This quarterly publication from UNICEF, announced here on a one time basis, reviews the Fund's activities in health, education, and nutrition for the children of developing countries. The following is a sample of articles from this issue devoted to education: "New Targets" discusses recommendations for emphasizing minimum education, attention to primary school dropouts, curricular innovation, and occupationally oriented and nonformal education. "A Better Educational State for Jamaica's Children" describes a preschool program funded almost entirely from the private sector. Teacher training projects are described in "Jordan Teaches the Teachers," an on-the-job training project, and "Botswana Teachers Upgraded," where radio correspondence courses for teachers overcome geographic barriers. "Education for Tomorrow" is a UNESCO report on the future of education. "The Provincial Approach" is a positive approach to education in West Sumatra, Indonesia. "Focus on Dropouts" is Judith Spiegelman's profile of an elementary school dropout in Thailand. "Harvest of Hope" and "Picking up the Pieces" describe reconstruction projects, the former in Honduras, the latter a photo report from around the world. "Homemade School Aid" is another photo report illustrating do-it-yourself projects. (JH)
Readers of UNICEF News-

Wider acceptance has led to wider distribution and use of UNICEF News at a time when production and printing costs continue to rise.

If you have found UNICEF News useful, informative, or enjoyable in any way, would you be kind enough to join "FRIENDS OF UNICEF NEWS." By your contribution of $3.50 or more, you will help us to continue production and distribution of our publication. Another way to assist us in reaching new readers is to pass the magazine along to a friend or a student or a library so that we attain maximal readership for each copy. (Make checks payable to "UNICEF News." The address is UNICEF News, U.S. Committee for UNICEF 331 East 38th Street, New York, N.Y. 10016)

Your donation will put you on the mailing list for a year during which you will receive four issues of UNICEF News.

Contents

Goals of Education (excerpt from Jean Piaget) ........................................... 3
New Targets ........................................................................................................ 4
A Better Educational Start for Jamaica's Children
   by Dudley R. B. Grant .......................................................... 6
Photo Report: Home-Made School Aid ................................................. 10
Jordan Teaches the Teachers by Donald A. Allan ......................... 13
Education for Tomorrow .............................................................................. 15
Botswana Teachers Upgraded by Alastair Matheson .......... 18
Education: Its Triple Role ........................................................................... 20
The Provincial Approach by Mallica Vajrathon ............................... 21
Focus on Drop-outs by Judith Spiegelman ....................................... 23
Harvest of Hope (Primary Education in Honduras) ...................... 25
Photo Report: Picking Up the Pieces ..................................................... 27
The World of Education ............................................................................. 30
New targets for UNICEF educational aid in the 1970's will be an estimated 500 million children in the developing countries of Asia, Africa and Latin America who are educationally-deprived. These include a backlog of primary school-age children not now enrolled in school; primary school drop-outs; illiterate adolescents growing up in slums, shanty towns and rural areas where educational services are inadequate or non-existent. Girls, who are traditionally neglected when it comes to education, will get special attention.

The education of girls and women is important because help to future mothers is one of the best ways to help young children and additionally because more equalized opportunities for girls and women will facilitate their increasing occupational role in national development.

Recommendations to change the direction of UNICEF education assistance were made in the special report and review of the agency's education policies, presented at the 1972 session of the UNICEF Executive Board. It was prepared by Mr. Herbert M. Phillips of the United Kingdom, a special consultant. According to Phillips, the plight of the 500 million educationally-deprived children is masked by figures which show that over-all regional school enrolment is rising: in Latin America, 75 per cent of children aged 5-14 are now enrolled in school; 55 per cent in Asia; 50 per cent in the Arab States; and 40 per cent in Africa.

But these figures do not reveal the uneven distribution of educational services between rural and urban areas, nor the high proportion of rural drop-outs, nor the difficulties which the least-developed countries are experiencing in providing minimum education for their youth.

According to the report, primary school children, and adolescents who have had no schooling or are drop-outs, are benefiting little from the vast flow of educational aid to the developing countries — approximately $1,500 million annually. Therefore, UNICEF could play a vital role by concentrating in an area not currently covered by other aid agencies. To do so, UNICEF ought to reduce its support for secondary education gradually in favour of providing basic minimum education and focus on the enormous wastage in the form of primary school drop-outs.

Among the data presented were the following figures from a recent UNESCO study of rural-urban enrolment in Latin America. Between 1963 and 1968, out of 1,000 primary school children who started school in Uruguay's urban areas, 129 did not complete the fourth grade. In rural areas of Uruguay, nearly 3 times that number - 345 children dropped out. Out of one thousand Guatemalan children in the urban areas, 404 children dropped out, while twice that number — 902 - did not finish the fourth grade in rural areas.

To prevent this enormous wastage — experienced in every developing re-
Mr. Phillips recommends a major drive for innovation and modernization of the whole educational process to be spurred by UNICEF. Among the successful innovations his report cited were the following joint UNICEF-UNESCO projects: the testing of teaching materials in Tanzania; the reduction of school hours during harvesting periods in Rajasthan (India) where youngsters were needed in the fields; and a pilot project in the earthquake-devastated part of Peru which includes educating parents as well as children.

In the years ahead, the report recommends that UNICEF progressively reduce its support for traditional-type projects while encouraging more practical or pre-occupational education to supplement training in reading and arithmetic; to support educational research and development into innovative techniques; to open up and explore how non-formal means of education—through community education centres, through after-hours school programmes, as well as at home methods—might reach the now educationally deprived millions.

According to Mr. Phillips, in many developing countries only one percent of the children reaches the university, yet the curricula of almost all of them are geared for that purpose. The problem is how to introduce cycles and patterns to deliver suitable educational "packages" to segments of the population needing different amounts of knowledge suited to different environments. Before any of this is feasible, formal education must be drastically reformed and informal or non-formal education more widely promoted. The International Council for Educational Development has been commissioned by UNICEF to undertake a study of non-formal education for rural children. It will be presented to the 1973 session of the UNICEF Executive Board.

In Phillips' view, UNICEF is now in a position to consolidate its gains in teacher training by linking it in the future to curriculum reform and new learning patterns. It should help countries to build up their own research and development capacity and so promote innovation and renovation. It should also tackle problems of non-formal education and train teachers for this purpose. In working out its global strategy for the solution of educational problems, UNICEF maintains that education must be accepted in its broadest sense to include all forms of instruction and training, whether they be formal schooling or less formal, training on the job or pre-vocational training. This is in accord with the new concept of a lifelong education, entailing no less than a restructuring of education to make adult education the centre instead of the periphery of the system. The challenge to modern man is the degree to which he can understand and control the process of unparalleled demographic, technological, intellectual and moral change in which he is involved. In the last resort this depends on the quality of his education. To carry this further, it is no exaggeration to say that the future of mankind depends on the production of an adequate number of educated and trained men and women equipped mentally, physically and psychologically to meet the challenges of this swiftly changing world.

Opportunities for girls in education are increasing in such countries as Afghanistan (left) and Brazil (below, UNICEF 4168/Spoiler).
a better educational start for Jamaica's children

by Dudley R. B. Grant

With only the most limited resources and with almost complete dependence on the private sector, one developing country—Jamaica—is engaged in an intensive experiment to give its underprivileged preschool children a better educational start in life. Dr. Dudley R. B. Grant, Director of the experiment called "Project in Early Childhood Education", has been working in the field of education for many years in a wide variety of posts, including Consultant and Advisor on Early Childhood Education to Dominica and Kenya; Education Officer for Jamaica's Ministry of Education and school principal. He has also been in the forefront of organizing and developing many methods and innovations in teacher-training.

At the beginning of 1966, of a total of some 187,000 children between the ages of four to six in Jamaica, West Indies, about 97,000 were not enrolled in any early childhood education programme. Over 90 per cent of this group were children from families of the very poorest income brackets. The impoverishment of their life style was so severe that subsequent failure in primary school seemed a natural consequence.

Of those who were participating in some educational programme, about 66,000 were attending Basic Schools, a term used in Jamaica to indicate institutions available for the preschool child of the low-or-no income family. Many of these children attended pre-school programmes in dilapidated buildings, verandahs, carports, sheds or yards, such as this one.

Before the PECE experiment, many Jamaican children attended pre-school programmes in dilapidated buildings, verandahs, carports, sheds or yards, such as this one.

Many of these schools were not fit to accommodate a preschool programme, and over 90 per cent of the teachers lacked the necessary training to ensure adequate care for the children entrusted to them. Moreover, the curriculum was meagre and directionless, there was lack of instructional materials and little or no understanding of the developmental needs of the children.

The facts were inescapable. A glar-
ing and desperate need existed for improving the educational opportunities for the vast majority of disadvantaged four-to-six-year olds in the country, especially in light of the research findings of educators, psychologists and psychiatrists who have uncovered some of the causes of learning disabilities among the children of the poor. It is now generally accepted that the roots of learning are formed long before a child enters first grade; but it is a tragic fact that in the case of large numbers of children—the have-nots of the world—these roots are blighted before they begin their school careers.

Although some attempts had been made over the years to improve the situation, the efforts were hit-and-miss and were reaching relatively few schools and teachers.

