

The education revolution

Over the last decade, consensus has grown about the kinds of changes needed if learning is to occur. More important still, these are not ideas dormant in academic papers or debated at international conferences, but they are being put into practice all over the world, in pilot projects and at the national scale. Nor are the resulting success stories isolated events that would be impossible to replicate in other contexts or cultures. Rather they are practical proof of the 'education revolution', whose principles are now broadly understood and shared and whose central elements are emerging in varying configurations around the world.

If access to quality learning is one guiding light of this revolution, the other is child rights. In article 28, the Convention on the Rights of the Child established the right of all children, without discrimination, to education. The Convention also provides a framework by which the quality of that education must be assessed. If children are required to sit in an overcrowded classroom mindlessly parroting what the teacher says, their learning and developmental needs are

clearly not being fulfilled. The Convention guides us, therefore, in article 29, towards a more child-centred model of teaching and learning, one in which students participate actively, thinking and solving problems for themselves, and in this way developing the self-esteem that is essential for learning and decision-making throughout life.¹

A vision of quality in education guided by the Convention can never be limited to the lesson plans of the teacher or the proper provision of classroom equipment. It extends far beyond, into questions of gender equality, health and nutrition; into issues of parental and community involvement; into the management of the education system itself. And the benefits and impact of quality education also make invaluable contributions to all areas of human development, improving the status of women and helping to ease poverty.

The education revolution is reshaping the edifice of education. Under its aegis, schools must become zones of creativity, safety and stimulation for children, with safe water and decent sanitation, with motivated teachers and relevant curricula, where children are respected and learn to respect others. Schools and other learning environments also need to offer young children in the early primary

The Convention on the Rights of the Child guides us towards a more child-centred model of teaching and learning, one in which students participate actively, thinking and solving problems for themselves.

Photo: As much as 60 per cent of new HIV infections in sub-Saharan Africa may occur among young people 10-24 years old. Schoolboys in Malawi watch an AIDS prevention drama.

Learning for life in the 21st century requires equipping children with a basic education in literacy and numeracy, as well as the more advanced, complex skills for living that can serve as the foundation for life.

grades a nurturing experience that eases their transition into systems all too often not designed to do this. The elements of this revolution are already changing schools around the world.

Element 1. Learning for life

Going to school and coming out unprepared for life is a terrible waste. Yet for many of the world's children, this is exactly what happens.

Educators around the world have recently begun to focus on the gap between what is taught and what is learned, and the large numbers of children caught in that abyss. A World Bank survey in Bangladesh found that four out of five of those who had completed five years of primary schooling failed to attain a minimum learning achievement level, while those who had completed three years of schooling scored approximately zero on the same low measure of learning achievement.² The rights of these children are not being met.

Surveys such as these generally assess basic levels of literacy and numeracy — levels of reading, writing, speaking, listening and mathematics — which, of course, are critical tools for further learning. The surveys do not even attempt to measure the success of teaching children skills necessary for survival, for a life with dignity and for coping with the rapid and constant change that typifies modern life.

Learning for life in the 21st century requires equipping children with a basic education in literacy and numeracy, as well as the more advanced, complex skills for living that can serve as the foundation for life — enabling children to adapt and change as do life circumstances. A lack or inadequacy of basic education can seriously jeopardize the possibility of

lifelong learning and can widen the gap between those who can and cannot profit from such opportunities.

In this approach to learning, teachers and students need to relate in new ways so that the classroom experience — the very process of learning — becomes a preparation for life. As the principles of the Convention on the Rights of the Child make clear, teaching must be a process of guiding and facilitating, in which children are encouraged to think for themselves and to learn how to learn. The classroom must be an environment of democratic participation.

The learning environment must also be transformed to one that is active and child-centred. It must be linked to the development level and abilities of the child learners. Children must be able to express their views, thoughts and ideas; they need opportunities for joy and play; they need to be comfortable with themselves and with others; and they should be treated with respect. In this kind of environment, children develop a sense of self-esteem that, when combined with basic knowledge, skills and values, stands them in good stead, enabling them to make informed decisions throughout life.

The physical environment is important too, helping children feel safe, secure and nurtured. Buildings and furniture should be child-friendly. Too many children perch on furniture built for adult bodies in classrooms with windows and doorways designed by adults for adults.³

The comprehensive approach of learning for life enables individuals to integrate more effectively into the world of work and society. It calls for a curriculum and a teaching approach that take into account such factors as gender, language and culture, economic disparities and physical and mental disabilities and enable chil-

dren to deal with them in a positive way. Learning systems are needed that help children and societies respond both to their local needs and the challenges of globalization. The key features of such systems include emphasis on human rights and the transmission of knowledge and skills that help each person realize individual potential and social good, and ultimately help alleviate and even eliminate poverty.

Within this broader definition of learning to which every child has a right, the Jomtien conference gave new prominence to the idea of 'life skills'. The definition of life skills is evolving to encompass psychosocial skills of cooperation, negotiation and communication, decision-making, and critical and creative thinking in preparation for the challenges of modern life. It is an education in values and behaviour.

Life skills are those that children need in order to cope with issues and problems related to the entire spectrum of their survival and well-being, including knowledge about health, nutrition and hygiene. A grounding in life skills prepares children to deal practically and resourcefully with people and situations they encounter on the streets and in the fields, helping them manage finances, interact in social and family dynamics, appreciate their own rights and respect those of others.

While important in early childhood education and primary schools, where emphasis is placed on general survival skills rather than academic ability, life skills become even more vital in adolescence when the risks of exploitative child labour, HIV/AIDS and teenage pregnancy increase, requiring children to make ever more complex and difficult behavioural choices. The alarming proliferation of civil conflict in the developing world

has posed an enormous life-skills challenge. To meet it, training in the techniques of conflict resolution is being introduced to students in countries with a recent history of violence, such as Colombia, Sierra Leone and Sri Lanka.

Measuring learning achievement

If the success of education is to be gauged by what and how children learn, better ways must be found to measure the quality and relevance of education. The emphasis must be on assessing how well education systems are meeting their responsibility to provide for the educational rights of their youngest citizens in terms of what they learn. Such information can be used to adjust policy, introduce realistic standards, help direct teachers' efforts, promote accountability and increase public awareness and support for education.⁴

Unfortunately, most of the mechanisms in place test children as part of a selection process rather than addressing whether they have had sufficient opportunity to acquire the literacy, numeracy, life skills and values needed throughout life. There are interesting efforts emerging, however. To date, the joint UNESCO-UNICEF Monitoring Learning Achievement (MLA) project represents one of the most comprehensive attempts to devise an international framework for measuring learning that transcends the traditional focus on exam results or school enrolment⁵ (Panel 2).

