practice. Exceptional importance has been given to inter-Agency co-operation in assisting the Government of Ethiopia to carry out this project; the international team of experts include seven from Unesco, four from FAO and two from ILO.

The main purpose of the Guinea project which is to last five years, is to assist the government to organize and implement two pilot work-oriented literacy experiments. The first (industrial) sub-project aims to provide technical and vocational training in industrial enterprises in Conakry, the national vegetable and meat canning factory at Mamou, and sawmills near Seredou, where a timber project organized by FAO with UNDP assistance is in operation. The second sub-project aims to make literate some 75,000 agricultural workers in three agricultural areas in Lower Guinea, Central Guinea and Forest Guinea.

In India, the purpose of the project is to assist the government in its High Yielding Varieties Programme of food-grain production through the training of farmers, utilizing farm radio broadcasting supported by functional literacy courses. The project is run by the Indian Government and assisted by FAO and Unesco. About 5 million farming families will be concerned, the aim being to increase agricultural production as much and as quickly as possible. The programme of functional literacy is carefully phased and is scheduled to include 100 districts by 1970-71.

The Madagascar project is divided into three sub-projects. The areas chosen have a level of education well below the national average, but possess established administrative and technical services, on-going projects of rural development, aid from external sources, and a clear growth potential from subsistence level to one of a cash economy. The project presents the peculiar characteristic of being the first experimental project where literacy is closely linked with rural 'animation'.

The Sudan project is to set up the basic infrastructure of a functional literacy scheme in two areas, one agricultural where settlement schemes based on a government irrigation plan are being initiated, and the other industrial, where the programme will comprise both literacy and skills training.

The Sudan Government has, however, expressed the wish, which has the concurrence of UNDP and Unesco, to follow up the first three-year phase with a second of four years, if the results of the first are satisfactory.

The Syrian project region consists of 65,000 hectares of land (approximately 160,000 acres) which has been reclaimed by irrigation for agriculture. FAO is the United Nations Agency responsible for the agricultural aspects of the programme; the literacy component has been subcontracted to Unesco in order to help the government in training local staff for functional literacy. This part of the programme is intended to serve as a preparatory phase for an expanded functional literacy programme to be carried out by the government in other development areas. The Government of Syria has requested UNDP to support the literacy component, in view of the fact that illiteracy in the area constitutes a serious obstacle to agricultural development.

The Tanzanian project is entirely concentrated on rural areas, and applies to four regions lying at the southern end of Lake Victoria which have priority in the five-year development plan. Its aim is to promote the development of this area, particularly by means of very extensive projects for irrigating and mechanizing the growing of cotton and coffee.

The emphasis in this project will be on the use of instructors belonging to different groups—teachers, civil servants, leaders of co-operatives and trade unions—who will be given a preliminary training, which they will complete during the execution of the project. The diversity of the teaching staff should help to keep the balance between the educational, social and vocational sides of the project and lead to simultaneous progress in all three spheres.

Diversity of projects and sub-projects

Each of the major pilot projects in the experimental programme contains several sub-projects in different parts of the country. This enables a variety of experiments to be undertaken in urban and rural areas. In each of these, functional literacy is integrated into a different type of development. Table 7, from a report prepared by the Secretariat for the General Conference of Unesco at its fifteenth session in 1968, illustrates this diversity.[1] The table has been brought up to date to include projects established since 1968. It sets out the administrative structures and development aims of each project.

Table 8 describes briefly the people for whose benefit projects have been established. It also shows the languages in which literacy is taught in the various projects and sub-projects.

1. General Conference document 15C/52: 'The Position as regards Functional Literacy Pilot Projects'.

TABLE 7. Development aims of world literacy projects

Aims of development	Projects	Sub-projects
Reorganization of socio-economic structures		
Agrarian reform	Chile	
	Ecuador	Milagro; Pesillo
Promotion of active participation in community life, in towns and country areas	Madagascar	Faragangana
	Guinea	
Improvement of self-management	Algeria	Sahel (Algiers)
		Arzew (Oran)
Development of co-operatives	Tanzania	Mara; Mwanza; Shinyanga; West Lake
	Ecuador	Milagro
Development of local craft co-operatives	Iran	Isfahan
Agricultural settlement	Ecuador	Milagro
	Ethiopia	Wollamo (Soddo)
Settling of nomadic populations	Sudan	Khashm-al-Qirbah
Improvement of work qualifications and integration of workers into enterprises	Mali	Bamako
	Brazil	Valley of the Rio Doce
	Sudan	Khartoum
Modernization of the primary sector		
Irrigation projects	Iran	Dezful
	Mali	Ségou
	Algeria	Bou Namoussa
	Syria	Valley of the Ghab
	Sudan	Khashm-al-Qirbah
Development of export products	Tanzania	
	Ethiopia	Marma; Gourma; Wollamo (Soddo)
	Mali	Ségou
	Nigeria	Ibadan
Increase in food production	India	
Transformation of subsistence economy into market economy	Ecuador	Pesillo

Aims of development	Projects	Sub-projects
Integrated regional development	Ethiopia	Chillalo
Modernization and mechanization of agricultural techniques	Venezuela	All projects in rural areas
Agricultural extension work and training of farmers	Ethiopia	
	India	
	Mali	Ségou
Development of the secondary sector		
Setting up of small industries for the processing of farm products	Iran	Isfahan
Modernization of craft techniques	Iran	Isfahan
	Ecuador	Cuenca
Modernization of traditional industries	Iran	Isfahan
Setting up of new industries based on advanced technology	Algeria	Arzew; Annaba
	Iran	Reeze

PROBLEMS OF THE EXPERIMENTAL WORLD LITERACY PROGRAMME

Planning

The choice of areas, occupational groups and development schemes containing the necessary combination of factors for experimental projects of functional literacy was not easy. Even in the smaller projects, such as Ibadan (Nigeria), the choice of area proved difficult. There the Unesco expert and the planning team from Ibadan University visited and studied many sectors, including cocoa farming, poultry keeping, shopkeeping and the building trade, before settling on tobacco growing. The choice was based on several factors: first, the tobacco company's extension service was not satisfied with their efforts over the past ten years to reach the people by oral communication and demonstration; second, the vast majority of growers were illiterate or nearly so; third, the growing and curing of tobacco is an intricate operation requiring meticulous attention to detailed rules, which could be communicated more effectively in written and visual form and thus remembered and followed more easily by the growers; fourth, the tobacco company graded the quality of the tobacco it bought very precisely and paid for it on a corresponding scale of prices. This should enable the functional literacy programme to be evaluated by establishing control areas where no literacy classes were established and comparing the prices paid in these areas with those paid to the growers who had been through the functional literacy training.

TABLE 8. Projects, people and languages

Country	Sub-project	People benefited	Languages used for literacy
Major projects			
Algeria	Staoueli (rural)	5 000 farmers and agricultural workers	French and Arabic
	Arzew (industrial)	25 000 industrial workers	
	Bou Namoussa (rural and industrial)	70 000 workers	
Ecuador	Canton of Cuenca (industrial)	15 000 industrial workers	Spanish
	Canton of Milagro (co-operatives)	15 900 farmers	
	The Pesillo Hacienda	2 000 farmers	
Ethiopia	Marma and Gourma sub-districts (agricultural)	50 000 coffee growers	Amharic
	Wollamo/Soddo (agricultural)	45 000 cotton growers	
	Chillalo district (mixed agriculture)		
	Shea Province (industrial)	5 000 industrial workers	
Guinea	Conakry (industrial)	3 500 industrial workers	One of the eight national languages as appropriate: Kissi, Guerzé, Toma, Malinke, Fulami, Soussou, Bamaré and Cognagui
	Lower Guinea, Central Guinea, Forest Guinea (agricultural)	75 000 farmers	
India	Functional literacy in districts: 3 in 1967-68, 10 in 1968-69, 75 in 1969-70, 100 in 1970-71	Farmers (approximately 1 million)	Language of each linguistic area
Iran	Great Dez (agricultural)	45 000 farmers and industrial workers	Farsi
	Isfahan (rural and industrial)		
Madagascar	Farafangana, Befandriana, Tuléar (rural)	Agricultural workers (number not definitely known)	Malagasy

Mali	Segou area (rural)	100 000	cotton and rice producers	French and Bambara
	Bamako area (industrial)	10 000	industrial workers	
Sudan	Khashm Al-Girba (agricultural) Khartoum-North (industrial)		Farmers Industrial workers	Arabic
Syria	Ghab region		Farmers	Arabic
Tanzania	Mara ; Mwanza ; Shinyanga ; West Lake (agricultural)		Farmers (number not yet finalized)	Swahili
Venezuela	Lara Trujillo Portuguesa		Farmers and workers engaged in different activities (agricultural, animal husbandry, handicrafts, industrial)	Spanish
Micro-experiments				
Algeria	Correspondence course (Oran)		Literacy teachers and instructors, semi-illiterates	Arabic and French
Brazil	Companhia Vale do Rio Doce		Industrial workers	Portuguese
Chile	Institute for Training and Research on Agrarian Reform (Santiago)		Land reform beneficiaries	Spanish
Jamaica	Kingston	30 000	illiterate adults	English
Nigeria	Ibadan		Tobacco growers	Yoruba
Tunisia	Co-operative (Mornag Village)		Agricultural co-operative members	Arabic
Upper Volta	Literacy component in the project 'Access of Women to Education' Kongoussi; Po; Banfora	2 500	illiterate women	Moré

From this example it is clear that the selection of areas for functional literacy projects requires careful study of the environment. In a number of pilot projects the problems were complex and the population large or heterogeneous, as for example in Isfahan (Iran), where oasis agriculture mixes with many ancient crafts, including carpet weaving, and a number of new large industries. In others, the exact aims of functional literacy in regard to local development were not established with sufficient precision, as in the industrial sectors of Algeria and the extensive agricultural zone of Tanzania. In yet other projects progress has been affected by unforeseen circumstances and changes in the economic or social situation, in the aims of development, in investment and employment policies, or, as in Dezful (Iran), in land reform.

Administration and co-ordination

It has always been recognized that the integration of literacy into development schemes would involve a far more complex operation than the old-fashioned literacy-for-its-own-sake campaigns. In the first place, the new approach demands great flexibility on the part of the responsible authority. It also demands the co-operation of many agencies, different ministries and government services, industrial managements and trade unions and universities, as well as individual specialists in various fields. This co-operation is not easy to obtain if only because those in responsible positions in each department or agency are preoccupied with their own projects and activities.

Services within Ministries of Education administer six of the UNDP-assisted projects. These ministries are already heavily burdened with the task of expanding and improving the school system and are not generally prepared or equipped to co-ordinate or administer a new inter-disciplinary activity far removed from their traditional responsibilities. To achieve the necessary co-ordination, the plan of operation of each project provides for the establishment of an inter-ministerial advisory committee on which the Resident Representative of UNDP and the Unesco Chief Technical Adviser sit without a vote.

Integration of functional literacy into local development

It is not only at the national level that co-ordination is needed; the functional literacy component has to be integrated into local development schemes. This complication has, however, been overcome in many of the projects where functional literacy has become a local initiative aided by external technical assistance. Successful efforts have been made in most projects to obtain the active assistance of local technical staff in studying needs and problems and preparing training programmes. In several projects it has been possible to recruit local instructors from technical services; this has happened in Mali, Tunisia, Iran, and Brazil. Great efforts have also been made to persuade

industrial or agricultural concerns to take full responsibility for functional literacy. A specially successful example is that of the Vale do Rio Doce mines in Brazil where the company financed, organized and carried out the whole programme. In a number of cases workers have been given facilities to follow literacy courses during working hours without loss of pay, as in Brazil, or at least to count part of the literacy course as working time, as in Algeria, Mali and Guinea.

Staffing

The agreements signed between the governments and Unesco in regard to the major pilot projects usually envisage a staff of some ten international specialists and several times that number of national specialists. This national staff includes the project director, specialists for the supporting services, and supervisors, as well as large numbers of teachers, instructors, extension workers, and other 'front-line' personnel. The international staff is headed by the Chief Technical Adviser, and generally includes specialists appointed by Unesco in adult literacy teaching and the preparation of teaching materials, in the production and use of audio-visual media, and in evaluation. In addition, other United Nations Agencies may provide experts in co-operative education, craft and industrial training, rural construction (ILO), agricultural extension, agricultural co-operatives, and home economics (FAO). The provision of the necessary staff has proved a complex operation and much of the first year in each project has been employed in bringing together national and international staff and building them into smooth-working teams.