This, then, was the big question being raised by concerned educators in Jamaica: could practical, low-cost, effective measures be found—despite the limited resources available—to significantly improve the condition of Basic Schools and to upgrade teacher-training throughout the Island? Also, could substantial increases in local resources be generated—this being a matter of great concern since Basic Schools are primarily supported by the private sector with little or no financial help from the Government?

The Project is launched

To seek answers to these questions, the Project for Early Childhood Education (PECE) was created in April, 1966. For the first time, a large-scale experimental programme was to be undertaken by professionals to grapple with the enormous and glaring inadequacies of the Basic Schools. The joint commitment of the University of the West Indies Institute of Education and the Council of Voluntary Social Services, undergirded by Government support through the Ministry of Education, resulted in the funding and launching of PECE by the Bernard Van Leer Foundation (Holland).

In its publicity programme over the radio, television, in newspapers, and in addresses to different groups of citizens—especially the service clubs—all over the Island, the PECE staff emphasized its basic credo. It says that "society is people, some of whom are children, and, therefore one cannot discuss the society without dealing with the development of the children in it. Our status in, and citizenship of the society are not measured in terms of our financial position or station in life or bank account; but in terms of what we—each of us—have done to help build our society with our children—upgrading the preschool opportunities and facilities of our underprivileged fellow Jamaicans who are deprived of a good beginning educationally." One of the largest service clubs on the Island—the Jaycees (Junior Chamber International)—provided leadership in helping PECE carry out its goals.

Of the 1,205 Basic Schools in Jamaica, PECE confined its operations to 458 schools scattered over four of the eastern parishes of the Island, with an enrolment of 33,000 children in the age group of four to six years. The Project set out not only to initiate active programmes of compensatory education for underprivileged children, but to ensure that these programmes were consistent with current knowledge from various disciplines and based on meeting the needs of preschool children while enriching them in terms of motivation, confidence and experience. In addition, PECE aimed at up-grading the teaching competence of Basic School teachers, and providing instructional materials.

Profile of a Basic School

When PECE began its operations, only 37 per cent of the Basic Schools were housed in a special building used for that purpose, another 33 per cent were held in church and community halls, and nearly 41 per cent operated under adverse conditions such as dilapidated buildings, verandas, yards, carports, markets, and sheds attached to a house. Approximately half of the Basic School children had less than six square feet of classroom space available to them and many attended schools where proper sanitation, rest and other ordinary comforts were difficult or impossible to provide. The average annual expenditure on every phase of the school ranged from about (US) $13 to $68. The teacher-pupil ratio indicated an average of 43.5 pupils per teacher and about 56 per cent of the schools had only one teacher. The total of one and two teacher schools numbered 388 or 85 per cent. Only one out of six schools had a Parent-Teacher's Association which in most cases met very irregularly.

In theory it appeared that in the rural areas it was possible to enroll all the 4-6 year olds in the Basic Schools, but in actual practice this did not happen because of parents who could not afford the fee—an average of 12 cents per week. Other factors preventing many children from attending school in both urban and rural areas were overcrowding, lack of adequate facilities, equipment and furniture, as well as a shortage of teachers who were prepared to work for "Love and Service". Because of the irregular attendance and payment of fees, the average weekly pay of teachers was (US) $3.00 in the more "affluent" rural areas to (US) $8.50 in some urban areas. It is not surprising, therefore, that this low "salary" caused a rapid turn-over of teachers, especially among the younger ones.

Training the teachers

By and large, the Basic School teacher is a product of the village or town in which she "keeps" her school and, coming from the people, she shares with them common ideas, common needs and common goals. However, the underlying assumption of the Project is that these teachers are of a marginal academic level and consequently need a different and specialized kind of preparation and follow-up supervision from that provided in a typical teacher education programme—a preparation which will enable them to make more effective and positive impact on the lives of the children entrusted to their care. By changing the attitude, confidence, competence and image of the teachers, it is hoped that this will lead to an enrichment of the educationally related experiences of the pupils and the development of their self-respect, language values, concepts and perception. For this reason, the re-orientation of the teachers' cognitive, emotional and professional outlook receives high priority in the day-to-day operations of PECE.

The teacher-training programme is directed at three points:

1) the teacher and her approach, with a view to altering her expectations and changing her teaching techniques;

2) the children and their environments, with emphasis on helping the teacher understand the children she teaches, and the community in which she works;

3) the scope and sequence of the child-centred curriculum (Lesson Guides), which provides her with some definite suggestions in content, method, and instructional materials for developing the teaching-learning activities in her class.
The schedule for the training programme consists of two intensive four-week residential courses at the University of the West Indies given annually for 120 teachers each. These are followed by fortnightly workshops at the parish level and follow-up training on the job.

One gauge of the “holding power” of the teacher-training programme is the attendance record at the workshops which ranges from 62 per cent to 77 per cent of the teachers in each of the four parishes and the fact that a large number of teachers travel under severe hardships and sacrifices—some even walking up to 12 miles to attend classes.

In some areas, the workshops have been useful in helping to establish a closer relationship between Basic Schools and Primary Schools. With permission from the Ministry of Education, Grade I teachers have been allowed to attend and participate in the Basic Schools Teachers’ Workshops held in their parishes. In some instances, Primary School and Basic School Parent-Teacher Associations have had joint meetings and a few high schools and some primary schools have adopted their neighbouring Basic Schools.

Planning the curriculum

In developing a curriculum for the Basic Schools, the Project staff had to take many factors into account. First was the typical disadvantaged preschool child himself, generally described as “one who lacks acquaintance with adults outside of his family circle; who lacks familiarity with toys, books, stories and games; who is a ‘verbal have-not’; who is unstimulated at home, and who does not experience a dependable pattern of life, or a design for living”. Other important factors were the skills and competences of the teachers, the teaching-learning conditions, the parents’ attitude toward the school, and the children’s own school readiness experiences.

Since the home situation of these pupils makes socialization, perception, concept formation and language development difficult, the Guides provide specific suggestions to help the pupils experience growth in these areas, to incite the children to relate to materials and people and to attend to tasks assigned to them. The activities developed in these Lesson Guides aim to encourage children to learn the value of conversation in human relations, the use of verbal expressions, as well as the value of listening. Hopefully, they will become aware of the process involved in a two-way communication, learn new concepts and generally extend their verbal capacity, and gain satisfaction from the use of language as a medium for developing new levels of competence so essential to the building of their selfhood. Towards this end the Lesson Guides develop such teaching-learning experiences as these:

- **Free activity corners** where the children experience social courtesies during their spontaneous play with a variety of materials, and develop concepts and perceptions of discriminations and associations.
- **Nature rambles** which are planned to provide first-hand experiences with people, places and things in the environment, and are organized to foster occupational role identification with a view to giving pupils a framework within which to develop their aspirations.
- **Keeping a record of weather, temperature, days and months** is part of the varied learning experiences at PECE schools.
- **Skills training** in which emphasis is placed on the development of the pupils’ visual and auditory perceptions, their non-numeral and numeral concepts, their large motor and psycho-motor skills, as well as their use of the language arts skills, including reading readiness and developmental reading.
- **Enrichment and creative activities** through which the pupils and teachers are encouraged to experiment with a variety of materials, and opportunities are provided for both to indulge in dramatic play, and to use art materials for creating something on their own.

In short, the Basic School curriculum—or Lesson Guides—represents an attempt to reverse the effects of deprivation and experience deficit and to provide a balance between compensatory and developmental programmes, activities, and direct and vicarious experiences.

Community and parental involvement

In Jamaica, services for the welfare of poor children have their roots in community effort. The church was the first agency to make education available to everyone in the society, and to provide some form of child care for the needy. It was the Rev. Henry Ward, a Presbyterian Minister of Religion who, in 1838, established the first Basic School on record as a community school. Since then, Basic Schools have been, by and large, the responsibility of the community, under the sponsorship of voluntary organizations, service clubs, churches, and individuals from the private sector.

Since no school programme can by itself overcome the deficiencies of the disadvantaged preschool child, the Project believes that the teacher-parent relationship and school-home interaction are crucial to the development of the young child. Although the children who attend school do spend about six hours a day under the guidance of a teacher, they continue to learn something from other people, places and things in their neighbourhood during the rest of their daily waking hours. From the point of view of learning time, the compensatory and developmental education programme offered by the Basic Schools cannot outweigh the influences that the home and the community exert on the children.

On the basis of this conviction, it became evident that if PECE were to succeed, and if the Basic School were to receive greater support, there must be cooperation and alliance between parents, community, teachers, and others involved in the business of education. In view of the importance attached to parental influence upon the preschool child, a major goal of the Project has been to establish a healthy relationship between the Basic School and the parents of its pupils. By making better use of the Parent-Teacher Association, some constructive achievements have resulted:

Parents have been made to feel that...
they have an important contribution to make to the teachers' understanding of the pupils;

—Teachers have come to realize that they have an obligation to share their knowledge of their pupils with the parents;

—School staff are being encouraged to visit the parents of their pupils to learn more about these pupils, and to develop mutual confidence between parents and teachers;

—Parents have been influenced to contribute to the school programme in such ways as helping to maintain and build equipment and school plants, assisting with lunch duties, lending materials, enjoying an evening together, working on special projects, and organizing picnics or other money-raising functions.

PECE staff and Basic School teachers place a high priority on developing ways and means of letting parents, guardians, and community leaders know that they are needed to help push the Basic School programme, and that their contribution is highly appreciated.