The MLA project is not the only initiative. The Minimum Levels of Learning (MLL) project in India is taking a fresh look at what kinds of skills can and should be measured both in and out of school.⁶ And in Bangladesh, the Assessment of Basic Competencies (ABC) project is using the same techniques as immunization



UNICEF/98-1141/Vauclair

Innovative learning systems that respond to local needs and the challenges of globalization have the potential to alleviate, even eliminate, poverty. A girl in India.

What children understand: The Monitoring Learning Achievement project



UNICEF/98-1704/Lemoyne

The first-ever attempt on a global basis to help countries uncover and understand the trends, weaknesses and strengths of their education systems is bearing fruit, with some findings strikingly consistent across countries. For instance, pupils in urban schools perform better than those in rural schools; girls' performance is better than that of boys in the lower grades, but later, due to diverse cultural and socio-economic factors, begins to decline; and pupils from private schools generally outperform those from public schools.

These profiles are emerging from the project on Monitoring Learning Achievement (MLA), a collaboration between UNESCO and UNICEF launched in September 1992. The project's central team at UNESCO headquarters in Paris has overseen its development from a pioneer phase in five countries (China, Jordan, Mali,

Mauritius and Morocco) to its current embrace of 27 countries at three different stages of implementation.

Its goal is to help countries monitor their performance in meeting 'minimum basic learning competencies' — in other words, acceptable levels of learning in literacy, numeracy and life skills — through a child-centred approach. From the data collected, countries then are able to:

- identify the factors promoting or hindering learning achievement in primary schools;
- understand the role of key participants;
- analyse problem areas;
- propose policy changes and practical measures to improve the quality of education.

Specific recommendations that have emerged, for example, were that classroom practices must be improved in Sri Lankan primary schools;

the most urgent need in Nigerian primary schools is to ensure effective teaching and learning of the English language; and in Mozambique, the priority is to develop children's critical thinking and problem-solving skills.

The addition of life skills to the more normal '3Rs' (reading, writing and arithmetic) is important since most testing excludes this element entirely. In China, for example, children were shown to be gaining an adequate understanding of reading, writing and mathematics. But their learning achievement in life skills was significantly less, which led to the recommendation that "the teaching-learning process in China needs to emphasize more problem-solving skills and the ability to apply knowledge in dealing with real-life problems."

While the project has the same broad goals, each government develops its own country-specific monitoring system. This country-specific design is important, since conditions differ so markedly. If monitoring is to be meaningful, it has to take into account not just local cultural differences but also the type of school, its location, its way of organizing classes and so on. Questionnaires are filled in by the pupils themselves, their parents, their class teacher and their head teacher so as to build up as complete a picture as possible of the child's learning environment, both in school and at home.

The project investigates three major areas of life skills: health/hygiene/nutrition; everyday life; and the social and natural environment. Again, some of the skills assessed within these areas are common to all while others are country-specific. All the pioneer nations, for example, wanted

children to be able to recognize the symptoms of the major childhood diseases. Jordan wanted its children to know about the harmful effects of coffee and tea.

The MLA project makes it possible for participating countries to exchange information, and consequently, those joining the scheme later have benefited from the experience of the five pioneers, avoiding pitfalls and putting their monitoring structures in place more quickly. This is not just as a result of international seminars of the participating nations, though these have also been useful, but due to specific 'mentoring': China, from the original group, has acted as adviser to Sri Lanka from the next batch of countries, for example, just as Jordan has helped Oman.

In all these cases, better monitoring of learning achievement is helping governments to skirt some of the deepest potholes in the road to Education For All.

Photo: A class in China, where an assessment of learning achievement showed that the country has done well in giving pupils a good grounding in literacy and numeracy but requires a greater emphasis on life skills in the curriculum.

surveys to assess the ability of children aged 11 and 12 to read and understand a passage of text, write a letter communicating a simple message, solve mental arithmetic problems and demonstrate life skills. The project has successfully shown that meaningful data can be gathered at local levels and at very low cost. The results showed a distressingly low level of learning — only 29 per cent of all children and 46 per cent of those with five years of schooling satisfied basic education criteria.⁷

There is a growing worldwide movement to discard numerical rankings and instead describe learning achievement, as in the profiles teachers do of children's work in the United States and the reformed school-leaving examinations in Slovenia. In the outcomes-based curricula used in Australia, India, Italy and South Africa, learning objectives are unambiguously stated and understood by both teachers and students at the outset. Teachers then observe and describe how well children demonstrate — verbally, in writing or in performance — their grasp of the learning goals.

These developments share a conviction that what is needed is a focus on what children actually learn, and that assessments should be used to develop the kind of teaching that facilitates the learning process (Panel 3).

This concept of learning achievement has economic as well as educational implications. If class repetitions and drop-outs — indicators of inefficiency and poor quality — can be reduced, limited resources will stretch much further. A survey of Latin American education in the 1980s showed that, on average, a child took 1.7 years to be promoted to the next grade and that each year 32 million students repeated grades in primary and secondary schools, representing an annual waste of \$5.2 billion.⁸

A survey of Latin American education in the 1980s showed that, on average, a child took 1.7 years to be promoted to the next grade and that each year 32 million students repeated grades in primary and secondary schools, representing an annual waste of \$5.2 billion.

Beyond the ruler: Competency-based learning in Tunisia



UNICEF/94-1536/Prozzi

A stork has nested in the minaret of the white-painted mosque across the road. Below, two children are tying up the donkeys they have ridden from their homes to this school in the peaceful village of Mahjouba in north-western Tunisia. In the school courtyard, dozens of birds warble from almond and apricot trees shading a vegetable garden and a rabbit hutch. On the right are five classrooms decorated with large murals painted by the children. On the left is a large multipurpose room hosting a school library and extracurricular activities — the room is a vital resource in a school where students have to use the classrooms in shifts.

The school in Mahjouba is a typical example of Tunisia's integrated school development project, which was begun in 1992 in the governorate of El Kef on the Algerian border. In this area, more than 40 per

cent of the population is illiterate and more than 10 per cent lives in absolute poverty.

The project aimed to enhance the performance of 30 of El Kef's rural schools through improved teaching methods, while also developing the infrastructure (building compound walls and multipurpose rooms, for example), providing safe water and planting vegetable gardens or fruit trees to provide learning opportunities for the students. Teaching methods pioneered by Mahjouba and other schools in El Kef have since been introduced in 475 primary schools across the country.

The new framework, devised by a national steering committee of experts from UNICEF and the Ministry of Education, is called 'competency-based teaching'. This term refers to a system based on the skills or 'competencies' children should be able to acquire, which become the key focus

of teaching, remedial and evaluation systems. Teachers run regular assessments in order to observe what competencies children have acquired and which areas need additional attention.

In many parts of the world teaching is based on assumptions, and all too often lack of comprehension and learning only show up in end-of-year examinations, with many students having to repeat a year because their problems weren't diagnosed early enough to be addressed. The results from El Kef are still preliminary but are nonetheless encouraging: The pass rate at the end of grade six has increased from 46 per cent in 1991 to 62 per cent in 1997.