Adherence to traditional techniques

Even where staffing difficulties have been overcome, it has not always been easy for personnel to adopt and apply the new techniques. The tendency has been to adhere to traditional methods in practice, while accepting the new approach in principle. In many instances, staff drawn from the formal education system and ministries of education find it understandably difficult to change their academic methods and traditional primer-centred literacy teaching and to adopt a functional approach based on adult needs and problems. The selection and training of teacher-instructors and extension workers to integrate literacy teaching with vocational training and rural extension programmes has accordingly been one of the preoccupations in the experimental projects.

Supporting services

Associated with these requirements has been the need for initiating and staffing supporting technical services for training, production of media and

research and evaluation. Such staff must be highly trained and specialized. They may also face a conflict between the need for careful study and action research as a basis for the preparation of good training programmes and educational media on the one hand, and on the other hand, the pressure to get these programmes and media operative as quickly as possible. This is in essence a conflict between the experimental and the operational aims of the projects, between the need for sound planning and the demand for quick results.

A comparison of Table 9 and the third column of Table 8 shows that the number of adults enrolled in classes and courses is still far short of the targets set. It also shows, however, that once the planning stage is over, the number of people affected will rise rapidly.

Micro-experiments

A revolution in educational policy of the kind envisaged in the experimental functional literacy projects cannot and should not be hurried. The micro-experiments which have been allowed to grow quietly with much more limited objectives have been among the most successful.

These micro-experiments rang widely in their aims and organization (see Tables 7 and 8 earlier). In most cases they are carried out with the full-time or part-time assistance of one or two Unesco specialist consultants, working with governmental authorities, universities or sometimes directly with the management and workers in an industrial enterprise. In all cases they aim to explore the application of functional literacy to particular environments and occupation groups.

The micro-project in Brazil, for example, is situated in an iron mine. In Nigeria the project has been started by the Adult Education Department of

TABLE 9. Examples of adult enrolments

Country	Cycle	Adults registered
Algeria	First course	1 735
	Second course	639
Ecuador	First course	1 027
	Second course	1 356
	Third course	1 718
Iran	First course	1 850
	Second course	6 212
Mali	First course	1 000
Tanzania	First course (experimental)	493
TOTAL		16 030

the University of Ibadan, which entered into an agreement with Unesco to carry out experiments in functional literacy, as part of a programme to help local tobacco growers. In Tunisia, the micro-experiment is concerned with a new co-operative movement which is being developed and has as its immediate aim to prepare and pre-test simple, economical and effective media for functional literacy.

ACHIEVEMENTS OF THE EXPERIMENTAL WORLD LITERACY PROGRAMME

The Experimental World Literacy Programme, though its aims are comparatively simple, includes a wide diversity of projects. It is natural that the more ambitious pilot projects have taken longer to launch than the small-scale micro-experiments, but already both types are beginning to show important and interesting results.

The various governments which have undertaken either pilot projects, or micro-experiments, or activities based on the new concept of literacy linked with development, have considered the potential of work-oriented literacy to be significant—sufficiently significant to persuade them to devote considerable resources to these projects.

In exploring new ways of making literacy functional by relating it directly to development, the projects have brought economists and specialists from many fields into the planning of functional literacy projects. They have secured the collaboration of international agencies, government departments, industrial and agricultural projects managements, trade unions and other non-governmental organizations. They have persuaded universities and specialized institutes to help with research. They have explored, with varying degrees of success, new methods of evaluating the impact of functional literacy on development. Above all, they have provoked interest, exerted influence and invited emulation far beyond their own boundaries.

One of the most encouraging aspects of the programme has been the degree of international co-operation achieved between Unesco, the main executing agency for experimental literacy projects on behalf of governments, and the various other specialized institutions within the United Nations family. This kind of co-operation, which started off tentatively, has steadily increased with the number of projects in which a common interest was found.

The programme is still in its early stages. If its operational success to date is still only modest, it is an achievement that, in the world situation as it is, the impact of these various projects has been world wide. In assessing this achievement, it is important to remember the word 'experimental'. As pioneer projects in uncharted waters, their most valuable service may be in detecting the shoals and rocks for future navigators.

Governments and people mobilize their resources

LEGISLATIVE AND ADMINISTRATIVE MEASURES TO PROMOTE LITERACY

The growing importance attached to literacy has led many governments to pass laws and decrees and to issue administrative orders, defining the aims of their literacy programmes, setting up agencies to plan, co-ordinate and execute them, and imposing special responsibilities upon various bodies or groups of the population. Such laws and decrees passed since 8 September 1967 are listed in Appendix D.

Certain countries[1] have made legal provisions to establish national literacy committees or to reorganize their literacy services. In Madagascar, for example, four decrees were adopted in January 1968 creating three categories of staff in the literacy and community development service within the framework of the civil service, and instituting new diplomas and certificates for those having successfully undergone training for literacy and community development work.

In a number of countries, such as the Dominican Republic, Indonesia, Iran and Paraguay, laws, decrees or ministerial decisions have been adopted, giving priority to literacy programmes, organizing them as interministerial enterprises or including them in general plans for education and social and economic development.

The Prime Minister of the Republic of the Congo has issued a circular letter inviting private enterprises which employ illiterate workers to organize literacy classes in collaboration with the national service concerned. In the United Arab Republic a draft law has been submitted for ratification to the National Assembly. This imposes upon private enterprises the duty to provide literacy courses to their illiterate workers, and stipulates that five years after its ratification it will be illegal to employ illiterate adults. Libya has issued a decree which makes literacy classes compulsory for illiterate adults; Syria has also submitted a draft law which obliges illiterate citizens under the

1. Argentina, Brazil, Chad, Chile, Ecuador, Haiti, Togo.

age of 45 who work in the industrial sector to attend literacy courses wherever possible. The Minister of Education of Guatemala has decreed that, before their assignment, student-teachers must have made at least six adults literate.

At least twenty-seven countries have reformed or reinforced their existing administrative structures or created new ones to deal with adult literacy.[1]

Responsibility vested in one ministry

Mass literacy programmes are generally administered by a single ministry. In many countries, such as Burma, Cameroon, the Dominican Republic, Jordan and the Republic of the Congo, the Ministry of Education holds the responsibility. In Nigeria, the Ministry of Economic Planning and Social Development is responsible for adult education and literacy; in Ghana it is the Department of Social Welfare and Community Development, and in Syria the Ministry of Culture.

Where the control of a national literacy campaign is vested in a single government department or service, the structure and staff may still vary considerably. The minimum staff generally considered necessary is a small unit at headquarters for planning, administration and finance, a specialist unit, either within the headquarters staff or in a separate centre, for the production of media; a unit or service for the training of field workers and teachers; an inspectorate or staff of supervisors and organizers providing the link between headquarters and the teachers and workers in the field and finally, of course, the teachers and workers themselves.

To implement national literacy programmes, there is generally some decentralization of responsibility, and in most cases the service has its officers, sometimes with small staff units, in provinces and districts. Zambia, for example, employs more than 100 provincial, district and local literacy officers under the Department of Community Development. In the United Arab Republic, the Ministry of Education earmarks funds in the general education budget for literacy work, and transfers them to the provincial education authorities. A similar system is adopted in the Republic of China, where the Ministry of Education has instructed local governments to set up annual plans to eliminate illiteracy. Another example is Argentina, where the operational responsibility is decentralized from the National Direction of Adult Education in the Secretariat of State for Culture and Education to provincial bodies. In Indonesia, steering committees have been established in every provincial capital, and branches created in every regency, sub-district and village.

1. Chad, Chile, Democratic Republic of the Congo, Ecuador, Ethiopia, Ghana, Guinea, Haiti, Indonesia, Iran, Iraq, Jamaica, Kenya, Kuwait, Malaysia, Mali, Nepal, Niger, Nigeria (W. State), Paraguay, Saudi Arabia, Syria, Tanzania, Thailand, Tunisia, Uganda, United Arab Republic.

2

Responsibility vested in non-governmental bodies

A somewhat different situation arises where literacy programmes are being conducted by voluntary organizations, with support and perhaps supervision from the government. In these cases, various agreements and arrangements between the government and the voluntary agency exist. This is so in Syria where the Ministry of Culture is supporting the efforts of eighteen voluntary organizations. Similarly, the Bureau of Public Schools in the Philippines, which is entrusted with the implementation of the adult literacy programme, gives support to the Philippines Association for the Advancement of Literacy and its campaign for organizing rural libraries for new literates. In Italy, likewise, a law of 2 April 1968 provides for State grants to the National Union for the Struggle Against Illiteracy (UNLA). The Sebenta Society of Swaziland, a voluntary organization, has entire responsibility for the literacy work in the country and receives private donations and assistance from bilateral and international technical assistance.

Responsibility vested in more than one government department

There are several instances where two or more government departments are conducting literacy programmes more or less independently. In Malaysia the adult education programme under the Ministry of National and Rural Development, which caters for the needs of rural people, is different from the programme of the Ministry of Education, which places emphasis on the needs of formal education including further education for school drop-outs. Literacy programmes in Afghanistan, both functional and traditional, are carried out by three agencies: the Ministry of Education, the Rural Development Department of the Ministry of the Interior, and the Women's Welfare Society.

There is generally some form of co-ordinating arrangement whereby the departments can collaborate effectively in their common purpose. A National Directorate of Adult Education in Bolivia co-ordinates the literacy work of the Ministry of Education (in urban areas) and the Ministry of Rural Affairs (in rural areas). Certain technical services for the training of teachers and extension workers, or the production of media for literacy and informal adult education are sometimes shared, as in Ghana, where the Social Welfare and Community Development Department, which organizes literacy activities, has close working relations in the field with technical departments such as those of the Ministries of Agriculture and Health, and depends upon the Ghana Language Bureau for the production of books and other media.

FUNCTIONAL LITERACY AS AN INTER-DEPARTMENTAL ACTIVITY

Within the last few years more and more countries have been adopting the new concept of functional literacy. Consequently they are finding it necessary

to integrate literacy with other forms of adult education, technical and vocational training, extension, 'animation' and community development and to relate this comprehensive training programme to national economic development plans and regional and local development projects. This requires new, more complex and more flexible administrative structures and forms of organization.

Although a single ministry or department may have primary responsibility within the government, functional literacy is regarded as an inter-departmental activity which interests all government departments concerned with educational, social and economic development and requires the collaboration of most of them. Many countries have accordingly established inter-departmental machinery for co-ordinating literacy. The Government of Kenya, although it has not yet embarked on a functional literacy programme, has recognized the need for co-ordination by setting up an Adult Education Board which regularly brings together representatives of ten ministries and twelve other agencies and deals with the literacy programme in the broad framework of adult education. The structure for inter-departmental co-operation has also to cater for joint planning of projects and programmes at regional, provincial and local levels. The necessity for day-to-day collaboration between different government departments and non-governmental agencies, voluntary bodies, industrial enterprises, trade unions and co-operative organizations has been realized by many countries; for example, inter-ministerial, provincial or district committees have been formed in Iraq, Niger and Uganda to co-ordinate adult literacy and related programmes, to plan projects and advise on methods. So also in all the major pilot projects of the Experimental World Literacy Programme, where co-ordination machinery is provided for in the plans of operation.

COSTS AND FINANCE

It is not easy to discover the amount of money spent on literacy in any country. Literacy work may be done by a variety of government departments and agencies, each financed from a different budget. However, thirty-eight countries replied to the Unesco questionnaire on this matter and these replies have been summarized in Table 10. Of these countries, thirty-one have given figures for more than one year, from which it is possible to see that four have reduced their expenditure on literacy, eleven record no change and sixteen have increased their budgets.

It is clear that total budgets vary, not only because the programme has expanded, or occasionally contracted (where, for example, illiteracy has been reduced) but also because the programme has changed its character. A programme of functional literacy, which aims at a year or more of intensive and varied training, and requires more complex structures and services to integrate and organize it, will inevitably cost more for each illiterate adult trained than

a mass campaign using volunteer teachers and providing a few months of elementary literacy for all. However, a comparison of the two programmes in terms of costs alone would be unrealistic, for functional literacy is an educational package, combining literacy with a varied range of training and education, so that it should be regarded not as more expensive literacy but as the total cost of several components that were once considered separately.

In most countries the main source of funds for literacy is the national budget. In some cases it is the budget of a single responsible ministry, in others contributions from several ministries and agencies may flow into functional literacy projects. In a number of countries funds for literacy are collected by voluntary contributions, sales of flags or lotteries. Brazil, for example, introduced in 1969 a compulsory stamp of 20 centavos on all letters and parcels dispatched within the country and a tax on betting, the proceeds of both being used to finance literacy.