Some progress has been made in enlisting community support. The Jaynees have accepted the promotion of Basic Schools as one of their major projects and in association with other members of the private sector, the church, and other service organizations, they are promoting the formation of a "National Early Childhood Education Foundation" in Jamaica. It is hoped that, in cooperation with the Ministry of Education, this foundation will help to continue the expansion of early childhood education activities after the Bernard Van Leer Foundation ceases to support the Project for Early Childhood Education in 1972.

In addition, the Alpart Bauxite Company and the Tryall Fund have each assumed responsibility for providing their parish with a Teacher Trainer and have guaranteed enough money for developing a "Basic School Teachers' Training Programme" within their parish. In other parishes, organizations are sponsoring teachers for the PECE Courses, improving the facilities of some Basic Schools, donating toys, and paying for children of the poor to attend the schools. Encouraging and welcome as these contributions are, they still represent a drop in the bucket, in light of the enormous unmet needs of the Island.

Challenging problems ahead

Although PECE has achieved some measure of success, it has not yet progressed to the point where evidence of success can be regarded as conclusive. This Project is a relatively new feature in the educational system of the country, and, therefore, much about it is still undefined to the public and local officials. A number of challenging problems and issues continue to emerge daily, the most disturbing ones being the salary of the teachers, the size of the classes, the sub-standard teaching conditions, and the conspicuous absence of educational toys and outdoor equipment.

Notwithstanding these and other challenges, the Project has progressed from a "proposal" to an active and vigorous institution of much promise. It has promoted the Basic School teacher’s image; it has upgraded the teacher’s teaching competence; it has helped the pupils develop a positive selfhood; it has imbued some sponsoring bodies with a greater consciousness of their responsibilities; and it has created greater public awareness of and interest in the needs of the Basic School and of the children who attend them.

There have also been some encouraging signs of Government interest. Although Government support for Basic Schools has been minimal, it is increasing. Annual grants of approximately (US) $180 to $260 for some thirty per cent of the Basic Schools which meet certain Government criteria have recently been increased by about 25 per cent. There is evidence of some progress since 1968 when the Honourable Minister of Education stated: "Since we (the Government) cannot undertake responsibility for early childhood education at the moment, I appeal to the Private Sector to come forward and become actively involved in the provision of early childhood education for the underprivileged children in our communities."

On the regional scene the influence of the Project is reaching the English-speaking Caribbean Islands. This was evidenced at the Van Leer-sponsored Caribbean Conference on Early Childhood Education, held in Jamaica on 4th to 10th October 1971, for the purpose of examining procedures, actions and strategies relative to the "present and future dimensions" of early childhood education in the region. On the local scene more is known about the pupils, the parents, the schools, the teachers, and the needs of each. The present educational thinking concerning each of these elements is so dynamic and enthusiastic that the challenge to everyone directly and indirectly concerned at the national and regional levels, is clearly defined, and the outlook is encouraging.
The "do-it-yourself" approach to educational materials is having a positive effect on education in several countries of the developing world. In areas where textbooks are scarce and money to obtain them in the near future is nowhere in sight, resourceful teachers and students are making their own. The home-grown textbooks are not only produced from locally available materials, but the subject matter is based on local realities. For example, a Tanzanian home-made textbook might show terrain, houses and people familiar to the Tanzanian child, rather than some English countryside with scenery and people totally alien to Tanzanians. In several countries teachers and students are learning how to write, illustrate, print and bind their own textbooks — a highly educational experience in itself. UNICEF and UNESCO are encouraging home-made school aid production wherever text shortages impede educational progress.

The self-help approach is particularly useful in areas where schools cannot afford science teaching equipment. In many cases teachers and students may use scrap material to fashion laboratory equipment. The finished product is crude and unsightly, perhaps, but it does the job. It demonstrates basic scientific principles. The fundamentals of science are revealed and a whole new world opens up for the student.

These photos show some of the home-made school aids which reflect the ingenuity and imagination of those determined to teach and to learn. They are impressive examples of the innovative education for which UNICEF is urging wider support in the developing countries of Asia, Africa and Latin America.
1. Locally-produced textbook is tested on pupils in Uganda (ICEF 6214/Matheson)

2. Indonesian students work with homemade lab equipment (ICEF 6574/Valrathon)

3. Student teacher in Botswana produces simple teaching aids. (Photo by Matheson)

4. Desire for learning lights faces of Bolivian students as they watch a chemistry experiment with equipment made from old tin cans and other scrap material. (ICEF 4056/Spelser)

5. Botswana teacher makes clock to teach children how to tell time. (Photo by Matheson)
I.

TOP: Indonesian youth enjoys himself while learning the basics of aerodynamics, using a plane he made himself from local materials. (ICEF 6575/ Vajrathon)

LEFT: Bottle tops act as paddles in this laboratory water wheel, a simple teaching aid made at the Namutamba Teacher Training Centre in Uganda. (ICEF 8215/Matheson)
Jordan Teaches the Teachers

"In 1951, when I took my secondary-school examinations in the East Bank sector of Jordan, there were only 165 of us. This year, more than 15,000 took the exams. When you grow that fast, there are bound to be problems along with the benefits."

Zuhni Qbedwey, UNICEF's Liaison Officer in Amman, recalled these figures as he and a visitor were being shown around Jordan's new Certification and In-Service Teacher-Training Institute by Director Ali Abdul-Razik recently. The figures were relevant, for the UNICEF-supported institute in Amman was created to cope with some of the problems of rapid educational expansion. It has developed an effective approach that has attracted the attention of governments and educators throughout the Arab world.

The insatiable appetite for learning, so characteristic of developing nations, produced phenomenal increases in school enrolments in the Middle East during the 1950's and 1960's. Teaching colleges generally could not produce qualified graduates fast enough to meet the ever-increasing demand. Governments were forced to make do with men, women and even adolescents who lacked any professional training and who sometimes had scarcely more schooling than their pupils. Today, the upgrading of these unqualified teachers is of wide concern throughout the region. It is the mission of the Jordanian Ministry of Education's institute.

Education in the Hashemite Kingdom of Jordan begins with six years of primary school, followed by three of preparatory and three of secondary. The first nine years of this cycle are compulsory and free. In the 1960-61 school year there were 149,205 children enrolled in primary and 29,883 in preparatory schools in the country. Only a decade later, these figures had jumped to 421,961 and 111,140, respectively.

Teacher training was growing too, but at a slower pace. Where government normal schools in the early 1950's had graduated about 40 teachers a year, the current annual output of the expanding system is about 400. This, however, is still far short of the present yearly requirement of the compulsory cycle for 883 new teachers. As in the past, the deficit will have to be made up by unqualified personnel. The government estimates that 70 per cent of primary and preparatory school teachers (including 4,443 in the East Bank) do not meet the minimum official standard: a high school diploma, plus two years of teacher training.

Pilot Project

"From the beginning the government recognized that these emergency teachers would have to be upgraded," Mr. Abdul-Razik told his visitors. "Poorly prepared students are costly to society. Some of the teachers we hired were teenagers, fresh out of high school. Others, perhaps as many as five per cent, had less than a secondary education themselves."

"In the 1950's, the government called some of these teachers in for summer training sessions. In the 1960's a more systematic approach was tried, bringing teachers to Amman for 16 weeks at the Men's Teachers' College. But this meant replacing them in their classrooms with substitutes - both expensive and a drain on the supply of teachers - and it was abandoned after three years. Then, in 1969, the whole problem was reconsidered in the light of a survey showing that more than two-thirds of our teachers in the compulsory cycle were below standard."

"We looked at what was being done abroad, in Egypt, Australia, India and elsewhere. We studied the range of educational technology available. And we finally discovered that probably the best system was in our own backyard," Mr. Abdul-Razik went on. "In 1964, UNRWA (the Relief and Works Agency for Palestine refugees) and UNESCO had set up an Institute of Education in Beirut to provide professional on-the-job training for unqualified teachers working in schools or the refugee children. We had seen one system at work in our own country and decided it could be adapted for our own needs. That's when we went to UNICEF."

UNICEF helped the Jordanian Ministry of Education draw up a pilot project for training teachers on the job, using weekly mailed assignments and seminars, multi-media teaching aids, field tutors and summer courses. The UNICEF Executive Board in 1971 approved allocation of $196,000 toward the $488,000 cost of an initial 18-month launching phase from mid-1971 to the end of 1972. This year it increased this commitment with another $900,000 toward the $2,568,700 to be spent on a full-fledged programme from 1973 through 1977. In this partnership venture, UNICEF's contribution is for training supplies and equipment, vehicles and funds for the preparation of curricula, stipends.

by Donald A. Allan
(UNICEF Public Information Officer, Beirut, Lebanon)
and some salaries. The Jordanian government is supplying personnel, premises and local costs. UNESCO, UNRWA, UNDP and the Ford Foundation also have aided or will participate in the programme.

The Jordanian Certification and In-Service Teacher-Training Institute’s first class consisted of 220 trainees chosen from 1,799 applicants. In August, 1971, they embarked on a two-year course with a fortnight’s introductory programme at the Men’s Teacher College, in Amman. When they returned to their schools in the fall they began a schedule of weekly mail assignments prepared and printed at the institute and attended weekly two-hour seminars in groups of 25, conducted at sub-centres in Amman, Irbid and Zarqa. These seminars are led by field tutors (highly qualified teachers selected by the institute), by subject specialists on the institute staff, or by specialists called in from outside. They begin with a test on the week’s assignment, and may continue with the showing of an instructional film, a filmed or live “micro-teaching” demonstration of techniques, a lecture by a visiting consultant, or perhaps the showing of a video tape of one of the students at work in his classroom. These become the take-off points for lively discussions.