Unexpected responses that might have earned a pupil a rap on the knuckles in the past are now seen by teachers as a normal part of the learning process, which can be used to assess learning achievement.

Samir Elaïd, who has taught at the Mahjouba school since 1987, agrees. The academic results also indicate the value of the system: Three years ago, 10 of the 30 pupils in his third grade class had to repeat a year, whereas in 1998 only 4 have had to do so.

Abdallah Melki, principal of the Mahjouba school, is another convert. A 50-year-old with a ready smile, he was initially uncomfortable with the new methods but now feels they are highly effective, especially for problem students. His one regret is that the competency-based approach has so far been limited to three subjects: Arabic, French and mathematics. Competency-based science teaching will be introduced in the 1998/99 school year.

The Mahjouba school has also helped to pioneer three other innova-

tions. In the first, students sign a contract with the teacher on the work to be accomplished in a certain period: for example, two pages of spelling and one of mathematics in the coming week. Teachers in El Kef have found that this agreement helps children build a greater sense of responsibility for their own learning.

The second divides the class into groups of three or four. Students work individually on the same assignment, then discuss their results and come up with a joint answer. In a slight variation of this system, groups are made up of students of different levels who work together and help one another.

The third innovation is the practice of stronger pupils 'tutoring' weaker ones and offering them advice and explanations. At the Mahjouba school, for example, Wahida tutors her friend Hanene who is glad of the help. Hanene herself chose Wahida as her tutor because they are friends who walk to school together each morning.

On Wahida's part, she has found that her studies are much more interesting and she understands them better since her learning has been gauged by regular assessments.

Photo: Regular assessments of students' academic progress in Tunisia have reduced repetition rates by identifying learning problems early on. A Tunisian boy reads from a chalkboard.

According to a World Bank publication, low-income countries spend, on average, four years' worth more resources to produce a primary school graduate than they would if there were no repeaters or drop-outs.⁹

Teachers, policy makers and students in many countries, nevertheless, still accept it as natural and inevitable for children to repeat grades because they have 'failed', which contributes to a vicious circle of low expectations, damaged self-esteem and further failure. Repetition may even be seen as evidence of high standards in schools, when the reverse is probably true.¹⁰

In recent years, countries have experimented with automatic promotion — the norm in most of the English-speaking world. Myanmar, confronting a serious crisis in education, has replaced year-end exams with an ongoing assessment of students' learning achievement. Teaching and management skills are also being upgraded. As part of the All Children in School project, schools are given initial incentives, in the form of chalkboards, toilet facilities and teaching kits, that are tied to success in meeting annual targets: a 10 per cent increase in enrolment, retention and completion rates over the previous year's rates as measured by community members. As a result, in three consecutive academic years from 1994 to 1997, an average of 65 to 70 per cent of all project schools managed to meet their annual targets and received roofing sheets to upgrade or extend school facilities.¹¹

Health and learning

Health and adequate nutrition are pillars of learning throughout life. But children in most of the developing world contend with frequent episodes of respiratory illness and diarrhoea during their school years that can

Low-income countries spend, on average, four years' worth more resources to produce a primary school graduate than they would if there were no repeaters or drop-outs.

Second-hand computer, first-class vision: Thailand's CHILD project



UNICEF/1895/Sprague

Somjai is in grade three of her primary school in north-east Thailand. In her first year she made good progress, but by the end of grade two she was faltering and her test scores were low.

Now, with this downward trend continuing, her teacher refers to Somjai's computerized learning profile. From it she learns that Somjai was often absent during her second year, that she rarely attends the health clinic despite her poor nutritional status and that she has three younger siblings and a divorced mother.

The teacher decides to visit the mother in case Somjai is missing school to care for her siblings while her mother works. She will suggest that the younger children attend the community day-care centre, or she might persuade the school authorities to talk to local officials about

starting an income-generating project in the community.

Somjai is a good example of the Children's Integrated Learning and Development (CHILD) project in action, which started when the head teacher of a small, rural, primary school in the poorest region of Thailand wanted his 150 students to have access to a computer.

The head teacher wrote to the Institute of Nutrition at Mahidol University asking if they knew of anyone willing to donate a computer. He explained that it would be used not only in the classroom, and to improve the school's administration, but also to track changes and influences in the community from which the students were drawn.

The response to this modest request for a second-hand computer has already grown far beyond a network of computers in rural schools into a

dynamic and distinctive example of child rights in action that could yet inspire similar ventures worldwide.

Launched in two schools in one province in January 1997, in the course of a year the CHILD project spread to 25 schools, 38 communities and some 3,000 children in the province. The project, run by Mahidol University with UNICEF support, creates an early warning system that integrates educational with community indicators to help all children achieve their maximum learning potential — particularly those with special educational needs.

Schools compile a child's learning profile (ideally computerized, in spreadsheet form), comprising social and family factors that might affect learning. Teachers and communities then use these over time to make informed decisions and propose actions in an integrated, holistic way.

The early expansion of the scheme is a sign of its success. Its rapid spread has also meant changes in focus to address the diversity of social conditions of the new schools and communities.

For example, in several communities protein energy malnutrition, iodine deficiency disorders and iron deficiency anaemia are threatening children's health and thus their ability to attend school. In other communities where parents migrate to seek work, increasing numbers of children are being left in the care of grandparents who have limited knowledge of modern basic health care.

Concentrating on learning alone, therefore, has proved insufficient in the effort to facilitate children's learning. For this reason, the CHILD project now redefines its objective as strengthening and preserving children's rights, in line with the Con-

vention on the Rights of the Child. This holistic and practical view of child rights enables communities to see the connections between poor learning in school and health, nutrition and other factors.

As a result, communities have become more active participants in their own and their children's development. They are undertaking a wide range of activities to increase children's access to primary and secondary education, upgrade the quality of school lunch programmes and improve water supply and sanitation facilities. Communities are setting up day-care centres and establishing vocational training centres for youth who are returning to their villages due to the recent economic crisis.

Photo: The CHILD project creates an early warning system, looking at health, nutrition and other factors that can affect learning. Children in class in northern Thailand.

subvert learning. Even in the state of California (United States), where standards of water and hygiene far exceed those in developing countries, gastrointestinal diseases account for around a quarter of all days lost from school.¹² Other serious health complaints that plague school age children in the developing world include malaria, helminths (parasitic worms), iodine deficiency and malnutrition. Health hazards like these do not simply keep children out of school, leading them to underachieve or repeat grades, but can permanently impair their ability to learn.