SUPPORT FROM PUBLIC AND PRIVATE ENTERPRISE

As industrial concerns come to recognize the value of a literate work force, they are increasingly ready to contribute to the financing of work-oriented literacy. There are certain industries in Brazil which contribute funds, equipment or premises, and allow workers time off with pay to attend literacy classes. Since 1965, also, in Brazil all industrial or commercial enterprises deduct 1.5 per cent of the salaries of their employees as a contribution to a literacy fund. In the first year, $40 million were collected. In the Republic of the Congo the Chamber of Commerce has given a sum of 450,000 CFA[1] for literacy in 1969, and numerous public and private enterprises organize functional literacy courses for their workers, provide equipment for the classrooms and pay the wages of instructors, following procedures laid down by the government.

Special efforts have been made to encourage business and industrial concerns to support literacy projects. In this specific context, the Round Table Conference of Bankers, Economists and Financiers made a number of valuable suggestions.[2] In particular, they recommended that 'the resources of modern enterprise, industrial and agricultural, as well as of banks . . . and specialized credit agencies should be brought to bear on training illiterate workers and farmers'. They further suggested that governments provide 'tax and other incentives to enterprises and agencies which engage in approved literacy programmes'. They considered that 'special loans should be organized to facilitate the initiation of functional literacy activities in small and middle-scale industry'.

1. $1 = 245 CFA francs.
2. *Round Table of Bankers, Economists and Financiers on Literacy, Rome, 11-13 February 1969. Final Report*, p. 7, Paris, Unesco, 1969. (ED/BEFLIT/69/3.)

TABLE 10. Allocations to literacy from national education budgets.
Figures in parentheses indicate percentage of national education budgets (where known)

Country	Currency	Rate to U.S.$	Expenditure			Notes
			1967	1968	1969	
Afghanistan	Afghani	75	4 501 807	4 649 027		Increase
Burundi	Franc (Br.)	87.5	—[1]	—[1]	—[1]	—
Cameroon	Franc (CFA)	245	700 000 000	700 000 000	700 000 000	No change
Chad	Franc (CFA)	245	1 500 000	1 500 000		No change
Chile			(0.9)	(1.7)		Increase
Republic of the Congo	Franc (CFA)	245	9 950 000 (0.5)	11 084 000 (0.55)	14 445 000 (0.54)	Increase
Democratic Republic of the Congo	Zaire	0.50		851 000 (2.12)	851 000 (2.12)	No change
Dominican Republic	Peso	1	607 680	811 567	811 567	No change
Ecuador	Sucre	23	4 900 000[2]		9 000 000	Increase
El Salvador	Colón	2.5	678 800	649 000		Slight decrease
Gabon	Franc (CFA)	245	12 000 000	10 178 000	9 276 000	Decrease
Greece	Drachma	30	5 500 000	5 500 000	5 500 000	No change
Guatemala	Quetzal	1			121 845	—
Guinea	Franc (CFA)	245			20 000 000	—
Indonesia	New Rupiah	375	—[3]	—[3]	—[3]	—

Iran	Riyal	75	125 862 026	240 282 866	433 861 065	Increase
Iraq	Dinar	0.3571			($)140 000	—
Israel	Pound	3.50	1967/68 1 986 000	1968/69 1 986 000		No change
Jordan	Dinar	0.3571		1968/69 (0.28)	1969/70 (0.29)	Increase
Kenya	Shilling	7.14	1966/67 £20 000[4]	1967/68 £42 000[4]	1968/69 £55 000[4]	Increase
Kuwait	Dinar	0.3571	1967/68 250 000	1968/69 260 000		Increase
Lebanon	Pound	3.25			17 000	—
Libya	Pound	0.3571	1967/68 102 117	1968/69 129 395		Increase
Mali	Franc (Mali)	490	1967/68 48 000 000	50 000 000[5]	48 500 000[6]	Slight decrease
Nepal	Rupee	10.12	Up to 1967 (1.0)	(1.4)	(1.4)	No change
Niger	Franc (CFA)	245	39 500 000	41 397 000	41 397 000	No change
Pakistan (East)	Rupee	4.762	1967/68 641 000	1968/69 646 000		Increase
Paraguay	Guaraní	124	2 919 600	4 392 600	6 097 200	Increase
Philippines	Peso	3.86	1967/68 377 480	1968/69 377 480		No change
Saudi Arabia	Riyal	4.50	1967/68 2 400 730	1968/69 2 985 348		Increase

Country	Currency	Rate to U.S.$	Expenditure			Notes
			1967	1968	1969	
Singapore	Dollar	3.03	800 000[7]	700 000		Decrease
Syria	Pound	4.16	1966/67 94 000	1967/68 119 500		Increase
Tanzania	Shilling	7.14	—[8]	—[8]	—[8]	—
Thailand	Baht	20.70	8 970 700	11 305 000	13 472 700	Increase
Togo	Franc (CFA)	245	($)54 600	($)54 600	($)54 600	No change
Tunisia	Dinar	0.525	(1.2)	(1.2)	(1.2)	No change
Venezuela	Bolivar	4.48	14 240 348	15 176 551		Increase
Zambia[9]	Kwacha	0.7142	249 250	302 208	366 000	Increase

1. Provision for five-year plan, 25,000,000 francs.
2. Figure for 1966.
3. Expenses are met in the following proportions: national budget, 50 per cent; provincial budget, 25 per cent; local community, 25 per cent.
4. Kenya changed the name of its currency during the period of this survey. No exchange rate for the pound is given.
5. Figure for July to December 1968.
6. Figure for January to June 1969.
7. Figure for 1965.
8. From 1967 to 1969 the government has spent 1,438,000 shillings on literacy work. This amount excludes salaries of ministerial staff engaged in the work.
9. For the period 1966-70 a budget of £74.1 million is foreseen for education. Out of this budget £1.5 million (2.1 per cent) is devoted to adult literacy. Zambia also changed its currency during the period under review.

BILATERAL ASSISTANCE

Another important source of finance for literacy, whether in cash or kind, is bilateral aid from richer countries. One of the ways in which individuals in such countries contribute funds for literacy is by buying Unesco gift coupons, which are then used to send much needed equipment to projects in developing countries. Some $200,000 worth of aid has been sent to literacy projects by this means.

Special fund-raising schemes have been launched in certain countries. The Scandinavian countries (Denmark, Finland, Norway and Sweden) have set targets of $121,800 and $75,000 worth of paper and ink to be raised by voluntary contributions. To date, over $70,000 has been contributed to the Tanzania Gift Coupon Campaign by the Nordic countries. Finnish students raised some $4,200 for the Joint Nordic Campaign supporting Unesco's literacy project in Tanzania. In December 1968, at the inauguration of the traditional 'Christmas Street', Helsinki, students marched behind the usual procession, urging people to give money for teaching illiterates. The organizers were the Ecumenical and Christian Student Associations, who called their campaign 'Nälkäjoulu'—Hunger Christmas.

The Swedish National Commission for Unesco has made a gift of $8,000 to strengthen the Experimental Literacy Project in Tanzania. The Swedish International Development Authority (SIDA) has also agreed to finance a Unesco literacy component in the FAO/SIDA project in Afghanistan on agricultural credits and co-operatives.

The Unesco Centrum of the Netherlands has also given $80,000 to the farmers' training project in India to help to finance a literacy component. Canada has also given bilateral aid to Jamaica to the value of more than $50,000 and the Government of Italy has donated an all-purpose vehicle to the literacy programme in Tunisia. A drive to raise $100,000 for the literacy campaign through a sale of book plates donated by the Amalgamated Lithographers of America was launched recently at the United Nations. The Swiss International Foundation for the Accelerated Training of Modern Man (FOPOTEC) has offered assistance to the Government of Niger for an intensive literacy programme for rice producers. This contribution is to be guaranteed by the Swiss Federal Government.

Paraguay has received from the Organization of American States an expert and fellowships in literacy and 32,000 brochures. In addition, Venezuela has offered 110,000 literacy primers. France has assisted Gabon in providing the services of an expert and two volunteers, equipment for radio forums and public libraries to which the United States of America has also contributed. France has also offered paper to the Republic of the Congo. The People's Republic of China has assisted Guinea by printing free of charge 120,000

literacy primers, and the Republic of the Congo and Gabon by providing them with chalk, copy books and equipment for radio forums.

INTERNATIONAL VOLUNTARY FUND FOR LITERACY

In order to provide an effective system for channelling contributions to projects in different countries, Unesco established in June 1966 an International Voluntary Fund for Literacy. Thanks to generous contributions from H.I.M. the Shahinshah of Iran and also from the Central African Republic, Cyprus, Mali, Morocco, Tunisia and many private citizens, as well as the Director-General of Unesco, the fund has collected $740,000 and disbursed $255,000 since September 1967.

A typical example of international collaboration is reported from the functional literacy projects of Togo, where voluntary contributions by Unesco Member States have furnished equipment for the production of teaching materials to the value of $5,434; the United States Peace Corps is attaching an artist for the illustration of these materials; the Regional Agency for Planning and Development (SORAD), an independent agency which is charged with agricultural development and the provision of credit, is placing its extension agents at the disposal of the projects and is producing the technical data necessary for the preparation of reading matter.

THE MOBILIZATION OF POPULAR EFFORT

Parallel to the action of governments, non-governmental and voluntary organizations have mobilized their members to take an active part in the struggle against illiteracy.[1] The trade union movement has been particularly effective. The General Confederation of Labour has launched a literacy campaign in France for immigrant workers; the National Confederation of Workers in Guinea has introduced literacy into numerous State enterprises and in Algeria trade unionists have given support to the National Centre for Literacy and to the functional literacy pilot project.

Women's organizations have also been active in literacy programmes all over the world. The International Council of Women printed a special illustrated leaflet and book plate to help their national councils to raise funds and buy gift coupons for literacy teaching projects in Africa, Asia and Latin America. With the money thus raised, the council has been able to equip literacy classes in Cameroon, Colombia, Lebanon, Nigeria and Uganda. The Young Women's Christian Association of the Lebanon organized a five-day course attended by 100 young people, who volunteered their services to teach adult illiterates.

1. *Literacy Projects carried out by Non-governmental Organizations*, Paris. Unesco, 1968. (ED/WS/75.)

The Organization of Women of Nepal, the League of Syrian Women for the Defence of Mothers and Children, the Union of Syrian Women and the National Union of Algerian Women, are amongst the many affiliate organizations of the Women's International Democratic Federation which are carrying out literacy programmes and creating literacy centres for the women of their countries. The Young Women's Christian Association is conducting literacy classes for women in Colombia, Hong Kong, India, Jamaica, Nigeria and the United States of America. The Associated Country Women of the World and their member societies are running literacy projects in East Pakistan, India and Southern Rhodesia. In Turkey, their affiliated organization runs four-month courses for women, teaching reading, writing and arithmetic. Girl Guides and Girl Scouts are engaged in literacy work in at least thirty-one countries. In Jamaica, for example, they take special courses to qualify them to teach in literacy classes, and in February 1969 they launched a literacy centre where regular classes are given. In Pakistan, by 1968, 67 adult literacy centres had been established by the Guide Association in which 17,000 adults had learnt to read and write. In Peru, also, groups of girls are trained in functional literacy, and the Association is establishing a library and a recreational centre where evening classes are held. In Tunisia the Union of Tunisian Women has held many meetings in rural areas to explain to the men the importance for the future of their children of letting women attend classes in domestic science, child care and literacy.

THE RECRUITMENT OF TEACHERS

Important as they are, legislation, finance, administrative machinery and technical services are essentially established for the purpose of enabling teachers to teach illiterate adults. Whenever mass illiteracy prevails the most important resource to be mobilized is a corps of teachers.

In a large number of countries primary school teachers are employed on a part-time basis for teaching adult literacy. In Nepal, for instance, there are some 1,450 adult literacy teachers—mostly primary school teachers—working two hours a day in adult literacy education, and in Ceylon in 1967, 213 teachers were doing part-time work in adult education centres.

The payment of these part-time teachers in adult literacy varied from country to country. In Guatemala, for example, private firms, with a view to stimulating the efforts of their employees teaching in literacy classes, give them extra pay. Professional teachers are not financially remunerated but receive points which count towards their administrative promotion; students receive points which count towards their final examination grade. Often, as in Ecuador, remuneration depends on the number of hours given to literacy work. Equally, as in Afghanistan, payment may be based on qualifications. Certain countries, however, make no payment to their part-time literacy

workers. In Burma, teaching is done purely on a voluntary basis, and in Guinea teachers and other civil servants 'voluntarily' devote part of their time to literacy; the Government of El Salvador expects teachers to help literacy classes in addition to their normal duties.