In the second semester, the trainees follow their seminars with additional two-hour sessions in their teaching specialties—working in a science laboratory, for example, or on languages with cassettes or in the libraries at the sub-centres. Twice-weekly programmes in English and classical Arabic are broadcast for the trainees over the national radio. About six times during the school year the trainee will receive a classroom visit from his field tutor, followed by a personal discussion of his problems. And once or twice a semester a subject specialist will also drop in unannounced to see how the trainee is carrying out the techniques taught in the assignments and seminars. Each semester concludes with a written examination and oral language test. All of this makes for a heavy work load on top of the trainees’ regular duties. In compensation, they are released from teaching one day a week.

Improvement Visible

This July the trainees returned on stipends for their second residential programme in Amman, this time a full month of professional classes. They will have another month in the summer of 1973 before taking their final examinations. Then the two-year (72 hours a week) course will be completed and the trainees will be certified, on an equal footing with their colleagues who have diplomas from normal schools and universities. They will also be eligible for promotions and salary increases and will earn a bonus of two dinars (about $6) a month for completing the course.

This summer also, a second group of 387 new trainees entered the pilot project’s two-week introductory course. Next year, the first of the long-range programme, the level of new trainees will be raised to 600 a year through 1977, by which time 2,400 teachers will have been upgraded and certified by the institute—all without losing time from vital work in their own schools.

Beginning next year, too, seven new sub-centres will be established, bringing all ten educational districts in the East Bank sector into the system. The staff of field tutors will be doubled, to 22. The nine subject specialists are already revising the curriculum in the light of the first year’s experience, and the Ministry of Education is considering making changes in the regular pre-service teacher training based on the success of the new In-Service Teacher-Training Institute.

“The average trainee is between 20 and 30 and has been teaching five or six years,” Director Abdul-Razik said. “They are about equally divided between men and women. We don’t take many of the old-timers, who might be resistant to change, and we take no one with less than a secondary diploma and two years of teaching experience.

“The curriculum has three sections: general education, deepening the teacher’s knowledge of a broad range of subjects; professional education in teaching theory and practice; specialized education, concentrating on language, science and mathematics, social studies or Islamic studies. Over the two years the emphasis on the professional and specialized studies increases.”

Adil Toubasi, 30, is typical of the high-calibre tutors. He is a graduate of the American University in Beirut, with a master’s degree in education from the University of Jordan. He has taught both preparatory and secondary schools, been a supervisor for mathematics teachers, and done post-graduate study in mathematics in London on a government fellowship. And he is enthusiastic about his work.

“Headmasters say that not only have our trainees improved as teachers, but they have inspired their colleagues to better work, too,” Toubasi told the visitors to the institute. “The greatest fun is the video tape, where a teacher can see himself on the screen. The biggest gripe is the work load.”

A Busy Year

Toubasi has to go to school, too. Each year the field tutors and subject specialists will spend at least a month at either the UNRWA/UNESCO Institute of Education’s courses for its refugee camp teachers or at a Jordanian teaching college. They, too, receive allowances above their base salaries for the extensive field work they carry out. Each tutor must look after about 50 trainees scattered in many schools.

“This first year has been busy, fascinating and very promising,” Mr. Abdul-Razik summed up. “The feedback we get from the headmasters and the trainees shows that it is working well. We have the confidence of the teachers we are training, for we never tell the Ministry of Education or the headmasters anything about them. We don’t carry a stick.

“We need more audio-visual equipment—right now we have to spread our cameras and projectors around in mobile units—and we hope to add national television broadcasts for the trainees to match the radio programmes. We want to have follow-up conferences for graduates. We know it will take ten or more years for the combined efforts of all forms of training to bring the country’s teaching staff up to standard. But we are making progress. Over 90 per cent of the first group of trainees passed their second semester examinations.”

“The Jordanians are very keen and are working hard,” commented Dr. E. A. Pires, Director of the UNRWA/UNESCO Institute of Education in Beirut, where the founding cadre of the Amman institute spent a month in 1971 studying the methods of in-service training perfected by Dr. Pires and his colleagues. “Now the Sudan has set up a similar institute, Syria is in the first phase of a re-training programme and there is interest being shown in Lebanon, Yemen and Oman. Unqualified teachers are a common problem for this region. The Jordanians have helped demonstrate that something can be done about it.”

---
A new worldwide appraisal of education has revealed that efforts to narrow the gap between the developed countries and the developing countries in the educational race, as in the march to economic progress, have failed. The magnitude of the problem is reflected in the still widening difference in expenditures for education in the industrialized countries and those of the developing world. This was one of the conclusions of the special report to UNESCO by the International Commission on the Development of Education. The seven-man commission, headed by France's Minister of Social Affairs, Edgar Faure, urged the world's educators to make universal primary schooling the top priority of the next decade. The report also contained a number of predictions about the future of education. The Faure commission visited 24 countries.
countries around the world to examine conditions and study educational trends at first-hand in order to re-define the functions and aims of education in the modern world and to suggest ways in which national education systems could achieve their respective goals.

The commission believes that lifelong education is not just a theory but already a fact and one which education systems should take account of to help people to be able to cope in a changing world where the quantity of knowledge increases faster than individuals can keep pace with it and where, in some countries, half the working population are in jobs that did not exist at the beginning of this century.

As the importance of pre-school education is more widely recognized, education will generally start much earlier in life, according to the Faure report. Then it will never end, if the lifelong education approach is adopted. Examinations will probably vanish from the school scene, for they will be meaningless to people who are learning at their own pace, throughout their lifetime. Rigid curricula are bound for the scrap heap and schools themselves, as places exclusively for children, are threatened with extinction.

Most importantly, spirit and aims will change. The stress will be on learning, not teaching. Education's products will not be measured in terms of so much knowledge dispensed, but of so many complete human beings who have developed. Inside and out, education will become truly democratic.

In the commission's view, man is a learning animal. Learning is both natural and necessary to him but the systems he has set up, whether they be modern American or European schooling, Hindu university, Islamic education, classical, medieval or post-industrial, have all had a tendency to set out to be a system and end up as a straitjacket. Why? Because the tradition they were established to pass on became a dead weight, because school became an institution instead of an approach to life, because there was too much emphasis on the written word, too much subject-division, too much authoritarianism—in short, too much school and not enough learning.

**Paradox**

The present situation, the commission finds, is paradoxical. On the one hand, there has never been so much demand for education (between 1960 and 1958, the total number of school-age children in the world increased by 20 per cent); on the other, there has never been so much dissatisfaction with, and rejection of, education by the young. Never before has so much education been provided (nearly 650 million persons are currently enrolled in educational institutions throughout the world) but never has society so widely rejected the product of institutionalized education, as indicated by the rate of educated unemployed in many countries.

Educational systems set up to cater to the needs of a minority, to pass on mainly middle-class values and to deal with a known quantum of knowledge, cannot cope with a majority, and they fail to impress on pupils values which they can see denied in daily life. These systems are outstripped by the constant expansion of human knowledge, especially in scientific and technological areas. Hence the student revolts in France and other countries in 1968, the high dropout rate in Africa and elsewhere and the growing number of unemployed graduates in Asia.

What's to be done? The commission does not lay down ground rules for the educational systems of the world, for it recognizes that cultural backgrounds vary from country to country and that the choice of the education it wants is for each state to decide for itself. But the commission does offer guidelines for possible action. Democracy, flexibility and continuity seem to be the watchwords emerging from these suggested strategies for educational reform.

These, says the commission, are trends which are already current in many countries and to which there are no counter-movements—particularly as regards the trend towards flinging the gates of educational opportunity open to all instead of working for a self-perpetuating elite. It is this movement which has caused industrialized countries to increase their educational spending and many developing countries to set aside 20 per cent and more of their national budgets for education.

The move towards democracy in schooling has several causes, including the general demand for qualified labour to meet the demands of stepped-up technology. In some countries ideology is behind the move, in others, the consequences of decolonization. In some cases the spur is even the fear of social unrest. But a wide gap remains between a decision of principle to provide universal education and the democratization of the systems. As they are currently structured, inequality is built into them.

"The universal right to education, in which contemporary civilization takes such premature pride," says the commission, "is often refused to the most underprivileged."

This happens because schools are often situated in city centres, remote from rural populations or even the inhabitants of poor suburbs. It also happens because some groups are disadvantaged. The report refers to the President's Commission on Campus Unrest in the U.S.A., instancing the discrepancies between the proportion of black and white pupils finishing the various grades of schooling. In any case, the report insists, equality of access is not the same as equality of opportunity, which must include an equal chance of success.

**Lifelong Education**

Nutrition, family background and factors like housing all play a role in success at school and even in some socialist countries children of executives tend to get higher school ratings than the children of labourers, while throughout the world, the disparities between social classes are even more strikingly reflected in university enrolments.