“There is a strong link between children's health and school performance,” says Professor Dr. Hussein Kamel Bahaa El-Din, Egypt's Minister of Education, himself a paediatrician. “This link between health and education is a major challenge to educational planners and policy makers. Rapid interventions and serious preventive measures must take place. In Egypt, we strongly believe that education is the vehicle of preventive medicine, which is the medicine of tomorrow and the medicine of the majority, a true democratic trend.”¹³

Egypt has launched a comprehensive package of reforms aimed at generating healthy and health-promoting schools. The package includes:

- ▶ regular medical checks for all schoolchildren;
- ▶ a school nutrition programme, with special help for rural areas;
- ▶ free health insurance for schoolchildren;
- ▶ the integration of health and nutrition messages into the curriculum;
- ▶ child-to-child programmes to promote health in the community.¹⁴

Egypt's efforts to make schools and students healthier are resulting in higher and earlier enrolment, lower rates of absenteeism and drop-out, and better learning achievement.



A teachers' workshop in Egypt, where education is considered preventive medicine.

UNICEF/96-0254/Toutouji



School health programmes are among the most cost-effective ways to improve public health. In Thailand, girls plot connections between groups at risk of contracting AIDS.

Research also shows that improvements in the health of schoolchildren reduce the transmission of disease in the community,¹⁵ with children proving to be exceptionally effective as health promoters themselves, passing on what they learn to siblings, friends, family members and other adults.¹⁶

Findings like these led the World Health Organization (WHO) to launch the Global School Health Initiative in 1995. The World Bank has also shown interest in investing in school health programmes, which it views as one of the most cost-effective ways of improving public health, noting that the number of schools and teachers far exceeds the number of health centres and health workers.¹⁷ It is important to point out, however, that teachers should not be expected to fill the role of health workers. Teachers, with demanding jobs of their own, cannot be expected to succeed where health centres have failed, especially without extra resources.

What are the main characteristics of a healthy and health-promoting school?

- ▶ **A place of safety.** Teachers need to act as protectors of children, safeguarding their rights within school, not least the right to be free from sexual exploitation and violence. Schools must be supportive and nurturing places for children with special needs, including those with disabilities or with HIV/AIDS.
- ▶ **A healthy environment.** All schools need safe water and sanitation. Without these, children are unable to practise what they learn about hygiene.
- ▶ **A place where diseases can be detected and often treated.** Some illnesses and unhealthy conditions — such as parasitic infections, micronutrient deficiencies and trachoma — can be simply and affordably treated by health workers or teachers. Teachers can

also be trained to recognize children with visual and hearing defects, which are often mistaken for learning disabilities.

▶ **A school that teaches life skills.**

Children need more than information to make healthy choices. They may need to develop technical skills in first aid or learn to use oral rehydration salts to treat diarrhoea. They also need to learn how to make decisions and to negotiate and resolve conflict — critical skills in leading healthy lives outside the school gates.¹⁸

Education's ripple effect is being demonstrated in many countries. The Clean and Green Schools programme in Mauritania calls for teams of students, parents and teachers to evaluate the state of their local school and draw up plans to improve it that include health education classes based on the *Facts for Life* booklet.* If it proves successful, the programme could be expanded nationwide at low cost and could help lower the country's high infant mortality rates.

In Thailand, schools covered by the CHILD project monitor the connections between children's learning and health (Panel 4).

In two Nigerian villages, a 20 per cent gain in life expectancy occurred when the only intervention was easy access to adequate health facilities, a 33 per cent gain when the mother had received schooling but lacked access to health facilities, and an 87 per cent gain when health and education resources were combined.¹⁹ Far from forcing a trade-off or clash of priorities among competing worthy goals, joint health and education initiatives work together to accelerate the education revolution.

* *Facts for Life* is an inter-agency publication that presents practical ways of protecting children's lives and health.

Element 2. Access, quality and flexibility

Children have a right to go to school and to receive an education of good quality. The conventional education systems in many countries, however, are too rigid to reach the children who, because of gender, ethnicity or poverty, have least access to school. But Education For All cannot be achieved unless these children are reached. The challenge for schools is to be flexible enough to adapt to the needs of the most disadvantaged children while offering education of sufficient quality to keep all students once they have arrived. It is no coincidence that the poorest, most indebted nations are farthest from the goal of Education For All. On average, nearly half the children in the 47 least developed countries do not have access to primary education.²⁰

Various cost-effective ways to increase enrolment and improve the quality of education are being investigated, and countries need to select approaches that address their distinct needs. A recent UNICEF study of five low-income African and Asian countries²¹ shows, for example, that double-shifting (in which a teacher and a classroom serve two separate groups of children on the same day) to improve access is already common in Viet Nam and would be useful in Burkina Faso and urban areas of Bhutan. In Myanmar, however, it would be inappropriate since there is no shortage of classrooms, nor are teachers' salaries high. Freezing higher education subsidies would be a reform worth pursuing in Burkina Faso and Uganda, which spend a disproportionate amount on these relative to primary schooling, but would be of less value in Myanmar and Viet Nam. Other solutions are being sought in the countries of Central and Eastern Europe and the

former Soviet Union, a region of about 115 million children where disparity in access is a growing problem.

One method of increasing access that could be widely applied is to reduce the cost of building schools by using locally available construction materials. A World Bank study of six African countries showed that building brick-and-mortar schools to international standards was more than double the cost of working with local materials.²² Even this estimate may have understated the possible savings.

When Malawi launched its policy of universal free primary education in 1994, it also began discussions with agencies such as UNICEF and the World Bank on designs for its major school building programme. The eventual design has proven both serviceable and sustainable at around one quarter of the cost of a more standard model.²³ Similarly, with support from UNICEF, communities in Mali are using a variety of durable local materials such as kiln-hardened bricks to build schools that meet Ministry of Education standards but cost two-thirds less than regular schools.

As ways are explored to meet the needs of unreached children, the growing role played by education providers other than governments needs to be kept in mind. Among these new providers are NGOs, religious organizations, private schools and communities. These all need to be acknowledged and accommodated within a new diversified system of education in which the State plays its essential role by setting standards.

Reaching the unreached

Access remains a problem for the disadvantaged in any society. The Convention on the Rights of the Child is the basis for inclusive education systems where no child is excluded or marginalized in special programmes.

The conventional education systems in many countries are too rigid to reach the children who, because of gender, ethnicity or poverty, have least access to school... It is no coincidence that... on average, nearly half the children in the 47 least developed countries do not have access to primary education.

A Tanzanian school welcomes the disabled



UNICEF/Tanzania/Tyabaji

The happiest day of Martina Mukali's life was the day her parents told her she could go to school. Then eight years old, Martina travelled with her mother, a nurse, from her home in Morogoro region to the capital, Dar es Salaam, 200 km away, to attend the Uhuru Mchanganyiko Primary School. In the United Republic of Tanzania, nearly a third of all primary school age children are not in school. For Martina, who was born blind, the opportunity was really a dream come true.