Volunteers have been mobilized from all walks of life. In Spain, in 1968 some 16,000 people with various educational qualifications, including doctors, priests, veterinary officers and agricultural extension workers, collaborated in teaching 3,474 adult classes. The Dominican Republic, Iran and Venezuela use members of the armed forces for literacy teaching. This is also true to some extent in Israel, where teachers employed in the over-all literacy programmes in 1967 and 1968 were: 540 civilian professional teachers, most of them in part-time jobs; 330 girl-soldiers (graduates of teachers' training colleges) working full-time; and some 200 volunteer teachers, also working part-time. In addition, 65 members of the Nahal Farming Brigade (boys and girls) also continued to devote all their time to educational work among adults and youth. They did this by volunteering to add six months to their army service and spending them in new immigrant towns for this express purpose. In Ethiopia there are army and police staff, university teacher training and high school students and extension workers from the Ministry of Agriculture and Ministry of National Community Development working together with school teachers in both general literacy and functional literacy projects. In Mali, more than 2,000 literacy teachers of all professions are charged with the conduct of the teaching programme. They include teachers, agricultural extension workers, literate farmers and workers, as well as various civil servants. In addition to school teachers, the volunteer teachers in Tanzania include literate farmers, government extension officers and leaders of voluntary organizations. A force of 1,054 rural development workers is also involved in literacy work in this country.

Finally, several countries are employing full-time paid literacy workers. In Tunisia, this full-time adult education staff is recruited from those who hold the *baccalauréat* and is trained and paid by the Institute of Adult Education; each one is responsible for four groups of twenty students for thirty hours a week. In Iran, press and radio are used to secure teachers with the required qualifications. Candidates must be over 18, have a high school diploma and pass a qualifying examination. These are then given a three-week training course, conducted by specially prepared instructors. Spain employs a large number of national literacy teachers exclusively for literacy work and these work a full day of five hours with an established salary. Indonesia also has 3,280 full-time officials of the Community Education Directorate who are assigned for literacy work.

THE STUDENT TEACHERS OF TABORA

Perhaps the most inspiring example of the mobilization of teachers is that of a group that mobilized itself and won the 1967 Mohammad Reza Pahlavi Prize for meritorious work in literacy. The students of Tabora, Tanzania, describe the experience in their own words: 'Our literacy campaign started in March 1966, supported by the Community Development Office in Tabora. We secondary school students are the "teachers". In the beginning there were only a few people who came to the classes at the Community Centre, but gradually the numbers increased. We realized, however, that we would reach far more of the illiterate people if we could meet them in their own homes. And so the idea of using the TANU ten house cell (nyumba kumi kumi) was born.

'. . . We reckon that our school alone is giving some king of knowledge to nearly four hundred people in our town. We are doing our best to assist Community Development here in our town, Tabora, first to help the illiterate people in this area; secondly, in the hope that our example will inspire other students to start such work themselves; thirdly, because the experience we get from doing this work in Tabora will help us to be able to start similar projects in our home districts when we leave our Boarding School.

'In our country, everyone is asked to help in building the Nation and we feel that in doing this work we are playing our part.'

Techniques and tactics in literacy

THE QUESTION OF LANGUAGE

Literacy is essentially an extension of the use of language for communication from speaking and listening to writing and reading. Before literacy can be taught, therefore, a question may have to be answered: literacy in what language? In countries where there is a single common language the question is irrelevant, but in any area where several languages are spoken the question may be very relevant indeed, and may involve conflicting social, political and technical considerations.

It is easier for anyone to become literate in his mother tongue than in a foreign language. Indeed, if a person is compelled to use a language in which he does not think and express himself naturally, his self-confidence is sapped, his thinking confused and his communication handicapped. There are, therefore, strong psychological and pedagogical reasons for using the mother tongue as a medium for literacy. There may, however, be powerful and even overriding reasons for not doing so. The desire to create cultural and political solidarity may, for example, lead a government to adopt an official national language as the medium of instruction, even where it is not the mother tongue of the local population.

Another important consideration is the attitude of the adults themselves, and this varies even within a single country. In Togo, for example, members of smaller language groups were very reluctant to learn reading and writing in any language other than their own, whilst in certain villages the farmers demanded that French should be the language of instruction.

An unwritten language—and many languages are still in this category—cannot be used for literacy teaching without long and extensive study by expert linguists. They may have to record its different dialects and determine which should be taken as the norm, endow it with an alphabet, prepare word-lists, establish a grammar and eventually compile a dictionary, an operation requiring anything up to three years. Again, some unwritten languages are spoken by so few people that it is not economical to transcribe them and

to produce the minimum of written material needed to acquire and sustain literacy.

More and more countries are, therefore, giving serious thought to these fundamental problems of language as they develop and refine their literacy programmes. Nevertheless, there is evidence of a great diversity of policy and practice. In a number of countries where several or many languages are spoken—Ethiopia, Iran, the Sudan and Tanzania for example—literacy is taught exclusively in the official national language. In Guinea, on the other hand, the governmental policy is to make people literate in their own language as a first stage. Ghana reports literacy programmes in ten languages, Kenya in six, Niger in five. Togo, with a territory of 56,000 square kilometres and a population of under 2 million, has thirty African languages and distinct dialects, of which two are used in government literacy programmes. In Algeria, both Arabic and French are used and learners may choose in which language they wish to become literate although in rural areas the courses are primarily given in Arabic. In Singapore, a vast programme of language teaching has been launched, which serves both literate and illiterate adults. Bolivia's Education Code lays down that literacy is to be achieved through the vernacular language and Indian languages are used as a first step to learning Spanish. Guatemala, half of whose population of 4.5 million are Indian, has also broken away from the traditional method of providing literacy teaching for Indians in Spanish; recently, experiments have been successfully carried out with literacy work and primers in the Indian languages.

CONTENT IN MASS LITERACY CAMPAIGNS

If the main purpose of literacy is to extend men's control of communication, the question naturally arises: What should be the content of the communication? In the traditional type of literacy campaign the aim is to teach reading and writing and perhaps calculation. Although it is not possible to learn to read without reading about something, the subject matter is subordinate, at least in the early stages, to the purpose of literacy training. In programmes that follow a primary school course, the content may be diversified but is largely determined by the school syllabus.

Most countries with extensive literacy campaigns now have, or are producing, literacy materials specially prepared for adults. This is a welcome departure from earlier tendencies to use books prepared for children in primary schools. The content ranges widely from folk stories, romances and lives of great men, to elementary principles of health, nutrition and agriculture.

CONTENT IN FUNCTIONAL LITERACY PROJECTS

In the new functional projects, literacy is no longer seen as an end in itself, but as a means of gaining useful knowledge and skills. Ideally, functional

literacy is acquired by being used, and used while it is being acquired. It is essentially adult education and training, with literacy as a built-in component. So the substance of what is taught, the technical content, takes on a real importance. It determines and controls the method, the language, the media and even the selection and training of teachers and instructors.

In most of the projects, the content is derived from a study of the environment and of the problems and needs of the illiterates themselves. An even more important innovation is that the illiterates themselves are consulted either by action research and opinion study or through informal discussions. To quote from the report of a regional workshop held in October-November 1968 on the Arab States: 'In functional literacy the problem to be dealt with emanates from concrete and real situations. It is from this reality that functional literacy should start, moving gradually to abstraction, through models, drawings and written symbols, and back to practical applications.'[1]

Thus, in industrial areas, the initial realities are generally the workers' capacities and skills (or lack of them), and the work specification of the jobs they are expected to do. Their training must take them from where they start as illiterate and largely unskilled workers to the point where they can confidently and efficiently carry out their specified jobs. In Mali, technical information has been provided by the management of State enterprises, the Niger Office, and the French Textile Company, who collaborated with the staff of the functional literacy project and made available to them the details of their vocational training schemes. In the Rio Doce iron mines in Brazil, the aim was to improve productivity, and the point of departure was a detailed study of the bottlenecks and anomalies in the various workshops. Among those listed were accidents, wastage, absenteeism, damage to machinery and breakdowns. The functional literacy programme was designed to remedy these.

In rural projects, the content is generally drawn from technical specialists and agricultural extension workers with particular competence in fields relevant to the learners' interests and problems. A team from ASFEC, working in a village in the United Arab Republic found that the crucial problem was failure to dredge the irrigation canals and embodied this subject into its literacy materials.

These innovations are still in an exploratory phase, and reports from both major projects and micro-experiments show an increasing diversity of content. One of the greatest differences resides in the emphasis given to abstraction, and in procedures for 'moving from reality to abstraction and back to practical application'.[2] The unschooled illiterate is not lacking in wisdom or experience,

1. *Regional Workshop for Specialists and Officials concerned with Literacy in the Arab States. Final Report 1968,* p. 68 (original in Arabic). (WS/Ed.M.) Available from ASFEC, Sirs-el-Layyan, Menoufia, Cairo.
2. ASFEC report, op. cit.

but he has not been subjected to the scholastic exercise of arranging his ideas, of generalizing from particular cases, of thinking in abstractions. He tends to think and speak in concrete terms: 'How can I kill these beetles that eat my cotton?' 'When should I put compost on my fields?' He also has great difficulty in deciphering pictures, diagrams or maps, being in most cases unfamiliar with the conventions of reducing three dimensional reality to the two dimensions of a flat surface. The rules of perspective must be learnt; until they are, two lines that join at the horizon will not represent a road, and smaller objects in a picture will remain smaller objects, not just the same-sized objects farther away. The conventions of cartography are, of course, even further removed from the illiterate's frame of reference. Tests in Tunisia have, however, shown that when visual images are related to known realities or to events which have been experienced, the comprehension of pictures is made easier.

To what point then should the illiterate adult be taught symbolism, abstraction and generalization? In the Nigerian functional literacy project, one of the first teaching books was a book about using books. It included progressive lessons in understanding drawings, aerial views, plans, maps and diagrams. Another book dealt with the principles of botany and how plants grow and multiply. The rest of the sixteen reading books concentrated on practical instructions for growing better tobacco. Twelve were programmed instructional manuals designed to teach reading, writing and arithmetic while simultaneously telling the farmer what to do each month in his plantation. The books were so planned that in November all classes were supposed to be learning from the book, 'What to do in December'.

All this has come a long way from graded primers based on simple stories and folk tales. In effect, the content of functional literacy projects is based on specific needs, with every programme tailored to the requirements of the actual situation and the adult learner.

MATERIAL FOR MASS LITERACY CAMPAIGNS

In traditional mass literacy campaigns the material is not generally adapted to specific social or occupational groups or to local situations. The usual practice is to prepare a standard 'literacy kit' for the whole country or for each language group. Most 'literacy kits' include manuals for teachers as well as primers and readers for learners. The primers, readers and follow-up books for the traditional literacy classes, are generally produced by an adult literacy specialist working with an artist and perhaps a group of teachers, who can test the materials in their classes. Sometimes studies are made to discover the reading interests of the illiterates or new-literates: in some cases the texts and illustrations are pre-tested on sample groups of learners or readers. It must, however, be admitted that up to now the production of varied and

suitable material for literacy training and adult education has generally been the exception rather than the rule. Much of the teaching and reading material is remarkable for the poor quality of paper and printing and the dim and confusing illustrations. This is partly due to a very proper desire to keep the costs down, but economy carried so far defeats its own ends and it is hardly surprising that adults remain unenthusiastic about literacy if the books they are given are poorly produced, badly illustrated, and uninteresting and if the only pictures they are shown are unintelligible in terms of their daily life.

Even where books exist, there is the problem of getting them to the reader. Public library services, mobile book vans and book boxes are therefore crucial to the development of a literate society.

Audio-visual aids and the media of mass communication in mass literacy

Some thirteen countries use radio or television or both to make the general public aware of the problem of illiteracy, to encourage adult illiterates to join classes, and for mass education to communicate useful knowledge and new ideas to the public. Several countries have used these and other audio-visual media, such as films and filmstrips or slides, for literacy teaching. In Colombia, radio has been used effectively to guide literacy teachers and their classes. The United Arab Republic has completed one 'literacy by television' course and is launching a new one, using revised books and new methods, with the collaboration of ASFEC. Tunisia also has an important half-hour programme of literacy teaching by television on five days a week.

On the whole, however, remarkably little use has yet been made of the tremendous potential of these media to guide and support the unpractised teacher or monitor, to carry information to families, organized listening groups and individuals, and to reinforce the written word with sound and visual images.

MEDIA FOR FUNCTIONAL LITERACY PROJECTS

It is perhaps in the work of producing media for functional literacy that the most interesting innovations are being made. Mali illustrates how practices are being changed by the selective-intensive strategy:

'The production of teaching materials specially intended for functional literacy has constituted the principal innovation in the literacy programme in the last two years. Functional literacy requires that a special programme be conceived for each socio-professional category. Special programmes have so far been prepared for workers in a ceramic factory, a power station, cotton farmers, workers in the hotel and tourist industry, the transport company, a food-preservation company and a group of producers of ground nuts.'