Merely multiplying schools is not the answer. The commission rejects the "reassuring ideology" of merit as the sole criterion. What is needed is not equal treatment for everybody, but provision for each individual of a suitable education at a suitable pace for his particular needs. This has always been a theoretical possibility although a practical rarity. Today, the advance of educational techniques (such as programmed learning) has made it much more realizable.

Abandoning the elitist conception of education means many things, including re-thinking the examination system for "there is little evidence that selection procedures are capable of predicting adequately whether an individual has the aptitudes required for a particular career... While the marking system does, in general, enable an individual's achievement to be compared with that of his peers, it rarely considers his progress in relation to his own starting level."

Real solutions to the problems of inequality can only be found in a sweeping re-organization on the lines
of permanent, lifelong education for
"once education becomes continual, ideas as to what constitutes success and failure will change. An individual who fails at a given age and level in the course of his educational career will have other opportunities. He will no longer be relegated for life to the
ghetto of his own failure."

The idea of lifelong education is not a new one but has been urged by some educational leaders in recent years. "Human beings, consciously or not, keep on learning and training throughout their lives, above all through the influence of
themselves throughout the years. "Human beings, consciously or
some educational leaders in recent years have observed that education has become continual, not a new one but has been urged by those who believe in permanent, lifelong education for
 humans. Pupils cease to regard learning as the acquisition of a certain quantity of knowledge within a certain time; teachers cease to be timekeepers and progress-chasers and become channels through which pupils can get at the knowledge they need.

Flexibility, the third characteristic of the education of the future, is obviously necessary if lifelong education is to work. As the divisions between subjects are eroded by advances in knowledge, curricula will have to change to meet specific needs — grown-ups who want to turn to say radio engineering, will not necessarily have the time to plough through the whole syllabus of heat and light before they can get to work. In any case, says the report, flexibility is required by modern conditions. "At the rate technology is advancing, many people during the course of their working life will hold several jobs or frequently change their place of work ... Education rarely equips the individual for adapt-
ing to change, to the unknown. The world has not yet widely accepted the principle of a general polytechnical education at secondary level — an education which would guarantee professional mobility and lead to lifelong education." Yet such an education has given positive results where it has been tried — in the U.S.A., in the Federal Republic of Germany and in most of the socialist countries.

Consideration of new techniques occupies a substantial portion of the report, for while the faulty functioning of education makes reform necessary, it is the existence of these new techniques which makes reform possible. Together they make up a whole arsenal of social, technical, cultural and structural innovations which could profoundly change educational systems.

Among the findings from research examined are results of investigations of the human brain, which as is now known, has a large unused capacity—perhaps as much as 90 per cent. Research into cell formation shows an immediate path to be taken: protein undernourishment of babies between five and ten months old can permanently handicap them so that nutritional measures are for some countries the first steps to boosting intellectual performance.

Contributions from psychology, linguistics, anthropology, communication theory and cybernetics have all helped to shed light on learning. Soviet researchers, for example, have worked out a strategy for tracing the cognitive process — and an emerging trend, which instead of pupils being invited to think about what they are taught, are, in some measure, shown how to think. That pupils can be encouraged to think has already been proved by the use of "group tech-
niques", and here, at any rate, permissiveness pays, for children allowed to tackle learning problems as groups have more and more come to take the role of the teacher themselves.

Toward a Learning Society

For the first time since the invention of the textbook, the exercise book and the blackboard, the "hardware" of the teaching trade has been substantially increased by a battery of mechanical supports, including the whole range of audio-visual aids video-cassettes, closed-circuit TV and computers. Mass communication technology has moved simultaneously in two opposite directions: towards individualization of education (as in programmed learning) and towards mass distribution (as in educational TV programmes by satellite transmission). Successful use of this technology is already being made in "TelleKolleg" in Western Germany, in the radio schools of Japan and Open University of Britain.

The focus of all the innovations of the last ten years is significantly the same: on self-education, on learning not teaching.

Every educational act is part of a process directed towards an end, says the report. "The search for a new educational order is based on scientific and technological training, one of the essential components of scientific humanism (which) rejects any preconceived, subjective or abstract idea of man (and) is concerned with a concrete being, set in a historical context, in a set period. He depends upon objective knowledge directed towards action and primarily in the service of man himself."

"Education must develop the scientific spirit of this concrete being because he lives in a world steeped in science, whether he is an automated factory worker in Europe or an Indian peasant caught up in 'the green revol-
u tion.' Education needs to cultivate his creativity, because stifling it is the cause of much of youth's malaise. Education must prepare a man who is socially committed, democratic and internationally-minded because this is one guarantee of peace. Man must be able to wonder, to doubt, to appreciate beauty, to master his own body. The physical, intellectual, emotional and ethical integration of the individual into a complete man is a broad definition of the fundamental aims of education."

If education spreads over the whole of life and concerns such a complexity of factors, then it follows that the school "will be less and less in a position to claim the educational functions in society as its special prerogative. All sectors — public administration, industry, communications, transport — must take part in promoting educa-
tion. Local and national communities are in themselves eminently educative institutions." In the Commission's view, the trend must be towards the "learning society".
Little-known Botswana, wedged between white-ruled South Africa and the black states of Africa to the north, is one of the most sparsely-populated countries in the world. Although bigger than France, Botswana has a population of 650,000. Its average density is one person to the square kilometer.

Enormous handicaps have faced this African country since it attained independence from British rule in 1966, and changed its name from Bechuanaland to Botswana. Among the handicaps has been the almost total lack of communications, caused by the fact that much of the country is either covered by the Kalahari Desert or impassable swamps. Only in the east is there any passable terrain, accommodating the north-south artery, 400 miles of railway linking Capetown with Salisbury, Rhodesia, and operated, even within Botswana, by Rhodesian Railways.

While nature has conspired to create most of the country's handicaps, one of the most serious obstacles in the way of Botswana's rapid progress is of a different type—lack of educational facilities. The fact that the isolated people of Botswana have long been deprived of adequate schooling and training has resulted in an acute shortage of skilled manpower. This has compelled the Government to rely upon the services of a large number of expatriates, mostly whites, to tackle skilled and even semi-skilled jobs.

**Mineral Discoveries**

The recent discoveries of minerals, including diamonds at Orapa, copper and nickel at Selebi-Pikwe and coal elsewhere, have made it imperative for Botswana to overcome its manpower bottleneck urgently, if it is to develop on a sound basis.

The government leaders directing the drive for better education want to see the school system more responsive to the country's real needs. They have given top priority to education and the limelight is now focused on Botswana's classrooms and teacher-training colleges.

Before any significant progress can be made, however, many problems have to be overcome within the nation's restricted educational system. For instance, there is the fact that girls have tended to be better educated than boys. Not only do they have a higher literacy rate, but more girls attend primary schools in Botswana than boys. This is accounted for by the fact that many boys only attend schools at certain times of the year when they are not busy tending Botswana's cattle herds, the country's most important single asset.

**No Real Training**

An even more formidable problem concerns the teachers. After independence, it was found that about 40 per cent of the country's "teachers" had no real training for their jobs.

Botswana's Chief Education Officer, Mr. A. W. Kgarebe, recently stated in an interview: "Our greatest worry was the very high percentage of untrained teachers we had in the country in 1966. Many had only a primary education and it did not need any imagination to know that it must have affected the quality of teaching tremendously. This problem has been phased out now, and in 1973 only 14 per cent of the teachers in Botswana will remain unqualified."

Now that the percentage has dropped sharply from 40 to 14 per cent, the next problem is to try to raise the general level of teachers' education. In these efforts, the UNICEF/UNESCO-aided teacher training programme at Francistown Teacher Training College has played an important role.
Under its New Zealand-born principal, Mr. Eric Hill, the college has been tackling the problem generally of the low educational standards of the teachers. To have placed all of the untrained teachers in training at one time would have disrupted the entire educational system. Forty per cent of the teaching staff would have taken around 700 teachers away from their classrooms for two or three years. As the schools had to be kept going, a policy of "in-service" training was introduced at the Francistown College. Much emphasis was placed on the use of teaching aids, especially those for science education, and many ingenious aids have been produced from waste material.

The plan meant that for the first six weeks of each of three years, the teachers attended the college for orientation courses which set them up for the remainder of the year. They continued by correspondence courses.

Radio the Vital Link

In operating the correspondence courses, radio proved the vital link, for in a vast, near-empty country like Botswana it was the only effective method of keeping in contact with the teachers. Most of the radios provided for the teachers taking re-orientation courses were purchased by UNICEF. Regularly the teachers' assignments go out from the Francistown College, far across the Kalahari, to reach every corner of Botswana. Some are carried by canoes far north into the Okavango swamp country bordering Angola and Namibia (Southwest Africa).

Many teachers had to work in small huts with no electric light, their only illumination coming from either a candle or a kerosene lantern. Principal Eric Hill, who gives these teachers high praise for their dedication under most trying conditions, recalls that one teacher wrote to him apologizing that the goats had eaten up all his assignment papers! Another complained that a storm had lifted the roof off his small mud house and scattered his papers across the vastness of the Kalahari.

"In all of my years of teaching and all of my associations with teacher training colleges, I have never met a more devoted and motivated group than the ones we had through this college", Mr. Hill recently stated, pointing out that ages ranged from 22 to 62 years. Some of the teachers who attended the re-orientation courses are grandfathers or grandmothers, yet each was anxious to improve his or her skills in order to serve the students more effectively.