Established in 1921, the Uhuru Mchanganyiko Primary School is one of the oldest in the country and the first to accept children with disabilities alongside other children, in the classroom and in all other activities. Of the 1,200 current students, 62 are blind, 11 are deaf-blind and 55 have mental disabilities. Like the other blind students, Martina resides at the school; she visits her sister in Dar es Salaam on weekends and holidays.

It is difficult for children with physical and mental disabilities to overcome the grave problems limiting their access to education. Fewer than 1 per cent of children with special needs make it into education systems in the developing world, according to UNESCO. Children in rural areas are the most seriously isolated.

In Tanzania, education is not free — students must pay fees and buy uniforms, exercise books and other materials — but the major costs of disabled children's schooling are covered by the Government. Boarding costs, school fees, medical expenses and learning materials for those who come from outside Dar es Salaam are also provided.

Martina, now 17, has achieved more than many of her sighted peers. Her classmates help her navigate the campus, and she reads and writes in Braille and loves to sing. She says, "I can do everything that you can do except cook, and that is

only because nobody has bothered to teach me!" Her love of life and learning are infectious and inspire her classmates and all who meet her.

At the Uhuru Mchanganyiko Primary School, blind students are integrated from the third year, or Class 3, onwards. Before they begin regular classes, they are oriented to the school campus — dormitories, classrooms and playground — and given instruction in mathematical symbols, elementary Braille and basic life skills consisting of personal care and hygiene. Eight specialist teachers and eight blind teachers — themselves graduates of the school — work together with teachers of geography, history and social studies, preparing all their materials in Braille and dictating them to the students. Braille course materials are produced at a printing press on-site. Students in need of extra help can attend special classes after regular school hours.

Of the deaf-blind students, four live on the school campus. The other seven live at home, and specially trained teachers work with their parents and other family members on ways to improve communication and interaction with these children.

One of every five students — and the majority of the disabled students — enrolled in the Uhuru Mchanganyiko Primary School goes on to secondary school. Many students find work or begin trades on finishing primary school, so hands-on vocational training in carpentry, masonry and brick-making is offered to boys and girls at the end of the primary school programme.

One child with mental disabilities who thrives in the carpentry classes is Kenny Lungenge, 15 and living with his mother, an onion vendor, in Dar es Salaam. When he first arrived

at the school five years ago, he knew nothing about basic hygiene or about how to communicate with other children. Today he interacts with his peers and is able to craft beds, bookshelves and cupboards. His friend Hussain Ali, who also is 15 and has mental disabilities, has mastered basic arithmetic and civics and reads at Class 2 level. Hussain also studies masonry.

The Uhuru Mchanganyiko Primary School achieves these rich results with threadbare resources. The dormitory facilities are spare, and there are no live-in specialized staff to look after the blind and deaf-blind children. Teaching materials, classroom furniture, and supplies and equipment used in vocational training are in short supply. Still, the school is succeeding in eliciting community support. There are plans to involve parents and the community in fund-raising activities, to sensitize the public about the disabled and to market products the students make, with proceeds to directly benefit them.

As the school's appointed time-keeper — a Class 6 student — strikes the rim of an old car wheel, sounding the end of another day and calling the children to afternoon assembly, the disabled mingle with the other children, distinctions among them blurred by the hope and energy of schoolchildren ending their school day and at the threshold of life.

Photo: Blind since birth, Martina Mukali, 17, uses a Braille typewriter to take notes in a class at the Uhuru Mchanganyiko Primary School in Dar es Salaam. The school was the first in Tanzania to integrate disabled students.

Who are the excluded? Girls are the large majority of children out of school, and they must be a priority for recruitment. Also, proportionately fewer rural children attend than city-dwellers, and proportionately fewer children from ethnic minorities or indigenous groups go to school than children from the dominant ethnic group. The disabled are barely considered (Panel 5). Children caught in the turmoil of armed conflict or other emergencies face the loss of years of schooling. Some 8 million children in sub-Saharan Africa alone will have lost their mothers or both their parents to AIDS, and many of these orphans will never enrol or will have to drop out of school (Fig. 6).

And lack of minority access is a problem in many countries, for example, in Niger, where only about a third of children enrol. It is a vital issue in China, which comes close to achieving universal primary enrolment but has to work much harder to enrol Muslim girls from Ningxia Hui Autonomous Region than Han Chinese boys in Beijing, for instance.²⁴

Distance from the school reduces attendance. Studies in Nepal have shown that for every kilometre a child walks to school, the likelihood of school attendance drops by 2.5 per cent.²⁵ In Egypt, if a school is one kilometre instead of two kilometres away, enrolment goes up 4 per cent for boys and 18 per cent for girls.²⁶

To reach unreached children, educational policy makers can learn much by sharing successes. In fact, one of the most hopeful aspects of the education revolution is the way in which creative initiatives are piloted in one part of the world and applied in another.

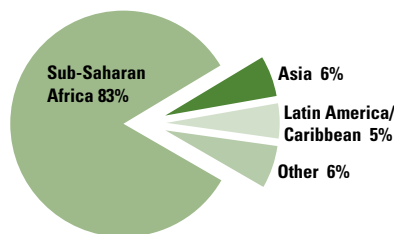
Multigrade teaching, in which children of two or more ages or grades are taught by one teacher, is one example. The practice has long

Fig. 6 AIDS orphans: A looming education crisis in sub-Saharan Africa

HIV/AIDS is having a devastating impact on children in sub-Saharan Africa. Over 90 per cent of all AIDS orphans — children who have lost their mother or both parents to AIDS — live in sub-Saharan Africa.

Many of these orphans risk never completing basic schooling. Lack of resources limits responses, but among the measures in place are free primary education policies in Malawi and Uganda that provide vital support for orphans. Malawi has also developed a national orphan policy and is focusing on community care approaches, and South Africa is testing community-based care initiatives. Far more needs to be done to meet the crisis, and ensuring the right of orphans to an education must be an essential part of these efforts.

Geographical distribution of deaths attributable to HIV/AIDS



AIDS orphans in eight African countries

Country	Cumulative total (1997)
Burkina Faso	200,000
Congo, Dem. Rep.	410,000
Ethiopia	840,000
Kenya	440,000
Malawi	360,000
Tanzania	730,000
Uganda	1,700,000
Zimbabwe	450,000

Source: Report on the Global HIV/AIDS Epidemic, June 1998, UNAIDS and WHO, Geneva, 1998.

been a necessity in small village schools that can only afford one teacher, and it was the norm in most rural schools of the industrialized world in the early decades of this century. It tended to be regarded, however, as an inferior model of education until the Escuela Nueva schools in Colombia demonstrated how well-designed lesson plans and teaching materials, bolstered by the support of the communities, could ensure a positive multigrade experience.