Each of these programmes is intended to last for approximately two years

and is divided into two phases of thirty sequences, each sequence representing a week of teaching. The material which supports it includes a training text incorporating visual aids for literacy teachers. It includes also four booklets for reading and writing and four for arithmetic. Eventually there will be language teaching materials for French when the course is conducted for workers in industry in the official language. Films and filmstrips have been produced for the motivation of illiterates and for the training of teachers and a number have been made for farmers' training in the agricultural zone. Other films obtained from abroad cover such matters as health, education and agricultural training. A new development in functional literacy has been the change over from the old radio transmission 'radio school' to a series of transmissions of fifteen minutes each instituted in January 1969 entitled 'Learn to produce'. These programmes are transmitted five times a week in five different languages. Listening groups have also been created throughout the country.

Several points are worth noting here. First, the programmes and their content and media are tailor-made for specific occupation groups. Second, the intensive training-cum-literacy courses are planned to last for two years. Third, the various media are combined into a 'learning system' to communicate a coherent message and reinforce each other, instead of being produced and used independently.

In Tunisia and Mali training is based not on books but on worksheets and pictorial charts given to the literacy teachers and on photocopied reading sheets given to the learners in the group. Each day's training experience results in a picture, and each picture in a phrase or short text. At the end of several months the collection of worksheets is brought together to make a manual.

A new trend in the use of audio-visual media for functional literacy is that they are conceived in terms of the educational and cultural environment and integrated into educational programmes, so that the use of any given medium arises naturally, with the right material available at the right moment and place. In this regard, the Report of a Meeting of Experts on Mass Media in Adult Education and Literacy[1] had some pertinent comments:

To be effective in adult education the output of mass media should be related closely to the needs and interest of the audience and draw inspiration from its participation. With respect to the content and form of programmes, it was suggested that programme directors and producers keep in mind certain basic points:

1. There is more need for 'grass roots' programmes with which the audience can directly identify itself.

1. Meeting held at Unesco Headquarters in Paris, November 1967.

2. The content of the programmes should help the learner to advance economically and socially. It is also essential that they should be action-oriented so that through group discussion and decision, practical projects can be undertaken both individually and collectively.
3. The programmes should be attractively presented and entertaining in themselves to hold the interest and enthusiasm of the audience. The use of traditional forms like story-telling, ballad singing, drama, etc., should be suitably adapted for use through the mass media.
4. Every attempt should be made to involve the audiences through field reporting of their own activities to give the learning group a sense of participation and self-expression.
5. A two-way traffic between the media and the audiences through comments and suggestions from the receiving end gives an idea of the response, so that programme content and techniques may be modified accordingly.

In this connexion, the meeting endorsed the following statement of the Meeting on Broadcasting in the Service of Education and Development in Asia, convened by Unesco at Bangkok in 1966: Broadcasting should be considered part of the country's basic facilities like harbours, roads, electricity, for the provision of which funds are invested not merely for immediate and identifiable results, but which are rightly believed to promote a long-term increase in national production. As with investment in education, broadcasting resources should be expected to yield results in the form of an informed, motivated and skilled people, leading to the increased availability of productive manpower whether in urban or rural areas.'

PRODUCTION OF MEDIA FOR FUNCTIONAL LITERACY

Many of the functional literacy projects have established media production units. Algeria has a 'central elaboration team' which is articulated in two groups: the technical service (socio-economic, agricultural, industrial) and the pedagogical service (elaboration and visualization). The technical services furnish the pedagogical services with raw material, the elements of training taken from preparatory studies; the pedagogical service transforms these elements into teaching media adapted for use by teachers ('animateurs') and students ('auditeurs').

In Tunisia also the 'production team' is composed of a 'pedagogical team' working with a 'technical team' composed of a representative of the Institute of Adult Education, an educational psychologist, a sociologist, an evaluation specialist and his assistant, an agricultural engineer from the regional development unit, and a representative of the regional co-operative union. Thus, the three components of technical knowledge, action research and elaboration of media are grouped in various ways. Iran affords another example of 'group participation'. Since the learners in the functional literacy centre

themselves take part in the preparation of the programme, opportunity is given at all times for flexibility of content to meet new problems or particular needs, both of individuals and the local community.

What is called 'functional literacy' thus reveals itself as a functional adult education and training programme with literacy and numeracy as built-in components. It is, in a sense, a communication system which develops new skills of communication at the same time as it imparts useful knowledge. In this communication system a 'media centre' or production service can be regarded as a processing plant, where the raw material of knowledge is selected, processed and packaged in digestible form, before it is conveyed to the consumers. Its activities also include 'consumer research' or, as it is called in the next chapter, 'action research' and 'feedback', for it is essential to discover what people do, know, think and believe about their problems, what skills they possess, what are the limitations and possibilities of their environment and their economic situation, before telling them what they should do, what changes they should aim to make, what new skills they need, what new practices they should adopt. In multilingual areas the media centre may also have to include translators and to work in collaboration with institutes of linguistic study.

THE STUDENT-TEACHER RELATIONSHIP IN LITERACY PROJECTS

In the more traditional literacy campaigns, the atmosphere resembles more or less closely that of a reading lesson in a primary school. The teacher may be a primary school teacher, or other literate person, he may have been trained to change his methods a little, to treat his adult pupils with patience and respect: the 'pupils', of course, are older, the books and visual aids may be specially prepared for adults, but the impression still remains of a teacher teaching a class of pupils. As the concept of functional literacy gains ground, the situation is changing. The idea of a class of pupils with a teacher is giving place to the idea of a study group of adults with a leader—of the adults as active partners in learning, studying and solving their own problems, rather than as passive recipients of teaching from a set syllabus and from text-books or primers.

This attempt to find a new pedagogical relationship—to create a new atmosphere—has characterized functional literacy projects. Instead of the traditional 'one-way' method, efforts have been made to establish a group dialogue, where the teacher or group leader ('animateur') plays the role of compere in a programme, where everyone participates, and everyone can say what he wants concerning the conception of the programme, its elaboration and its implementation. Experience has also shown greater success when the teacher comes from the milieu and can identify himself with the group's problems. This approach has been adopted in experiments in Brazil, Algeria, Iran and

Mali. It is all the more effective when the group itself is responsible for the organization of the literacy programme. Thus, in Mali, when literate and sometimes even semi-literate peasants were employed as group leaders, it was noticed that they were often more effective than more qualified teachers because they were working with people who had the same problems and preoccupations. This tendency to use teachers from the immediate environment, and to adopt a dialogue approach to teaching, is also becoming marked in a number of national literacy campaigns, where the importance of 'atmosphere' as a positive influence on learning is increasingly realized.

TEACHERS AND INSTRUCTORS AND THEIR TRAINING

In projects where the aim is to integrate literacy teaching with education in such fields as civics, health, nutrition, home economics and family planning, the problem is to find teachers and instructors with the necessary range of knowledge and experience. In some cases this problem is solved by providing specialized supervisors or specialist instructors working with the part-time and full-time literacy teachers. In Togo, mass education staff, social workers and agricultural extension agents from an agricultural development agency—SORAD—collaborate in functional literacy projects with school teachers and literate villagers. Volunteers are supervised by social workers holding diplomas from the national training centres. Each social worker supervises five villages and works under a regional director for rural development.

The term 'teacher' is thus perhaps misleading in the context of functional literacy. The approach to teaching adults in 'non-captive' voluntary groups is, or should be, very different from teaching a captive of 6-year-old children. Hence the need for training services and courses that will help teachers, instructors and extension workers. A great many countries have recognized this need for training and are providing it. The Democratic Republic of the Congo, the United Arab Republic, Jamaica, Ecuador and Gabon are all undertaking training, ranging from five or six days up to several months, sometimes with monthly conferences, refresher courses or local in-service training, in which special teaching demonstrations may be included.

In this context, with the growing adoption of functional literacy, training courses are often adapted to comprise both literacy and community development. Uganda held its first course in methods of teaching functional literacy in June 1968 at a rural training centre. The students were community development staff who were in charge of the functional literacy projects in their respective districts. Emphasis was placed on the work of extension workers in functional literacy; seventeen specialists from different departments and services of the government collaborated in staffing the course. In Malaysia, under the new policy in establishing home economics and vocational agriculture, animal husbandry, and fisheries classes, prospective teachers were

trained by the extension services to become teachers for the vocational classes also.

Whether the 'teachers' are full-time adult educators or part-time volunteers, primary school teachers or secondary school children, civil servants or simply literate members of the community, it is relevant at this point to quote the message sent by H.I.M. the Emperor Haile Selassie I to the literacy teachers of Ethiopia on World Literacy Day 1968:

'When you have given a group of your countrymen the opportunity of learning, we believe you will consider it to have been one of your great personal experiences.'

Research and evaluation

For nearly a century, a vast and growing volume of educational research has been concentrated upon child development, the teaching of children and young people in schools and universities and, to a lesser extent and more recently, on the education and training of adults. This research has been largely confined to the wealthier and more highly industrialized countries. Now the attention of research workers is turning to the needs of adults in developing countries, and especially to the two-fifths or more of the world's adult population who remain illiterate.

THREE TYPES OF RESEARCH

There are three broad types of research activity which are crucial to the progress of adult literacy, though it is neither possible nor desirable to draw a sharp distinction between them. The first, fundamental research, includes rigorous, long-term investigations designed to test hypotheses and establish general conclusions and to lay a foundation of knowledge on which practice can be built. The second type, action research, includes systematic, but generally less rigorous and shorter-term studies carried out by the operational staff of a project, or by research workers assigned to it. In this second category, the results are fed back directly and immediately to the project staff to guide and control their activities. These two elements of 'feedback' and 'control' are both essential to action research, for its purpose is to avoid and correct mistakes and improve the efficiency of ongoing operations.

The third type, evaluation, may be crudely defined as measurement of the achievements of a programme or activity against its defined objectives. It is clearly essential to discover how, why and to what extent a project achieved or fell short of its objectives and this, in the case of functional literacy, is proving to be an extremely complex and difficult undertaking.

FUNDAMENTAL RESEARCH ON LITERACY

One of the hypotheses on which the selective-intensive strategy was built was that in a functional literacy programme there is a positive relationship between the motivation of illiterate adults and the results of functional literacy. Indeed it has been assumed that adults would be motivated to learn by the recognition that literacy could be of immediate practical use to them.

A number of fundamental research projects are, therefore, concerned to verify this hypothesis or to study aspects of it. Three such studies were started with Unesco's support in 1968 and 1969 to discover the economic effects of literacy on workers in a flour mill in Algeria, in a factory in Bombay and in the phosphate mines in Morocco. The Unesco Regional Centre for Functional Literacy in Rural Areas for Latin America (CREFAL) also conducted two studies in this field in 1968, on 'economic, social and cultural factors which stimulate motivation for literacy' and 'underemployment in rural areas of Mexico in relation with attitudes to change and levels of education'. In Ecuador, the Unit for Research and Evaluation of the National Council of Adult Education has undertaken a range of studies, including the investigation of causes of absenteeism in adult centres, studies in factories in regard to the interests and motivations of adult pupils, and a quantitative and qualitative study of the effects of literacy on the pupils in adult literacy centres. The Office of Education Bureau of Research of the United States of America has also financed a wide range of research including studies of adult age differences in performances and learning and the influence of cognitive and affective factors on adult learning. Universities, both within the country concerned and outside it, have collaborated extensively in many fundamental research projects. Starting in 1967, a research group from Harvard University has carried out a study of persons who received primary education before 1963 in a small town in Tunisia to find out their present level of literacy, how far literacy is being used in their work, and whether literates are in a better position than illiterates. A sample of persons who have become literate in adult courses is now being studied. Similar studies are being conducted in India and Malaysia.

An Adult Literacy Research Unit at the University of Ghana and a team from the University of Nottingham (United Kingdom) are working together on a study of latent learning ability and learning problems among adults. The University of Nice (France) has also discussed with Unesco the possibility of a field study in an area of high illiteracy to discover the technical and scientific factors within the environment which condition literacy programmes.

Linguistic studies figure largely in the fundamental research programme. The most comprehensive long-term project in this field has been carried out by linguists from many countries working under the auspices of Unesco for the past ten years. It has resulted, within the past three years, in the adoption

of new or revised alphabets for five important West African languages.[1] These alphabets are now being used for adult literacy in Guinea, Mali and Niger.

The support of universities and research institutes has been particularly significant in this programme. Using its world-wide network of contacts, Unesco has been able to call upon expert assistance from the Academy of Science in Prague (Czechoslovakia), the School of Oriental Languages, Paris (France), the Institute of African Studies, University of Leningrad (U.S.S.R.), and the School of Oriental and African Studies, London (United Kingdom). Specialists from these institutes have worked with the governments in preparing and revising alphabets, producing word lists, grammars, dictionaries and reading texts, and enriching the vocabulary of the various languages with new scientific and technical terms. All material produced by the specialists has been submitted to the countries concerned for checking by national linguists and language committees. Mali, for example, has established linguistic commissions for the study and transcription of the national languages.