Teacher listens to a correspondence course programme on one of the radios provided by UNICEF for the teacher re-training project in Botswana.

(Photo by Matheson)
Education has a triple role in the process of over-all development of the child. First, education is needed for his personal development, and, in a sense, it is a human right and an end in itself.

UNICEF’s mandate in the field of education is derived directly from the United Nations Declaration of the Rights of the Child (1959) which contains the following:

"The child is entitled to receive education, which shall be free and compulsory, at least in the elementary stages. He shall be given an education which will promote his general culture and enable him, on a basis of equal opportunity, to develop his abilities, his individual judgement, and his sense of moral and social responsibility, and to become a useful member of society."

After this declaration was issued, UNICEF broadened its aims from "protection of life" to include "preparation for life". With a small allocation of $143,000, UNICEF entered the education field in 1960. Today, UNICEF aids educational programmes in 83 countries, committing $13 million, 28 per cent of its total programme assistance, to education. In 1971 UNICEF provided grants for training 42,000 teachers, including nearly 29,000 primary teachers. It helped equip 14,000 primary schools, secondary schools, and teacher-training centres with modern teaching tools (maps, globes, science teaching kits, blackboards and books). It provided paper, printing units, or both, for mass text-book production, with particularly large production in Ethiopia, India, Indonesia and Tanzania.

Education is also required for a child’s preparation for citizenship and employment. Education is widely accepted by governments and the general public as an indispensable factor in the economic and social development process. True development is impossible without the substantial development of a nation’s human resources.

Education is also an important instrument for effecting improvement in other sectors of concern to UNICEF, especially better health and nutrition, since there is a significant link between a child’s education and his ability to live a healthy life.

Link To Population

The attainment of universal primary education in the developing countries is closely linked to the population problem, both negatively and positively. Negatively, because the exceptionally high rates of population increase mean that countries have the double task of reducing the backlog of unenrolled children and of providing for a growing child population with the same resources. Positively, because there is evidence that the spread of education tends to have a limiting influence upon family size.

The positive impact upon family size affects the difficult choice of quantity versus quality in primary education which is faced by countries with incomplete educational systems, since the child population not covered by primary education rapidly becomes uneducated adults with large families. So long as there are large groups without education, the gradual extension of the school system is like pouring water into a bucket with a hole in it. On population grounds alone, therefore, there is a strong case for extending basic education, even of the simplest kind, as rapidly as possible. The fact of girls being in school rather than unenrolled raises the age of marriage in countries where the marriage age is low. There is also a link between education and population distribution that may be unfavourable. Rural education, unless geared to the needs of the environment, can encourage the movement to shanty-towns of youths in search of work, in excess of the numbers the towns are able to absorb.

In the countries that are seeking UNICEF assistance for education, there is now a general concern with the extension of their education services to rural areas and urban slums and shanty-towns. In the least developed countries the problem areas may be even more extensive. (This situation is similar to the other fields of UNICEF assistance.) Within this context, there are two minimal steps of outstanding importance for children and adolescents in the next decade. The first is to acquire basic literacy, which is the initial stepping-stone to full citizenship, personal development, and employment, and is the prerequisite for further education. The second is some form of practical or pre-occupational education, to enable them to raise their levels of living by having the necessary basic preparation for their working lives, on which further training can be built. The same school system may be used for both the academic and the practical requirements; and both types of education may be combined at different times and in various ways over the educational period by formal or non-formal education.
The Provincial Approach

Like most countries in Asia, Indonesia is undergoing a dramatic reform of its educational system. Issues such as whether better education is provided for children if the planning and implementation are done by provincial governments rather than the central government have been discussed and debated for years by Indonesian planners and educators.

A decision was finally made in 1969 to try “a provincial approach” to education, in which education is more directly geared to specific development goals of each province.

West Sumatra was chosen for this important demonstration project because the province is relatively small in area, with a total population of only three million, clustered most densely in and around Padang, the provincial capital.

At the Institute of Education and Pedagogy in Padang, teachers are being trained and re-trained, curricula are being drastically revised, and imaginative teaching aids are being produced by the educators themselves.

UNICEF has been involved in this experimental project from the start. The objective is not simply to increase the number of schools and teachers (although they do increase at a rapid rate). The aim is to create a new form of education directly related to the needs of the local community, of the province and of the nation.

Relevant Education

From the point of view of development, West Sumatra is neither exceptionally advanced nor unusually retarded relative to the rest of Indonesia. The main occupation of the people is agriculture. Rice, rubber, and copra are grown for local consumption and for export. Cement, coal, and timber are key elements in

Secondary school teacher explains how coral is formed during a field trip for science students. Greater use of such trips is part of the new approach to education in West Sumatra. (ICEF 6576/Vajrathon)

(Education in West Sumatra) by Mallica Vajrathon
the development of industry in the area; but most of these precious natural resources are largely untapped, due to lack of finance and trained human resources.

The situation is worsened by the fact that a large number of the brightest and most forward-looking young people migrate to Java, hoping to find some outlet for their talents through good jobs. Every year, it is estimated that about 70-80 per cent of high school graduates leave West Sumatra to continue their education and find work in Java, especially in Jakarta. Only about 2 per cent of them return to their home province.

The ultimate goal in making education more relevant to the life and the development needs of the province is to reduce the mass exodus to the cities. Young people will be encouraged to remain and use their knowledge and skills to develop their own province. Another objective of the "provincial approach" is to transform the village teacher into a vigorous local force for social and economic progress.

As part of the project, a two-year survey was carried out to determine how education had developed in West Sumatra in the last five years. Among the subjects covered by the survey were: the demographic situation, the problems of technical education in certain areas, conditions of primary and secondary schools and teacher-training institutions, attitudes and aspirations of the people about education, and the manpower resources of the province in relation to provincial development plans.

Refresher courses have been organized, with UNICEF assistance, for instructors and teachers of primary and secondary schools, teacher-training institutions, education management and administration staff, school principals and district education inspectors. The content of these training courses includes school and community relations, links between curriculum and environment, and production of audio-visual teaching aids. A variety of UNICEF teaching equipment goes to help improve the quality of teaching in kindergartens, primary and secondary schools, teacher-training institutions, vocational schools, and family-life education centres.

Thus, "provincial"—usually linked with narrow backwardness—takes on a new, more positive meaning in the light of the West Sumatra experience. Never again will it be limited to a negative definition.
By 1980, unless present trends are drastically reversed, UNESCO forecasts 820 million adult illiterates in the world. That spectre underlies world-wide concern with drop-outs.

Four centuries ago, William Shakespeare portrayed a typical school-boy of his day in these words:

"The whining school-boy, with his satchel,
And shining morning face,
creeping like snail unwillingly to school . . ."

The unwilling school-boy of Shakespeare's day is all too alive today, according to a recent UNESCO survey disclosing that his counterparts—repeaters and drop-outs—may be found in steadily increasing numbers, particularly in the developing world.

While 1 out of 10 pupils drops out in Greece, Hungary, Italy and Poland, 8 out of 10 drop out in Botswana, Central African Republic, Chad and Rwanda.

The UNESCO survey provides additional evidence of the alarmingly high drop-out rates for any number of developing countries:

1. 7 out of 10 in Colombia, Dominican Republic, Guatemala, Madagascar and Paraguay;
2. 6 out of 10 in Algeria, Brazil, Burundi, Ecuador, El Salvador, Mexico, Qatar, Khmer Republic, Upper Volta and Venezuela;
3. 5 out of 10 in Argentina, Congo (People's Republic), Dahomey, Gabon, India, Libya, and Malta.

If you consider how many children are not enrolled in primary school in developing countries, their drop-out rate is all the more disturbing.

In Africa as a whole, 60 per cent of primary children are not enrolled. Almost half—45 per cent—of Asia's children are not enrolled in school.

At a time in his life when he should be in school, this Brazilian boy must work for a living as a shoeshine boy in the streets of Rio de Janeiro. Here, exhausted, he gets some sleep on the steps of a hotel. (ICEF 4120/Speiser)

Among Latin American children, 25 per cent are not enrolled in school.

Generally, girls have less access to education than boys. In the Arab states, they occupy only 36 per cent of primary school places; 38 per cent in Asia, and 40 per cent in Africa.

Evidence points to the higher vulnerability of rural children, whose drop-out rate is nearly twice that of urban children. Available statistics from four Latin American countries bear this out:

In Colombia, over 96 per cent of rural children enrolled drop out, as contrasted to 52.7 per cent in urban areas.

Comparable figures for the Dominican Republic are 86.1 per cent for rural children, 48.1 per cent for urban; Guatemala, 96.5 per cent rural, as opposed to 50.4 per cent urban; and for Panama, 54.7 per cent rural drop-out rate, contrasting sharply with a 19.3 per cent rate in urban areas.

The growing dimensions of the drop-out problem, as well as the pressing need to reach an estimated half-billion educationally disadvantaged children in "the third world", challenge the educational planners of the developing world to re-examine the content, techniques and goals of their school systems.

UNICEF has a special role to play: in spurring the search for innovative techniques and materials; in supporting efforts to provide practical job skills along with reading, writing and arithmetic for primary-age boys and girls; in exploring non-formal, out-of-school channels for education—community centres and youth clubs—to reach functionally illiterate youths beyond school age.