Rural schools in Colombia in the early 1980s were few and of poor quality. Some 55 per cent of 7- to 9-year-olds and a quarter of all 10- to 14-year-olds in the countryside had never attended school, and one third of all first-graders dropped out.²⁷ The Escuela Nueva approach changed these statistics, and its evident success in a small number of schools has led the Government to extend the system countrywide. Multigrade teaching makes it possible for a complete primary school to be located close to children’s homes in sparsely populated rural areas. Escuela Nueva teachers benefit from detailed guides and lesson plans as well as regular training to help them adapt lessons to the local situation. In keeping with the principles of the Convention on the Rights of the Child, teachers become facilitators rather than authority figures.

Another advantage of Escuela Nueva is that children move to the next grade at their own pace — when they achieve a set of objectives — rather than by passing an exam at the end of the year. Grades, therefore, are not repeated. Apart from avoiding the stigma of being ‘held back’, students who have been sick or had to work in the harvest can resume their studies whenever they return. When compared with regular schools, Escuela Nueva’s children not only score higher

in achievement tests but also show improved self-esteem, creativity and civic-mindedness. Drop-out rates are also much lower.²⁸

A number of countries have been inspired by the Colombian model and have adapted it to their own circumstances. Guatemala, for example, employs the Escuela Nueva methodology in its bilingual primary schools for indigenous children. In the Philippines, educational planners launched their own special multigrade demonstration schools after a visit to Colombia. Multigrade schools had, in fact, existed in the nation since the 1960s but had a poor reputation — located in distant, disadvantaged areas, they tended to be staffed by inexperienced, unsupervised teachers and to have inadequate facilities.

The country’s new multigrade approach, however, has won approval from teachers, local communities and students. Thirteen-year-old Adonis Corisay, for example, planned to give up his studies after grade four, his local school’s highest level. When the new multigrade school at Poyopoy started offering grades five and six, he was inspired to continue despite a two-hour walk to school. “Now I would like to finish high school. Then I will continue on to college so I can become a mechanical engineer. I would like some day to assemble my own car, which I will use in the mountains.” The project expanded from 12 schools in 6 disadvantaged provinces in the 1996/97 school year to 24 schools in 12 provinces in 1997/98.²⁹

Another way of reaching the hard-to-reach in the remote mountainous regions of the Cordillera in the Philippines is the Cordillera Mobile Teaching project, which brings ‘school’ to the children, carried by a teacher with a backpack. First tested in 1989 in Ifugao Province, one of the poorest and most rugged regions of the coun-

try, the mobile teaching approach has not only increased enrolment but also produced test results matching or surpassing those of conventional schools. In 1993, it was extended to mountainous areas throughout the region. ‘Ambulant’ teachers now trek into the mountains to divide a week of teaching between two learning centres, kilometres apart, reaching children who would otherwise not have access to schooling and saving other students a hazardous hike across mountains and rivers.³⁰ The Cambodian cluster schools are another example of shared resources in remote areas (Panel 6).

In many countries, children in remote regions have gained access to learning by some form of ‘distance education’, often involving radio. The United Kingdom’s BBC pioneered the transmission of educational radio broadcasts as early as 1924.³¹ Since then, radio, television, and audio and video cassettes have become vital educational media, particularly in developing countries where more expensive technologies remain out of reach. Through Interactive Radio Instruction (IRI), a technique developed in Nicaragua in the early 1970s by a team from Stanford University, students answer questions, sing songs or complete practical tasks during carefully timed pauses in the broadcast, with the teacher acting as facilitator or even participant in group work.

Radio lessons like these must be tailored to the needs of their audiences and use the full potential of the medium, including drama, sound effects and music. From the first, the aim has been to improve quality of education rather than just provide learning at a distance. And while more high-tech options now command attention, IRI continues to be quietly effective on a mass scale. A study in the Dominican Republic

compared children who had 5 hours of radio instruction a week (plus half an hour of follow-up activities) with students with 10 or more hours of instruction in regular schools. The IRI students showed similar results in reading and writing and significantly better results in mathematics.³²

Radio has also proven a highly effective tool for reaching pre-school children. In Nepal, two series of 20 programmes have been developed for three- to five-year-olds and their caregivers. Each programme has been broadcast over national radio twice a week and is an effective way of conveying important information to remote mountain communities about the health, nutrition and stimulation of young children. But with a cast that includes characters such as a talking bird and a pet elephant, the programmes can also be used by community day-care centres or informal family groups.³³

Flexible and unified systems

The hallmark of all these approaches is flexibility, in which the approaches adapt to local conditions to meet the educational needs of all children. This attribute was once confined only to so-called ‘non-formal education’ projects that multiplied in the 1970s, particularly in South Asia, as concerned organizations tried to fill the myriad cracks in the education system by reaching out to working children, the disabled or girls.

One of the most famous of these was launched by the Bangladesh Rural Advancement Committee (BRAC) in 1985. Long recognized for its work in rural development, credit and health, BRAC aimed initially to provide basic literacy and numeracy to 8- to 10-year-olds (with special emphasis on girls) in 22 villages, but met with such immediate success that it expanded at fantastic speed. By the end



UNICEF/1562/W/lin

For girls and many among ethnic minorities, the poor and the disabled, school remains inaccessible. Ensuring the right to Education For All is essential. In Bolivia, a teacher helps a child to write in a pre-school programme for children of working mothers.

The floating classroom: School clusters in Cambodia



UNICEF/Cambodia

Kampong Prahok school is imposing, brightly painted and modern looking. It is also a houseboat moored among the wood and bamboo houses of a floating village at the northern end of Cambodia's Tonle Sap lake. When the villagers float their homes to more sheltered waters at the start of the rainy season, they tow the school with them.

The wooden base of the school is stabilized under the water by a steel hull balanced on two sides by sturdy bamboo poles, roped together to form thin logs. A corrugated roof keeps out the monsoon rains. There is a small teachers' office and two classrooms that can accommodate up to 80 students. The village children punt gondolier-style or paddle their canoes to the school, fastening them to the railings of its exterior boardwalk.

Kampong Prahok school is not unique — in fact, it is part of a cluster of such floating schools.

In mid-1993, UNICEF, in cooperation with the Cambodian Government, established the cluster schools in seven target areas of rural, urban and minority populations. The major objective of the clusters is to redress imbalances in school quality by sharing resources, administration and often even teachers, to improve the weaker schools without diminishing the stronger ones. Government policy nationalized their development in 1995. In total, 631 clusters have been established across the country, 44 of which UNICEF supports as of mid-1998.

Over time, experience has shown that parents move their children to cluster schools because they realize that these schools offer good teachers, new or refurbished buildings and better equipment. Surveys indicate that enrolment rates in these schools are substantially higher than the national and provincial averages and

drop-out rates are much lower, especially in urban areas.

The cluster system makes it possible to stretch scarce teaching resources and equipment by making them available via a common resource centre. Such centres can serve as a location for classes.