Language study is also gaining importance in Asia. Laos reports studies to discover the words current in Laotian rural life. An analysis of frequency has been made, and also an analysis of the sixty-eight distinct sounds used in three languages in Laos, and the 1,037 graphic symbols which the current orthography and grammar prescribe for writing these sounds.

Research into methods and media used in literacy programmes is of special importance at a time when many countries are exploring new ways of making literacy more functional and integrating the teaching of reading and writing into various forms of adult education and vocational training. During 1968 and 1969 Unesco has provided expert advice and financial assistance to projects of this kind in a number of countries. These have been focused upon programmed correspondence courses for new literates in Algeria; the teaching of literacy by radio and television in Jamaica; 'radio-vision' (the use of filmstrips or slides to add a visual element to radio broadcasts) in Mexico; and local rural newspapers to stimulate reading and convey information to farmers in Uganda.

In order to keep in touch with ongoing research and to map out research projects for the future, a group of five research specialists from different countries met at Unesco Headquarters in Paris, from 8 to 12 July 1968. In a report entitled 'Suggestions for Research in Adult Literacy'[2] they listed more than thirty examples of research projects they would like to see undertaken in fields related to literacy, and short-listed fifteen studies of particular interest to which they gave priority. This document has now been distributed to more than 700 universities, institutes, field projects and individual

1. Bambara, Hausa, Peul, Sonay and Tamashek.
2. Paris, Unesco, 1968, p. 12. (ED/MD/5.)

specialists in every continent in the hope that many of them will take up the suggestions and start new research projects.

Action research

Action research has been defined as systematic study which immediately feeds back results to modify and improve an operational programme. Reports come from many countries of activities which fall into this category. One of the most impressive examples, in the field of applied linguistics, comes from the Vale do Rio Doce micro-experiment in Brazil. Here a computer is being used to analyse the frequency of words and syllables in current use by the workers of the region. This analysis reveals that the basic vocabulary of 2,300 words comprises 540 different syllables; 9 per cent of these syllables cover 60 per cent of the words used and 20 per cent (about 100) meet 80 per cent of the speech needs. On the basis of this data a teaching programme is being prepared which is expected to cut the duration of literacy teaching by half.

Action research is also being used to determine the content of functional literacy. One study of development problems in an agricultural sector of Tunisia and another in Venezuela has provided content for functional literacy media. In Mali, a problem-centred approach is used in the functional literacy project: 'The problems which handicap the increase of productivity are investigated, discussed and studied, with the active participation of workers, who contribute to the development of solutions, and who are therefore motivated and competent to put them into practice. This method has been developed progressively over three years of research and experiment and will be applied on a large scale before the end of 1969.'

This example illustrates one of the most important functions of action research to provide 'feedback' from the target population—the illiterate adults themselves—to the planners of programmes and the producers of media. Even where it proved impossible to associate illiterate people directly with these intricate activities, techniques of action research, notably opinion study, problem study, audience research and feedback, can ensure that their opinions, beliefs, attitudes, customs and problems are not ignored. Action research is thus a means of making communication a two-way process, of making the learners partners in the education process rather than passive pupils.

Thus action research operates, in the study of language to establish the vocabulary structure; in the study of the environment, its people and their problems to establish the programme content for functional literacy and, built into the production of media, to test and improve the efficiency of communication.

The difficulty experienced by illiterate adults in interpreting pictures has already been mentioned; obviously the semi-literate—or new literate—also

has a limited reading ability and difficulty in understanding abstract language or unfamiliar terms. Hence the value of pre-testing texts, recorded broadcasts, book illustrations and other visual materials on a representative sample of the target audience. Such pre-tests, which feed back information to the producers, can help them to avoid communication failure in their educational media before they produce them in quantity and put them into mass use.

This essential use of action research for pre-testing media has been applied and taught for some years in ASFEC and CREFAL, but there is little evidence that it has yet been extensively used in national programmes.

Evaluation

It is one of the declared purposes of the Experimental World Literacy Programme to evaluate the effects of functional literacy in a variety of situations, and this has so far proved to be one of its most difficult tasks. It was intended that this evaluation should be rigorous and objective and that it should permit specific measurement of the socio-economic impact of each experimental literacy project. As far as possible it was also intended that evaluation should permit valid comparisons, not only between rural and urban sub-projects, but internationally, i.e. between projects in different countries. For such comparisons it is obvious that a very wide range of factors would have to be taken into consideration.

In 1966, a group of experts in evaluation from six countries was brought together in Paris to advise Unesco. In 1967 a more permanent Panel of nine members for the Evaluation of Experimental Literacy Projects was appointed for five years; it met twice, during 1967 and 1968. The members have also served as consultants to visit and advise on the various projects.

The techniques of evaluation

Following the first meeting of experts, a Provisional Guide for the Evaluation of Functional Literacy Projects was prepared by the literacy evaluation unit established at Unesco Headquarters in Paris. This guide, which was sent to all projects in the World Literacy Programme, will shortly be revised and published.

Meanwhile, Unesco made a special effort to appoint evaluation specialists to each of the projects, to encourage the national authorities to build around them evaluation units of national specialists and field workers, and to persuade universities and research institutes to give them professional support. There were three reasons for this effort to set up evaluation units even before the majority of the operational staff of the projects was engaged. First, it is the ideal of all evaluators to study the situation in detail before project operations begin to change it. Secondly, initial studies serve not only as base lines or bench-marks against which to measure and study the changes that take place;

they also provide information to project planners and operational staff for programme content and development. Thirdly, because the task of evaluation is to measure achievements in relation to the aims of the project, these aims must be defined in sufficiently clear and specific terms to permit achievements to be detected, measured and described. Hence the evaluator has special responsibilities at the planning stage. He must get his base-line surveys started; he must help the planners to clarify and specify their objectives; he must see that the purposes of evaluation are understood and accepted by the operational staff, whose collaboration he will need; he must ensure that evaluation is built into the plan and budget, that the timing of activities allows for evaluation, and that staff, funds, transport and equipment are provided for it.

Achievements of evaluation

In the projects started in 1967 and 1968,[1] the evaluation units have completed surveys at national level, covering the economic and social situation for the country as a whole. In 1968, the evaluation team in Mali, aided by groups of students and volunteer interviewers, carried out a basic study of twenty sample villages in the sub-project area of Segou. This resulted in two reports, the first concerning family levels of living, the other covering the educational and social situation. A second study of the same area, using the same criteria, will be carried out in 1969 and a third in 1971. Some of the villages will receive functional literacy programmes; others will be left untouched to serve as controls. It is hoped that this series of studies will enable the evaluation unit to measure the effects of literacy on family and community life.

In November 1967, regional studies were also made in three sub-projects in Algeria, in both agricultural and industrial zones. In Ecuador, the work of evaluation has gone further. In November 1967, three studies were made in the urban zones of Cuenca, Milagro and Pesillo. Two types of questionnaire were used: one containing questions to be put to the population in order to obtain a quantitative measurement of levels of living; the other, to be used with government officials, was designed to fill in details of the social and economic situation. In November 1968 and February 1969, further basic surveys were made in three communities, one in each sub-project. These gathered geographical, political and demographical data and, in addition, studied in detail levels of living, productivity, community structure and the health situation. Finally, in September 1968, three studies of the participants in functional literacy classes were made in three sub-project zones. These recorded their levels of living and their educational attainment. The studies made use of selected indicators which were again used and applied in a

1. Algeria (January 1967), Ecuador (April 1967), Ethiopia (October 1968), Iran (January 1967), Mali (February 1967) and Tanzania (January 1968).

second 'interim' study in February 1969, in the zone of Cuenca. This study was confronted with an unforeseen problem, due to the extreme mobility of the local labour force, namely that only 42.3 per cent of the original sample remained for the second round of interviews. Nevertheless, 23.2 per cent of those remaining from the original sample of participants had noticed a positive change in their lives, notably in their friendship patterns, the furnishing of their homes, their educational and professional aspirations, hygiene, nutrition, communication and leisure activities.

Problems of evaluation

In spite of efforts on the part of the evaluation units to carry out surveys and establish base lines, the Experimental World Literacy Programme's original aims of measuring the effects of functional literacy on countries and sizable communities may require modification. In this context, a conference of twenty-five educators, economists and other social scientists on the evaluation of functional literacy, brought together by the Institute of Development Studies, Sussex (United Kingdom), in collaboration with Unesco, suggested that evaluation should concentrate on the more manageable tasks of evaluating the effects of functional literacy first on the individuals who go through the courses and classes, and secondly in smaller communities and working groups, such as farms and factories.

At all levels of evaluation, the problems encountered have been serious and numerous. One difficulty has been the clarification of the feasible operational objectives of the projects themselves within the local context, and the Permanent Panel for Evaluation recently recommended that more detailed plans of action should be prepared by all project staffs, setting out realistic objectives with a probable time schedule, and taking into account recent research and experience. Another problem has been to define what evaluators call the 'independent variable'. What exactly is the 'functional literacy' whose effects are to be measured? Is it the literacy component only or the whole amalgam of literacy-vocational training, improved communication through new media, agricultural extension—in short, functional adult education in the widest sense? And since the amalgam is different from project to project, and the control groups may already be receiving certain components of it, how can its effects be compared?

The establishment of control groups has also presented acute problems in all projects. These have been partly technical—the difficulty of finding matching groups—and partly political and social—the understandable reluctance of local authorities to set apart communities and groups which would have to be subjected to interviews and surveys without receiving any benefits from the project.

In certain areas, the population has also shown a natural suspicion of

testing procedures. The practical difficulties of data collection have in addition raised problems. Questionnaires cannot be used in illiterate societies; and observation and interviewing need observers and interviewers, who must be found, trained, paid and supervised.

A report from Togo, one of the few countries outside the World Literacy Programme which is undertaking a serious evaluation, indicates how this problem was faced by enlisting the co-operation of the Higher Teacher Training College of Atakpamé. 'After a conference with the Director, the psychologist and the professor of Rural Animation, it was agreed that the pupil teachers of the national training college, under the direction of these members of the staff, would carry out a basic survey in the villages where experimental literacy centres were to be installed and in the control villages.' Subsequent evaluation will be further assisted by the national training college team.

Cost-benefit studies proposed

The Permanent Panel for Evaluation noted at its second meeting[1] that the per unit costs for functional literacy are expected to be higher than those for traditional literacy projects', and suggested that 'studies on costs in relation to benefits would put the data in their proper perspective'. Action in this area is now being initiated by Unesco, although it is realized that the implementation of effective cost benefit studies in the field will undoubtedly be far from easy.

A SIGNIFICANT EXPERIMENT

It is the evaluation of the 'micro-experiments' in functional literacy which has so far produced the most positive results. The Rio Doce project, in Brazil, demonstrated the first serious attempt to evaluate the costs and benefits of functional literacy.[2] The costs of the 'central team', representing 75 per cent of the total cost in personnel, amounted to 150 New Cruzeiros ($37.50) per worker taught; this could be reduced to 6 New Cruzeiros ($1.50) per worker if numbers were increased from the 36 now involved to 400. The workers participated in the programme for half an hour a day, during working hours and at full pay. A significant discovery was that throughout the experiment production at the factory remained the same in spite of the loss of 937 working hours. Thus, the time and money spent on functional literacy was compensated by a corresponding increase in productivity.

It should be pointed out that this experiment took place in particularly

1. *Final Report*, January 1969, para. 35. (ED/CS/230/5.)
2. The results are to be published in full, by the Italian Government, under the title, *Report on a Seminar on Methods and Techniques of Functional Literacy, Rome, 14-20 December 1968.*

favourable conditions and that only a small number of people were reached: it did, however, show the possibilities of implanting functional literacy in the structure of an industry.

CONCLUSION

It is too early as yet to expect results from projects which are not yet nearing the end of the five-year experimental period. Perhaps one of the most important achievements of the evaluation programme to date, however, has been to demonstrate that full-scale scientific evaluation of the experimental literacy projects is an extraordinarily complex undertaking, particularly within the field situations in which the projects are being implemented. As a result, evaluation of the experimental projects is becoming increasingly realistic, and more closely related to their operational requirements.

The way ahead

OUTSTANDING PROBLEMS

'What are the most urgent problems now faced?' This was the last point in the questionnaire to Unesco's Member States. There was a remarkable unanimity in their replies, and five problems clearly emerged as predominant.