The conditions which underlie the drop-out problem are common to many countries. As such, the profile of a drop-out which follows, coming from a country deeply committed to educational reform, may spotlight some of the conditions in need of correction wherever drop-outs are causing concern.

*Author of "GALONG, River Boy of Thailand" published by Julian Messner Co., New York.
PROFILE
OF A
DROP-OUT

When I first met eleven-year-old Galong Imphong in a riverside village one hour from Bangkok, the boy had gone to school only 32 days out of the school year; had failed two grades and could barely read or write. He had managed to drop out for over a month before his father and mother, fruit-sellers in Bangkok, found out.

Bright and energetic, Galong had found something much more interesting than school. He was providing his own pre-vocational training, by working as a helper or "second man" on the taxi-boats which shuttled back and forth between Bangkok and the many outlying canal-side villages all day long.

It was easy to understand why Galong preferred working on the taxi-boats, where he felt important (he collected fares, made change, helped dock the boat, and sometimes even helped navigate) to sifting in school. There was little to capture his interest in the traditional teaching methods; few if any visual or learning aids were being used. Galong dreaded being called on to read aloud, as he stumbled over the words the way most first-graders do. The lure of earning 10 baht (50 cents US) a day on the taxi-boats was quite strong to Galong, one of ten children, whose father could just afford to give him a baht a day for pocket money. Ten baht meant he could buy plenty of food during the day, go to a movie, or rent a bike at the sports field near the Temple of the Emerald Buddha. So it was no wonder that Galong felt he had outgrown school.

The day the school officials notified his father about his hookey-playing, Galong found out he was still a boy subject to his father's authority.

The Lord Buddha taught that ignorance was an evil to be eliminated, and, like most Thai, Galong's father and mother were deeply attached to Buddhist teaching and had great respect for education. Since they could neither read nor write themselves, Galong's parents wanted him to have these skills and set a good example for his six younger brothers and sisters. Otherwise, they were sure he would remain a "second man"—and never advance in life, unless he mastered reading and writing.

Since they left home each morning at 6 and often did not return until after dark, how could his parents help Galong resist the temptation not to go to school? The nearby Buddhist monastery provided the answer. The monks agreed to take the boy on as a serving boy, which meant he would work for his food and lodging, and benefit from their supervision as well as the good example of the whole brotherhood. Since the public school adjoined the monastery, the monk to whom Galong was assigned would keep his eye on the boy during the day, and help him with lessons at night.

His father held out this promise: Stay in school until you finish the fourth grade—compulsory under Thai law—then you will be free to go and do what you wish.

Galong held on to this promise, and made slow progress in reading and writing, although he remained unresponsive to the traditional formal teaching being used in his school. Then he was put into a special class for drop-outs and repeaters, where his new teacher discovered how keen Galong was about boats. He learned there was a special vocational training school, equipped by UNICEF, opening in Bangkok where boys learned how to run cars and boats; repair engines; and work in wood and metal. But if Galong wanted that kind of training, he would have to finish the fourth grade to qualify.

Here was a motivation Galong could respond to. Coached by his monk, encouraged by his teacher, Galong finally graduated primary school and was admitted to the vocational school.

A drop-out had been saved, and his ability channeled into the proper area. Hopefully the improvement of education in Thailand and other countries will take place quickly and effectively enough to save many more boys and girls like Galong and prepare them for more productive lives.

Galong at work in the public school adjoining the monastery in Bangkok.
The contrast—even within the proximity of four neighbouring villages—is startling. Each area moves at its own pace, but already a remarkable before-and-after quality is evident as the Honduras Government proceeds with its UNICEF-assisted emergency plan for the rehabilitation of the border zone located in the south and southwest part of the Central American nation. This is the area that was hardest hit during the 1969 conflict with El Salvador.

Primary education is the target for the greatest change. For example, while second graders in Santa Fe, Honduras, still learn on the floor because of a shortage of desks, in nearby Antigua, which has a rural pilot school, there is not only a sufficient number of desks, but youngsters engage in such diverse projects as agricultural and animal husbandry, as well as the usual academic subjects.

Again, in contrast, Antigua children get fresh water from the popular "la pila" (water tank), which also doubles as a swimming pool and communal bathtub. Their peers in Santa Fe have to lug water in huge pottery vases from a river that is not only distant, but polluted. As part of the emergency plan, Santa Fe is currently building an aqueduct which will bring fresh spring water from a mountain five miles away.

In El Portillo, a new school still under construction has to double as the only existing service in the tiny village. The nearest health sub-centre, atop a mountain, is two hours away.

In Terlaca, fifth and sixth graders are, for the first time, learning about industrial arts and carpentry with tools supplied by UNICEF. The children are, more and more, coming home with the proud results of their newly acquired craft. One young man carried a chair home to his mother, who received it happily and optimistically told him, "I'm sure the second..."
one you will make will be even better." Today, the mother does her sewing in the son's chair.

The pilot school at Antigua has granted the community a new lease on life. Formerly prosperous, the village was devastated by disaster three times in 35 years. A flood partially destroyed it in 1934. Two years later, another flood struck. The final blow came in 1969, when the El Salvador conflict closed the border and the potential market for Antigua's scallion growers. Today, however, fathers watch as their children plant radishes, peppers, tomatoes, watermelon and cabbage in the school garden—a reminder that crops need not be devoted exclusively to scallions.

Antiguans also hope to construct a street which would be a direct connection between the new school and the newly opened "international road," which bypasses the town. Villagers are donating land, money and, together with school-age children, their time as manual labourers. Anticipation runs high that the new road will attract tourists to the once-popular community.

These various by-products of the emergency plan reveal that the physical aspects of the aid are, in a sense, taking a secondary stance to the more important newly instilled feelings of hope and optimism prevalent among the Hondurans of the affected areas.

Second graders use UNICEF-supplied tools in school garden (TOP) at the Antigua pilot school. (ICEF 6567). After gardening, the children enjoy a splash in the water tank in the schoolyard (ICEF 6566). Boys (LEFT) learn carpentry and other skills as well as regular subjects at new pilot schools. (ICEF 6571). New water piping (RIGHT) contrasts with old church in Santa Fe, where community volunteers gather in the early morning to work on aqueduct. (ICEF 6582/Weisblat)
No matter what form a disaster takes — drought, flood, famine, earthquake, cyclone or warfare — top priority goes to the restoration of regular health and educational services during the period of rehabilitation. The United Nations Children's Fund (UNICEF) usually responds to emergencies with the most vital assistance items needed — food, medicines, shelter materials, clothing. When the initial relief operation is in full swing, UNICEF and its sister agencies turn their attention to the long-term reconstruction and rehabilitation programmes.

Getting back to normal includes getting the children back into school as soon as possible to minimize the disruption of their education. Without the resumption of regular school activities, no country can "pick up the pieces" after a disaster and get on with the task of economic and social development.

These UNICEF Photos from various countries where UNICEF has been active in recent emergencies vividly demonstrate how eager the stricken people are to get schools open again after the aftermath of tragedy.
1. UNICEF-provided textbook sets are packed for shipping at an Enugu warehouse during the Nigerian rehabilitation programme. (Photo by Matheson) 2. Workmen re-roof one of the war damaged schools in Onitsha, Nigeria. (ICEF 6230/Danola) 3. Plastic sheeting—supplied by UNICEF—was used for re-roofing in Bangladesh’s reconstruction programme. (ICEF 6520/Danola) 4. A football—part of UNICEF school equipment—is promptly put into play at a primary school in eastern Nigeria. (ICEF 6140/Yahaya-Godieke)
A survivor of the Afghanistan famine, showing signs of serious malnutrition, takes his place in school.
(Photo by Balcomb)
The World of Education

An African View
(From a statement to the UNICEF Executive Board, May 1972 by Robert K. A. Gardiner, Executive Secretary of the Economic Commission for Africa)

"A child is the centre of an ever-widening circle which embraces the whole community. Children mark a significant phase in population expansion, the rapid growth of the labour force and employment difficulties. They are dependent on society for their well being and impose responsibility on the community to equip them for a creative and satisfying life. It is not possible to cope with the needs of children without being concerned with the socioeconomic environment in which they live . . ."

"I must now turn to the prospects in our African demographic setting. At the beginning of 1972, the population of Africa was estimated at 370 million. In 2000 A.D., this population could be 734 or 818 million or 906 million, depending on the actual paths which fertility and mortality take. To set Africa's population growth in the perspective of that of other regions, I should mention that the current rate of population growth in Africa, which is estimated at 2.8 per cent per annum, is at par with that of South Asia and Latin America. With a steady decrease in the rate of mortality, and with fertility remaining high, it is estimated that, from about 1980 onwards, Africa would have the highest rate of growth among all the major areas of the world.

"The implications of these demographic trends indeed amount to a heavy burden in planning for education, for training and for employment of the workforce. Equally important is the concomitant increase in the school-age population, its requirements in terms of budgetary provisions, teachers and construction of facilities. In addition to its estimated 89 million school-age population in 1970, the needs of another 54 million additions between 1970 and 1985, and of yet another 77 million more between 1985 and 2000 A.D. would have to be met."

Adult Education: Instrument of Change

Adult education can be a powerful force in spurring not only personal fulfillment and national development, but the growth of democracy. This was one of the attitudes expressed at the Third International Conference on Adult Education, sponsored by UNESCO in Tokyo, July, 1972.