Given these advantages, it is no wonder that cluster schools are popular. Nevertheless, the floating fishing community had to work hard to bring a cluster school to Tonle Sap. Parents from the area journeyed for two days to the Provincial Education Office to insist that someone visit their community to help them plan the schools. The officials arrived a few months later to find a functioning parent-teacher association despite the fact that there still was no school and that all the association's members were illiterate.

"It was a difficult area," says Sieng Sovathana, Deputy Director of the Provincial Office of Education. "We used to have an enrolment rate of around 15 per cent because we only had one school." Now, with UNICEF's help, four floating schools move with the villages, and the old school building has been renovated as a resource centre. Enrolment is up to 60 per cent. "As a result of the cluster school system," says Ms. Sovathana, "we've seen an increase in enrolment, improved quality of education and a reduction in drop-out rates and in the number of children who have to repeat a year. Also the administrative work has improved remarkably."

This is not to say that Kampong Prahok is without problems. The teachers in the floating schools have no boats, for example, so whenever they want to go somewhere, they have to borrow one from the students. And Chhorn Rey Lom, a 13-

year-old student who is about to complete grade two, faces the prospect of having to give up school when she has barely begun, as the Kampong Prahok cluster presently offers only the first two grades. "I will have to stop studying," she says, "and work and fish to help my parents. I wish we had more grades and more schools in this community."

But on the whole, the advantages of the cluster system outweigh any problems, according to Ms. Sovathana. "It means the bigger schools with more resources can help the poorer schools. First we group the schools, then we group the head teachers so they all know what's going on. Then we group the teachers so they can help each other with teaching techniques and exchange ideas and experiences. Finally we group the communities."

In a country like Cambodia, with its grim recent past of suffering and civil war, clustering schools can serve an extra purpose. "Since 1979 people do not talk freely to each other, or share things with each other," says Pawan Kucita, UNICEF Education Officer in Phnom Penh. "The cluster's concept of sharing resources, materials and ideas, between schools and between villages, can only help. We look at the school as an agent of change in the community. It is one mechanism we can use to build harmony in society, a willingness to share and develop together."

Photo: By sharing scarce resources and pooling teachers, school clusters are able to reach more students and redress imbalances in educational quality. The Kampong Prahok floating school in Cambodia.

of 1992 there were 12,000 BRAC schools,³⁴ and in 1998 some 34,000.³⁵

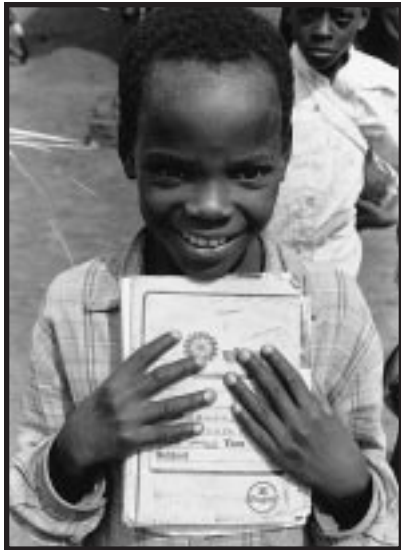
A BRAC school usually comprises 30 children, around 20 of whom are girls, who live within a radius of two kilometres and are taught in a simple rented room. Two thirds of the teachers are female, drawn from the local community and paid only modest wages. But they are among the most educated people in the community, having completed 9 years of education and 15 days of initial training, plus 1 or 2 refresher days each month. BRAC staff visit them weekly. Parents make no financial contribution but are expected to attend meetings.

The school is a typical village structure with a thatch or tin roof and earthen floors. Each has a chalkboard and charts, and teachers are provided with materials such as workbooks and teaching notes, picture cards and counting sticks. Each student receives a slate, pencils, notebooks and texts. The school aims to help children achieve basic literacy, numeracy and social awareness.

Students also spend 40 minutes a day on physical exercise, singing, drawing, crafts and reading stories, activities that the children love and that thus help boost attendance. Teachers ask pupils to help each other with assignments, and comprehension is stressed rather than memorization.³⁶

The schedule is flexible; school is held for 3 hours a day, 6 days a week, 268 days per year. But the time of day is selected by parents, and the school calendar can be adapted to fit local needs such as the harvest. BRAC school graduates are eligible to move on to the fourth grade of the formal primary school system, although not enough of them do so — many families find they cannot afford the extra costs associated with the public sector.³⁷

BRAC is a significant success, an exception to the general belief that educational projects aiming simply to fill in the cracks end up offering inferior education to the poor, disadvantaged, disabled or girls.



A boy clasps his exercise book in Uganda, where the Government, in its push to achieve Education For All, now guarantees free primary schooling to four children from each family.

BRAC is a significant success, an exception to the general belief that educational projects aiming simply to fill in the cracks end up offering inferior education to the poor, disadvantaged, disabled or girls who need it. And even BRAC has trouble providing a reliable bridge for its students into mainstream schools.

Now what is being increasingly advocated in many countries is a unified system overseen by the State and founded on state-supported schools but much more responsive to local conditions and community needs and at times bringing in partner organizations that open learning opportunities for children who are not being reached by conventional schools. The old divide between ‘non-formal’ and ‘formal’ education is thus becoming irrelevant. In such a system, the State’s role is to set standards and ensure that the different approaches encompassed by the system conform to these standards.

There are now examples worldwide of public education systems that:

- ▶ adapt the annual calendar and daily schedule of schools to local circumstances, such as the agricultural seasons in rural areas, and use shorter school hours more effectively;
- ▶ locate schools closer to children’s homes, which particularly increases girls’ attendance;
- ▶ involve parents and the local community in the management of schools;
- ▶ make increased use of paraprofessionals and volunteers from the local community;
- ▶ adapt the curriculum to local needs;
- ▶ eliminate gender bias in curricula and related materials;
- ▶ exercise more flexibility in evaluating and promoting students to minimize the need for them to repeat whole years.

In the more inclusive concept of education, diverse approaches complement each other in the push to achieve Education For All. The Ugandan Government has taken the bold step of guaranteeing free primary schooling to four children from each family. It has also piloted the Complementary Opportunities for Primary Education (COPE) scheme in four districts over the last two years, to give older children who have missed earlier educational opportunities a second chance at school.