The first was how to finance literacy programmes and, as the report from Mali put it, 'the insufficiency of funds both for the programme in general and for the equipment of classes'. Even the United States of America considered that 'the most urgent problem is obtaining funds for operating the adult basic education programme at a level that will result in a solution of the problem of the functionally illiterate'.

The second problem was, as Saudi Arabia expressed it, 'the absence of technical experts to plan scientifically and produce materials', or more simply, as Tanzania reported, 'the inadequacy of trained adult educators'. Associated with this was the need for training and retraining for staff at all levels, both for field programmes and for supporting technical services. This need was felt by almost all countries dealing with mass illiteracy. Niger linked to this the question of the status of personnel: 'Literacy is a specialization and the diplomas and certificates obtained after training courses should be . . . officially recognized.'

A third problem was the difficulty of producing teaching and training media especially for work-oriented, functional literacy programmes, and the lack of reading materials for new literates. In this context, Indonesia also called attention to the need for improvement in the public libraries in order to ensure that books reach their readers.

Fourthly, Iraq and others mentioned the need for more scientific evaluation.

Finally, and perhaps most important, comes the problem of organizing a transition from the experimental phase to the extensive application of functional literacy and, linked to this, the necessity of integrating the functional literacy component into agricultural and industrial development schemes in areas of high illiteracy.

THE NEXT STEPS

On the first question of financial provision, the twofold aim of extending national programmes and improving their efficiency will undoubtedly require additional funds and new sources of finance, again from within each country and from outside. Here the recommendation given by the Round Table of Bankers, Economists and Financiers at their meeting in Rome merits close attention: 'International banks and financial institutions should give serious consideration to making it a requirement that each development project has incorporated in its basic structure, where it is appropriate, the component of functional literacy, including programmes which might be called for prior to the actual launching of the project.'[1]

Since the cost per worker of functional literacy training is usually small in relation to total investment, and since literacy is likely to result in a clear gain in productivity, the Round Table further recommended that the financing of literacy programmes should be derived both from the individual resources of enterprises and from loans made by national and international banks. The Round Table also recommended that governmental planning authorities should bear in mind that benefits of functional literacy are cumulative, and that the consideration of such programmes should become an obligatory dimension in development planning. Governments of developing countries should, wherever possible, reapportion their educational budgets between traditional and functional literacy programmes with a view to making the total expenditure more efficient.

On the problem of training and re-training personnel, in view of the complexity of functional literacy, involving many agencies and many disciplines at different levels of operation, universities throughout the world, especially those in areas of high illiteracy, should be encouraged to provide specialized training of recognized academic status, both in their regular degree and diploma courses and in short special courses, to prepare specialist staff for their tasks in the supporting technical services of functional literacy. Unesco regional centres are already making, and will continue to make, their contribution to this task, which will include the training of organizers of national projects, writers, artists and photographers for national media centres, and teaching staff for national training establishments.

On the provision of teaching material, one immediate need is to strengthen and improve the technical supporting services for both intensive and extensive national programmes, to provide for personnel training, media production and action research and evaluation. This, in its turn, will require support, from inside and outside the country, from universities and research institutes,

1. *Round Table of Bankers, Economists and Financiers on Literacy, Rome, 11-13 February 1969. Final Report*, Paris, Unesco, 1969. (ED/BEFLIT/69/3.)

from teacher-training institutions and technical colleges, from various government services, from industry and from a whole range of non-governmental organizations. This raises problems of co-ordination to which urgent attention should be given by the planning authorities concerned.

On the fourth problem, that of research and evaluation, there is a pressing need for the pilot projects and micro-experiments of the Unesco World Literacy Programme to accentuate their experimental functions, to develop and evaluate new methods and techniques, to produce tested prototype media for functional literacy, and to explore methods of integrating the literacy component into comprehensive programmes of adult education and vocational training in a wide variety of development schemes. For this, the various regional centres, such as ASFEC and CREFAL, could provide supporting services for research as well as for training and media production to the countries of their respective regions. At the same time, the experimental projects can develop, test and report practical evaluation techniques, which can then be built into other functional literacy projects.

The fifth problem is the most difficult. It poses the immediate task facing authorities, and especially their educational and development planners, i.e. integrating functional literacy with technical and vocational training, and synthesizing this educational amalgam with agricultural and industrial development projects.

In attempting to meet these various problems, a pattern, which has a certain practical logic, seems to be developing in many countries. This is to conduct a holding operation on a broad front against the advance of illiteracy with mass literacy campaigns, while at the same time selecting sectors for penetration in depth by intensive functional literacy projects. The next step is perhaps to exploit these penetrations more effectively by developing the intensive projects as centres of excellence and using them as research laboratories and field training areas.

CONCLUSION

It would be easy to claim too much too soon. At this stage, after only four years of voyaging on virtually uncharted seas, it is best only to say that at least landings have been established. The pioneers—the governments, the international and national organizations, and the individual experts and enthusiasts, to all of whom tribute must be paid—are struggling through a jungle that continually threatens to engulf them. Illiteracy is being faced and tackled; its importance, social, economic, psychological and spiritual, has been realized as never before. But the battle is far from won and could very easily be lost. It is, indeed, part of the much larger campaign for human progress which is only just beginning.

Appendixes

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A Illiterate population and percentage of illiteracy

The figures in this appendix are taken from censuses or estimates made since 1960 with earlier censuses for comparison purposes

Country	Age level	Population (in thousands)						Illiteracy rate (%)		
		Total			Illiterate					
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nepal										
1952-54	15+	2 434	2 635	5 069	2 191	2 618	4 809	90.9	99.4	94.9
1961	15+	2 725	2 935	5 560	2 270	2 890	5 160	83.3	98.5	91.2
Algeria										
1954 (Moslem population)	15+	2 339	2 343	4 682	2 052	2 271	4 323	87.7	96.9	92.3
1966 (total population)	15+	3 146	3 230	6 376	2 204	2 973	5 177	70.1	92.0	81.2
Iran										
1956	15+	5 550	5 370	10 920	4 451	5 072	9 523	80.2	94.5	87.2
1966	15+	6 940	6 546	13 485	4 663	5 745	10 408	67.2	87.8	77.2
Libya										
1954	15+	334	306	641	252	283	535	77.0	98.6	87.1
1964	15+	444	404	848	278	387	664	62.5	95.8	78.3
Bahrain										
1959	16+	47	36	83	31	31	62	65.5	86.6	74.7
1965	15+	59	43	102	38	35	73	63.9	81.8	71.4
Guatemala										
1950	15+	803	808	1 611	527	611	1 138	65.6	75.6	70.6
1964	15+	1 119	1 152	2 271	625	786	1 411	55.9	68.2	62.1

Country	Age level	Population (in thousands)						Illiteracy rate (%)		
		Total			Illiterate					
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Turkey										
1960	15+	8 224	8 104	16 328	3 714	6 387	10 101	45.2	78.9	61.9
1965	15+	9 150	9 140	18 289	3 246	6 625	9 871	35.5	72.6	54.0
Réunion (France)										
1954	15+	78	85	163	49	50	99	63.0	58.4	60.6
1961	15+	90	101	190	45	46	91	51.1	45.8	48.3
Dominican Republic										
1950	15+	589	596	1 185	326	351	677	55.3	58.9	57.1
1960	15+	803	803	1 606	268	302	569	33.3	37.6	35.5
Brazil										
1950	15+	14 895	15 294	30 189	6 731	8 541	15 273	45.2	55.8	50.6
1960	13+	21 369	21 894	43 263	7 473	9 384	16 857	35.0	42.9	39.0
1960 (estimate)	15+	19 800	20 300	40 100	6 900	8 800	15 700	34.7	43.3	39.1
Lesotho										
1946	A[1]	246	315	561	175	190	365	71.2	60.3	65.1
1966	A[1]	366	481	847	265	237	502	72.5	49.3	59.3
1966	15+	181	297	478	102	96	198	56.0	32.4	41.4
Colombia										
1951	15+	3 149	3 301	6 450	1 101	1 328	2 429	35.0	40.2	37.7
1964	15+	4 485	4 844	9 329	1 129	1 398	2 527	25.2	28.9	27.1
Guadeloupe and dependencies (France)										
1954	15+	67	73	140	23	25	49	34.2	35.3	34.8
1961	15+	76	85	161	16	19	35	21.0	22.1	21.6

Ceylon										
1953	15+	2 635	2 248	4 883	514	1 063	1 577	19.5	47.3	32.3
1963	15+	3 269	2 929	6 198	478	1 063	1 541	14.6	36.3	24.9
Martinique (France)										
1954	15+	69	79	147	19	20	38	27.2	25.1	26.1
1961	15+	77	88	164	12	13	25	15.8	15.1	15.4
Bulgaria										
1956	15+	2 769	2 822	5 591	203	619	822	7.3	21.9	14.7
1965	15+	3 110	3 156	6 266	150	464	614	4.8	14.7	9.8
Western Samoa										
1951	15+	21	21	43	5	1	6	23.1	5.9	14.4
1966	15+	33	31	64	1	1	2	2.6	2.5	2.6
St. Helena and dependencies (United Kingdom)										
1956	16+	1.1	1.4	2.5	0.06	0.05	0.11	5.1	4.0	4.5
1966	16+	1.3	1.4	2.7	0.04	0.03	0.07	3.1	1.9	2.5
Hungary										
1960	15+	3 513	3 928	7 440	92	143	235	2.6	3.6	3.2
1963	15+	3 598	3 999	7 597	76	125	201	2.1	3.1	2.6

1. Figures given are for all ages.

B Comparison of illiteracy percentages by age and sex for two known years

Country and age group	First year			Second year		
	Male	Female	Total	Male	Female	Total
Algeria (1954, 1966)[1]						
15+	87.7	96.9	92.3	70.1	92.0	81.2
15-19	87.0	94.6	90.6	45.4	76.1	60.7
20-24	88.2	96.5	92.6	60.6	89.0	75.2
25-34	87.1	97.2	92.5	70.8	94.3	83.0
35-44	87.5	97.7	92.7	76.7	96.4	86.7
45-54	88.0	98.0	92.8	81.9	97.9	89.8
55-64	88.6	98.1	92.9	85.2	98.4	91.7
65+	89.7	97.9	93.5	87.8	98.7	93.5
Bulgaria (1956, 1965)						
15+	7.3	21.9	14.7	4.8	14.7	9.8
15-19	2.9	4.4	3.6	0.9	1.4	1.2
20-24	3.1	6.6	4.9	1.1	2.3	1.7
25-34	3.6	7.2	5.4	1.9	4.5	3.1
35-44	5.7	12.1	8.9	2.8	5.8	4.3
45-54	9.9	26.2	17.9	5.5	12.6	9.0
55-64	11.3	44.2	28.3	9.9	27.7	18.9
65+	22.4	72.2	50.1	14.9	54.5	36.7
Colombia (1951, 1964)						
15+	35.0	40.0	37.7	25.2	28.9	27.1
15-19	32.8	30.1	31.4	19.0	16.1	17.5
20-24	30.4	32.1	31.3	19.5	20.5	20.1
25-34	29.7	36.2	33.0	21.9	25.7	23.8
35-44	34.3	44.1	39.2	26.0	32.4	29.3
45-54	39.7	50.0	44.8	29.8	38.6	34.2
55-64	48.0	57.2	52.6	36.4	47.1	41.3
65+	55.8	61.9	59.1	47.7	55.2	51.8
Iran (1956, 1966)						
15+	80.2	94.5	87.2	67.2	87.8	77.2
15-19	68.2	87.1	77.7	44.0	72.2	58.1

Country and age group	First year			Second year		
	Male	Female	Total	Male	Female	Total
20-24	74.5	92.5	84.1	52.2	81.3	67.5
25-34	79.3	94.2	86.8	67.3	89.4	78.3
35-44	82.2	96.1	88.5	73.8	91.8	81.9
45-54	85.3	97.9	91.4	76.7	94.6	85.0
55-64	87.3	98.4	92.5	82.6	97.1	89.6
65+	90.8	98.8	94.7	86.1	98.2	91.7
Libya (1954, 1964)						
15+	77.0	98.6	87.1	62.5	95.8	78.3
15-19	68.0	95.6	80.7	31.3	84.6	57.4
20-24	70.5	98.1	83.0	43.5	93.4	67.3
25-34	73.8	98.8	85.8	60.9	97.5	78.9
35-44	77.3	99.3	88.4	69.8	98.7	83.4
45-54	82.9	99.6	90.7	77.1	99.2	87.5
55-64	86.3	99.7	92.4	83.8	99.4	90.7
65+	88.6	99.3	93.7	88.9	99.6	93.7