One report at the meeting said that the urgent need to provide schooling for the growing percentage of children in today's world tends to overshadow the fact that the vast majority of the world's adults are unable to participate actively in the political, social and economic life of their countries because they are educationally "underprivileged". UNESCO experts point out that the ideal of universal fundamental education cannot be confined to young people alone. Ways must be found to bring education of various kinds within the reach of people of all ages.

The growth of adult education can also help change the traditional educational process for younger learners as well, according to UNESCO. Since adults are more concerned with learning what they want to learn rather than what the teacher thinks he should teach, adult education must concentrate on helping people think critically rather than simply digest information.

Consequently, adult education may well be the starting point of a world-wide movement towards making all systems of education at all age levels more responsive to the needs of the individual.

"Education: A Definition"

"Education ought not to be defined in terms of uniform blocks of unchanging numbers of years of study. Rather, it should be an adaptable process with many "tracks" and varying achievement levels designed to meet many different qualitative objectives. It should be geared to give each individual, at any time of his life, the tools and the experience to adjust his ability to his ambitions. This requires fundamental changes both in educational policy and in the nature and magnitude of the aid effort that will be needed."

"From "Partners in Development" Report of the Commission on International Development, Chairman Lester Pearson."

The Books of the World

Half of all the books published in the world at present are published in only seven countries. In Africa, Asia and Latin America, where 80% of the world's population lives, only one fourth of the world's books are published.

According to UNESCO, the book is still "the simplest, cheapest, most dependable and most efficient device for communication that has ever been invented and, as such, is at the root of the whole development process," because it can be used anywhere, without depending on electric current, batteries or mechanics, and can be "consumed" when a person wants and needs it, at the speed at which he is able to learn, and the person can go back to it if and when he needs to.

Recent striking advances in production and distribution techniques have now made it possible to produce low-cost high-quality books in vast quantities. One important service of UNICEF in developing nations is to provide printing presses and paper to make possible the local production of needed textbooks, teaching guides and school readers in local languages. This is particularly important in Africa where there are so many different languages that the importation of books on a large scale is impractical for linguistic as well as for financial reasons.
the years from 2 to 6 are critical. Yet... millions of young children in this age group who live in developing countries are deprived of the basic necessities to ensure their healthy physical, mental, emotional and social growth.

To help illuminate the problems
To explore some practical solutions

a new UNICEF publication

the neglected years: Early Childhood

presents an original collection of articles by well-known authorities working in many areas of child care. They are:

Jean Piaget, Co-director of the Institute of Educational Science in Geneva and Professor of Experimental Psychology at the University of Geneva, who provides a compact overview of his major innovative theories and experiments which have provided the impetus for the study of cognitive development by scientists and researchers all over the world.

Dr. William M. Schmidt, Head of the Department of Maternal and Child Health, Harvard University School of Public Health, who reports on the highlights of a surprisingly frank and lively Roundtable discussion among 18 doctors from the developing countries on the problems of getting adequate care to the young child.

Dr. Derrick B. Jelliffe, Head of the Population, Family and International Health Division, School of Public Health, University of California, Los Angeles, and co-author E. F. Patrice Jelliffe, Research Fellow/Nutritionist, Caribbean Food and Nutrition Institute, Jamaica, West Indies, where Dr. Jelliffe was recently Director. Drawing on their many years of experience in the overlapping fields of nutrition and maternal and child health, the authors explore the reasons for widespread child malnutrition and offer a number of practical, low-cost measures for attacking this critical problem.

Beatrice B. Whiting, Research Associate at the Laboratory of Human Development and Lecturer in Anthropology at Harvard University, who examines the problems confronting mothers whose traditional folkways are being threatened in the modern urban setting in which many now find themselves. Dr. Whiting suggests ways in which they can be helped to accept the benefits of modernization.

Dudley N. B. Grant, Director of the "Project in Early Childhood Education", Jamaica, West Indies, who describes the successful results of an intensive experiment to give Jamaica's underprivileged pre-school children a better educational start in life. With only the most limited resources available, the "Project" has effectively upgraded teacher-training and curriculum, improved the physical condition of the schools, generated local resources and stimulated parent and community involvement.

Dorothy Beers Boguslawski, an authority in the field of day-care, who draws upon her many years of experience in Morocco, Tunisia, Iran and the Federal Republic of Cameroon. Pointing out the unique values of day-care for the child and his family, she provides specific examples of effective day-care programmes which have successfully overcome shortages of funds, materials and trained personnel.

Thomas J. Cottle, a member of the Education Research Center and Medical Department of the Massachusetts Institute of Technology in Cambridge, Massachusetts, who explores the wonders and meanings of play and how it helps children to find themselves, to learn about choice as well as constraint, and to develop a sense of autonomy and competence.

John Salcomb, UNICEF Regional Information Officer for South Central Asia, who reports on conditions he has seen at first hand which threaten the survival and well-being of young children, and draws particular attention to the need for more effective programmes which meet the full range of the child's basic needs.

To order copies of The Neglected Years: Early Childhood (96 pp.; English only; Sales No: E.73.IV.1 US $2.50 or equivalent in other currencies), please fill in the Order Form, enclose payment and send to either:

United Nations Office at Geneva
Distribution and Sales Section
Palais des Nations
1211 Geneva 10, Switzerland

United Nations Sales Section

Please send _____ copy (copies) of The Neglected Years: Early Childhood (Sales No: E.73.IV.1).

Enclosed find $______

ADDRESS__________________________________________________________

NAME ____________________________________________________________

CITY _______________ STATE ________ ZIP CODE ________
The U.S. Committee for UNICEF is a national, voluntary citizens' group organized to inform Americans about the purpose and programs of the United Nations Children's Fund and to receive private contributions for its support. It helps organize local UNICEF committees throughout the country and provides them with program assistance and staff services.

**UNICEF INFORMATION CENTERS IN THE UNITED STATES**

- **Atlanta Committee for UNICEF**
  103 Marietta Street
  Atlanta, Georgia 30303

- **Maryland UNICEF**
  115 East Eager Street
  Baltimore, Maryland 21202

- **Boston Committee for UNICEF**
  120 Boylston Street
  Boston, Massachusetts 02116

- **Buffalo Council on World Affairs**
  UNICEF Committee
  521 Genesee Building
  Buffalo, New York 14202

- **Chicago Committee for UNICEF**
  5 N. Wabash Building, Room 1501
  Chicago, Illinois 60602

- **UNICEF Committee of Cincinnati**
  c/o Travelers Aid Int’l/Institute
  700 Walnut Street
  Cincinnati, Ohio 45202

- **Cleveland Committee for UNICEF**
  510 Euclid Ave., 11 Euclid Arcade
  Cleveland, Ohio 44115

- **UNICEF Committee of Metropolitan Denver**
  901 East 17th Avenue
  Denver, Colorado 80218

- **Detroit Committee for UNICEF**
  402 Broderick Towers
  Detroit, Michigan 48226

- **Rochester Association for the U.N. Inc.**
  55 St. Paul Street
  Rochester, New York 14604

- **UNICEF Hawaii**
  3470 Waialae Avenue, Room 3
  Honolulu, Hawaii 96816

- **UNICEF Committee Houston-Harris County**
  5702 Valjean
  Houston, Texas 77035

- **Indianapolis Committees for UNICEF**
  644 East 38th Street #201
  Indianapolis, Indiana 46205

- **UNICEF Committee of Kansas City**
  2201 Grand Avenue
  Kansas City, Missouri 64108

- **UNICEF Committee Mankind Center**
  829 South Hill Street
  Los Angeles, California 90014

- **UNICEF Information**
  4155 North Prospect Avenue
  Milwaukee, Wisconsin 53211

- **Minnesota Committee for UNICEF**
  UNA Room 200
  55 South 8th Street
  Minneapolis, Minnesota 55402

- **New Orleans Committee for UNICEF**
  1639 Arabella Street
  New Orleans, Louisiana 70115

- **New York Metropolitan Committee for UNICEF**
  12 East 88th Street, Suite 208
  New York, New York 10028

- **Greater Philadelphia Area Committee for UNICEF**
  1218 Chestnut Street, Room 408
  Philadelphia, Pennsylvania 19107

- **Phoenix Committee for UNICEF**
  4636 North 31st Street
  Phoenix, Arizona 85016

- **Pittsburgh UNA/UNICEF Committee**
  252 Webster Hall Hotel
  Pittsburgh, Pennsylvania 15213

- **UNICEF Information Center**
  704 Oregon Bank Building
  Portland, Oregon 97204

- **U. N. Center of Greater St. Louis**
  704 DeMun
  Clayton, Missouri 63105

- **UNA/UNICEF Committee**
  U. N. Building
  Balboa Park
  San Diego, California 92101

- **UNICEF Committee, UNA**
  1739 Union Street
  San Francisco, California 94123

- **UNICEF Committee of Greater Seattle**
  2217A 4th Avenue
  Seattle, Washington 98121

- **UNICEF Information Service**
  Methodist Building, Room 205
  110 Maryland Avenue
  Washington, D. C. 20002

Many cities besides those listed above also have UNICEF Committees. For further information, write to Field Services, U.S. Committee for UNICEF.

**UNICEF News** is published 4 times a year by the UNICEF Public Information Division, United Nations, N.Y. 10017, and distributed in the United States by the U.S. Committee for UNICEF.