1. The 1954 figures refer to the Moslem population only; those of 1966 are for the total population.

C Literacy 1967-69: some statistical data

Country	Period considered	Number of courses or classes	Usual length of courses (months)	Teaching staff			Students enrolled			Previous enrolment	Difference
				Full time	Part time	Total	Male	Female	Total		
Afghanistan	1967/68	982[1]	9						30 195	23 560 (1965/66)	+
Algeria	1967/68	200	8	50	100	150	4 900	100	5 000		
Argentina	1967/68	7 382	9	7 382		7 382	82 447	54 965	137 412	33 830 (1965/66)	+
Bolivia	1968/69		8			1 333			12 720	12 360 (1965/66)	+
Brazil	1967/68	9 134				17 718	314 770	202 243	517 013		
British Solomon Islands	1967/68	6	9		6	6	108	12	120		
Brunei	1968/69				142	142	931	1 346	2 277	1 689 (1966/67)	+
Burma	1968/69		1.5		9 825	9 825			63 170	173 713 (1966/67)	—
Burundi	1968/69	107		240		240		8 249	8 249		
Cambodia	1967/68	16 123							155 170		
Cameroon	1968/69	120[2]		30	7 500	7 530			151 600	47 000 (1965/66)	+
Ceylon	1967/68				213	213			3 870		
Chad	1968/69			5	200	205	4 444	600	5 044	8 350 (1965/66)	—
Chile	1968/69	2 120				11 907			46 321		
Republic of China	1966/67	561	4				3 589	14 889	18 478	22 069 (1965/66)	—

Republic of the Congo	1968/69	580	9×2	33	690	723			50 089	8 783 (1965/66)	+
Democratic Republic of the Congo	1968/69			66	497	563					
Dominican Republic	1967/68	381	9		378	378	6 875	3 730	10 605		
Ecuador	1968/69	1 254	8	1 602	1 250	2 852	27 054	22 005	49 059	35 600 (1966/67)	+
El Salvador	1968/69	347[3]	9		1 697	1 697	22 808	6 201	29 009	23 562 (1965/66)	+
Ethiopia	1967/68					10 000	130 753	42 703	173 456	122 430 (1966/67)	+
Gabon	1967/69			6	119	125			5 076	1 200 (1965/66)	+
Ghana	1966/67	1 412	6			1 248			24 783		
Greece	1967/68	417			451	451	7 005	1 871	8 876	11 084 (1965/66)	—
Guatemala	1968/69		5		2 896	2 896			85 350	69 235 (1965/66)	+
Guinea	1968/69				55 000						
Hungary	1968/69	79	24						812	3 181 (1965/66)	—
Iran	1968/69		6×2						861 957		
Iraq	1967/68			509			12 271	2 736	15 007	10 553 (1965/66)	+
Israel	1968/69			395	740	1 135			17 000	11 532 (1965/66)	+
Italy	1967/68	13 395		13 716		13 716	121 707	91 698	213 405	184 578 (1965/66)	+

Country	Period considered	Number of courses or classes	Usual length of courses (months)	Teaching staff			Students enrolled			Previous enrolment	Difference
				Full time	Part time	Total	Male	Female	Total		
Jamaica	1968/69	343				410			5 326	2 947 (1965/66)	+
Jordan	1967/69	155	16		125	125	2 486	3 484	5 970	1 470 (1965/66)	+
Kenya	1968/69				3 000	3 000			70 000		
Republic of Korea	1967/68			3 767	92 530	96 297	10 000	177 880	187 880		
Kuwait	1968/69	266	24		347	347	10 031	2 599	12 630		
Laos	1967/69								25 000		
Liberia	1968/69	114		28	56	84			1 925	450 (1965/66)	+
Libya	1966/67	786	2		759	759			16 235		
Madagascar	1966/67	950							23 870		
Malawi	1967/68	382	6		382	382	1 311	3 914	5 225	3 511 (1965/66)	+
Malaysia	1967/68	10 718	30		6 446	6 446	90 699	168 463	259 162	258 198 (1965/66)	+
Mali	1968/69	300[4]	7×2	90	5 100	5 190			60 000	26 164 (1965/66)	+
Nepal	1968/69				1 450	1 450			20 000		
Niger	1968/69	378		27	350-400	377-427			11 300	16 176 (1965/66)	—
Nigeria	1967/68	933			705				20 068		
Pakistan[5]	1968/69				1 434	1 434	17 828	15 965	33 793		
Paraguay	1968/69			72	237	309			5 922		
Philippines	1968/69			1 391	17 440	18 831	27 756	32 316	60 072	19 137 (1965/66)	+

Qatar	1967/68	16	6		26	26	147		147		
Saudi Arabia	1966/67			1 548		1 548	41 000		41 000		
Singapore	1967/68	1 142[6]	10		850	850			34 571	33 936 (1965/66)	+
Spain	1967/68		3×3		5 000	5 000			330 000		
Swaziland	1966/67	90	9	25	55	80			1 050		
Syria	1967/68	320				561	8 286	3 524	11 810	7 188 (1965/66)	+
Tanzania	1968/69				12 067		125 800	237 900	363 700		
Togo	1968/69			600					7 700		
Tunisia	1968/69	896	9	335	625	960	27 039	12 447	39 486[7]	16 595 (1966/67)	+
Turkey	1967/68		4		2 105		32 713	5 112	37 825		
Uganda	1967/68	1 635				1 647	13 732	15 989	29 721		
United Arab Republic	1967/68	2 386					68 655	8 748	77 403		
United States of America	1968/69	41 915				18 113			532 000		
Venezuela	1968/69					15 243	24 743	25 856	50 599	80 322 (1965/66)	—
Republic of Viet-Nam	1968/69	222				222	7 712	4 600	12 312		
Zambia	1968/69	2 310		200	5 000	5 200			40 000		

1. Includes 271 functional literacy classes.
2. This figure represents the number of radio forums providing literacy lessons to 3,600 adults. The number of literacy classes is not specified.
3. Number of literacy radio forums opened in 1968; no figure available for literacy classes.
4. Number of radio forums providing literacy lessons.
5. All these figures relate to East Pakistan; no information available for West Pakistan.
6. Includes literacy courses as well as language courses.
7. This figure includes 2,753 men and 590 women attending television literacy courses.

D Laws and decrees concerning literacy which have been adopted since September 1967

Argentina. Decree number 2704 of 17 May 1968 establishing the objectives of the National Directory of Adult Education.

Bolivia. Decree-law of 4 December 1968 concerning the administrative reorganization of the Ministry of Education, including the Literacy and Adult Education Service.

Brazil. Law number 5379 of 15 December 1967 by which the federal government established a foundation named Brazilian Literacy Movement.

Decree number 61313 establishing the national network for functional literacy.

Decree number 63258 of 31 March 1969 concerning the organization of literacy classes for the illiterate recruits of the army.

Chad. Decree number 32/PR of 9 February 1968 concerning the organization of the literacy service and integrating literacy programmes in the general plan for education.

Chile. Decree number 10117 of 11 October 1968 concerning the creation of the Civic Corps for Literacy.

Republic of the Congo. Circular letter number 156/PM/CIRC of 18 December 1968 of the Prime Minister concerning the organization of literacy classes in private enterprises.

Democratic Republic of the Congo. Ministerial Decision dated 25 March 1968 related to the organization of a training course for the officials responsible of literacy programmes in the provinces.

Dominican Republic. Resolution number 774 of 12 December 1967 of the State Secretariat for Education related to the programme of primary education and accelerated professional training of adults.

Ecuador. Decree number 143 of 16 October 1968 concerning the establishment of the National Literacy Committee.

Ministerial Decision number 263 of 5 February 1968 concerning the organization of different technical services within the National Centre for Literacy and Adult Education.

Gabon. Decree number 00399/PR/MENSC of 15 December 1967 establishing the National Committee of Literacy Radio Forum.

Guatemala. According to the Ministerial Decision number 502 of 8 April 1969, the student teachers must have made at least six adults literate before receiving their appointment.

Haiti. Decree of 23 January 1969 concerning the reorganization of the National Office for Community Development and Literacy and the establishment of the National Council of Literacy and Community Development.

Indonesia. Decree number 329 of 30 December 1968 of the President of the Republic about the adoption of a more intensive literacy programme in the overall Five Year Development Plan.

Iran. Agreement between the Ministry of Education and the Ministry of Agrarian Reform according to which the cultural centres established by the latter will serve first the new literates (studies, group discussion, use of radio and television).

Italy. Law number 470 of 2 April 1968 providing the National Union for the Struggle Against Illiteracy a contribution of 150 million lire every year for assistance to the educational, civic and social activities of this organization.

Libya. Decree of 2 April 1968 making compulsory literacy for adults and establishing the National Literacy Committee.

Madagascar. Decrees numbers 68-041, 68-042 and 68-043 of 16 January 1968 creating three new categories of staff for the literacy and community development service.

Decree number 68-025 of 16 January 1968 instituting a diploma and a certificate for those having successfully undergone training for literacy and community development work.

Paraguay. Decree number 35175 of 8 August 1968 giving national priority to literacy programme.

General order number 44 of 10 April 1969, requesting the military centres to organize courses to raise the cultural, professional and social level of the draftees.

Decree number 6177 of 14 July 1969, establishing the National Council of Literacy and Adult Education.

Spain. Ministerial order of 6 August 1968 asking that efforts be continued in order to wipe out illiteracy whose percentage has greatly diminished and urging that measures be taken in order to give complementary education to the new literates.

Syria. Draft law which stipulates that illiterate citizens under the age of 45 who work in industrial sectors must attend literacy courses where they are organized.

Togo. Decree number 68195 of 11 November 1968 establishing the National Literacy Committee.

United Arab Republic. The general education act of 1968 stipulates that the State provides general compulsory education for all children of the school age. It also lays down that public and private institutions should combat illiteracy among their illiterate workers.

A draft literacy law has been submitted to the National Assembly for ratification. This law urges private enterprises to organize literacy for their illiterate workers and stipulates that five years after its adoption, no illiterate adult will be provided with a job.

E International conferences and meetings on literacy, 1968-69

International Consultative Liaison Committee for Literacy: meeting of enlarged bureau	Unesco, 29-30 January 1968
Working group of Non-Governmental Organizations on the contribution of NGOs to the conduct of literacy programmes	Unesco, 6 March 1968
International Advisory Committee for the Advancement of Out-of-School Education	Unesco, 18-26 March 1968
Agricultural and Industrial Vocational Training Seminar (Unesco/ILO/FAO in co-operation with International Centre for Advanced Technical and Vocational Training)	Turin, 17-26 April 1968
Regional Literacy Seminar for International Non-Governmental Organizations Leaders (Latin America)	Bogota, 22-26 April 1968
International Conference on Human Rights; resolution on literacy and human rights	Teheran, 22 April to 18 May 1968
Ad-hoc Committee on Literacy of the Standing Committee of Non-Governmental Organizations (fifth Meeting)	Unesco, July 1968
Meeting of Experts on Research concerning Literacy	Unesco, 8-12 July 1968
Inter-Regional Seminar on Adult Education and Development	Denmark, 16 July to 21 August 1968
Seminar on creating a favourable climate for promoting literacy among women, organized by the Associated Country Women of the World, and the International Alliance of Women in co-operation with the All-Pakistan Women's Association	Karachi, 27 July to 3 August 1968
International Consultative Liaison Committee for Literacy: meeting of enlarged bureau	Unesco, 2 and 9 September 1968
Regional Meeting on Women's Education and Literacy, organized by the World Movement of Mothers	Libreville, 2-8 September 1968
International Consultative Liaison Committee for Literacy, second session	Unesco, 3-7 September 1968

Literacy training course for African trade union leaders, organized by the International Confederation of Free Trade Unions and the International Federation of Free Teachers Unions	Ouagadougou, 7 October to 23 November 1968
Regional Workshops on Reading and Follow-up Materials	ASFEC, 26 October to 16 November 1968; Bangkok, 25 November to 13 December 1968
Inter-Agency Meeting on Work-Oriented Literacy	Unesco, 28-29 November 1968
Panel of Experts on Evaluation of Experimental World Literacy Programme	Unesco, 2-6 December 1968
Seminar on Literacy Methods and Techniques	Rome, 14-20 December 1968
Round Table of Bankers, Economists and Financiers on Literacy	Rome, 11-13 February 1969
Seminar on Youth and Students in Literacy Projects, organized by the World Assembly of Youth	San José (Costa Rica), 7-12 April 1969
Conference on Work-Oriented Literacy, organized by the World Federation of Trade Unions	Nicosia, 6-10 May 1969
First CREFAL Seminar on Work-Oriented Literacy in Latin America	Quito, 21-30 May 1969
Briefing Seminar for International Experts and National Specialists (functional literacy)	Paris, 2-8 June 1969 and Zagreb, 9-14 June 1969
Advanced Training Course for National Evaluation Specialists	London, 4-22 August 1969