The project embodies many of the good practices from programmes in other parts of the world that have reached out to marginalized children. The classes are small (30-40 pupils), and the curriculum is skills oriented and enriched with life skills, covering only four subjects: mathematics, science, English and social studies. The timing is flexible (three hours a day), and teachers assess children continually rather than in terminal exams. The participation of parents and the community is encouraged.³⁸

The national officer responsible for COPE, George Ouma Mumbi, believes the project’s schools are already changing the lives of child labourers and other children previously unreached by the system. “By giving them specially trained teachers, syllabus and teaching methods, they are able to pick up quickly because of their superior age,” he says. “It is amazing how fast these kids learn.”³⁹

Perhaps the most significant element of programmes such as COPE is that they accommodate and encourage accelerated learning opportunities, so that children who are over age in a class can advance quickly through the system to catch up with their peers. Enormous numbers of over-age learners repeating grades clog education systems throughout the world as a consequence of system failure. A

strategy that aims to accelerate students' movement through the education system has enormous potential in terms of both meeting their rights and increasing the system's efficiency. The full implications of accelerated learning programmes for curricula and for pupil flow have not yet been fully worked out, but they make a very powerful argument for flexibility.

Empowering teachers

Teachers are at the heart of the education revolution, but many feel under siege. Once viewed as wise, respected community leaders bringing the torch of learning to the next generation, their diminished and demoralized status is a worldwide phenomenon. In 1991, the second International Labour Organization's (ILO) meeting on the Conditions of Work of Teachers concluded that the situation of teachers had reached "an intolerably low point." Working conditions were drastically eroded, producing an exodus of qualified and experienced teachers.⁴⁰ When UNESCO sought the views of national authorities for a conference on the role of teachers in 1996, only a handful of wealthy industrial countries (notably Austria, Canada, Finland, Germany and Switzerland) differed from the majority view that the standing and pay of teachers were cause for anxiety.⁴¹

The profession was hit hard by the financial austerity of the 1980s in the developing world. When governments cut public spending as part of structural adjustment programmes required by the World Bank and the International Monetary Fund (IMF), education budgets (comprised largely of teacher salaries) suffered. Over the 1980s and 1990s, teachers in Africa and in Latin America experienced a general lowering of real income, with rapid and substantial reductions in some cases.⁴²

The erosion in salaries in Africa, for instance, has meant that primary school teachers often receive less than half the amount of the household absolute poverty line.⁴³ Many teachers have been forced to supplement their meagre incomes by offering private lessons or running their own businesses, to the detriment of their regular attendance and performance in schools — a phenomenon that has spread now to countries in Eastern Europe, and in Central and East Asia. Even when resources are abundant, governments are more likely to spend on expanding schooling than on wages.

Teaching conditions need to be improved worldwide to halt the vicious circle of demoralization and decline. But the social standing of teachers will not recover until the quality of the educational experience they provide improves. One route to this goal is their readiness to alter classroom practice in line with the Convention on the Rights of the Child. Another lies in society's responsibility to offer both the conditions that will encourage more highly qualified candidates to enter the profession and the kind of education for teachers that prepares them for the child-centred classrooms of the future.

In Togo, for example, more than a third of primary teachers only have a primary education themselves, and 84 per cent of secondary teachers have not completed a teacher education course. In Uruguay, one of Latin America's more prosperous nations, only a third of secondary teachers have completed university; 70 per cent have had no teacher education.⁴⁴ In the United States, more than 12 per cent of newly hired teachers enter the classroom without formal courses in education, and another 14 per cent have not taken enough such courses to meet state standards. Some teachers are recruited on the basis of tests that

The erosion in salaries in Africa has meant that primary school teachers often receive less than half the amount of the household absolute poverty line.

If the medium of instruction in school is a language not spoken at home, particularly when parents are illiterate, then learning problems accumulate and chances of dropping-out increase.

do not evaluate teaching processes and methodologies but instead examine basic skills and general knowledge — criteria that offer no insight into their abilities as educators.⁴⁵

In the past, wealthier governments have viewed teacher education as a lengthy process of theoretical study in college. Developing countries faced with the impossibility of financing this industrialized world model have often resorted to crash courses resulting in only minimal exposure to educational methods for teachers already poorly prepared.⁴⁶ Between these two extremes is a new model of teacher education that forms an essential component of the education revolution. Part of this is a revision of the concept of school supervisors and inspectors who are trained to serve as pedagogical advisers — experienced professionals who can guide teachers and help resolve problems in a continuing process rather than evaluate teachers in a judgemental way.

No workable education system can stop at the primary level. The focus of the Jomtien decade was understandably on guaranteeing universal primary education, but as more children complete the first years of schooling, the greater the need for secondary school, especially since it is from the latter pool of students that future teachers should be drawn. Teacher training costs as much as 35 times the annual cost per student of a general secondary education.⁴⁷ This experience of secondary education must mirror the participatory, gender-sensitive, child-centred model set out by the Convention on the Rights of the Child, as teachers are overwhelmingly likely to replicate the educational model they themselves experienced in school.⁴⁸

Those who do not complete secondary school will still, however, need preparation for their role as

teachers, and innovative models of teacher education are springing up throughout the world. One major strategy — little replicated elsewhere but proving that effective teacher education can be delivered at relatively low cost — is ZINTEC (Zimbabwe Integrated Teacher Education Course). Emerging from Zimbabwe's need to deliver on its promise of universal primary education, ZINTEC offered recruits four months of intensive, residential education at the beginning of a four-year programme, three years in-service education using a distance-mode package coupled with supervision by college lecturers and other regular school supervisors, and a final four months' residential course.⁴⁹

In India, teacher education initiatives have aimed to counteract old patterns of teacher-pupil interaction and inspire people with a sense of classroom possibilities through the Shikshak Samakhya (Teacher Empowerment) programme in Madhya Pradesh state. Here, teachers experience an explosion of ideas, knowledge, skills and interactive activities, a wide range of colourful and attractive teaching-learning materials, different methods of teaching, collegiality and peer-group support.⁵⁰ This alternative participatory education method involves teachers working with one another, with the aim of empowering them to make their own decisions. Shikshak Samakhya has succeeded in overturning the low morale endemic among teachers in Madhya Pradesh. It has also moved the teacher education process closer to the active, participatory environment embodied in the 'Joyful Learning' initiative that is transforming the classroom experience in 11 Indian states (Panel 7).

In 44 schools of the former Yugoslav Republic of Macedonia, the Active Teaching/Interactive Learning project has changed traditional class-

room practices by facilitating teacher-student-parent partnerships. Children's ages and aptitudes form the basis for the planned work, writing tasks are varied, and readings encompass a wide range of purposes.⁵¹

And in Bangladesh, where most primary school teachers require students to learn by repetition, some classrooms are benefiting from the Intensive District Approach to Education for All (IDEAL). This project, a partnership between UNICEF and the Government, educates teachers about the different ways in which children learn — each according to individual strengths. For example, some children learn better by doing, others prefer to listen, and still others to visualize. To make the classroom environment more friendly, enjoyable and sensitive to students, especially girls, IDEAL teachers use participatory methods. The value of this approach has been obvious to many teachers: "I have been dreaming of this sort of classroom organization for the last 35 years," said Abdul Majid Mollah, head teacher of a primary school in Jhenaidah. "My dream has come true."⁵²

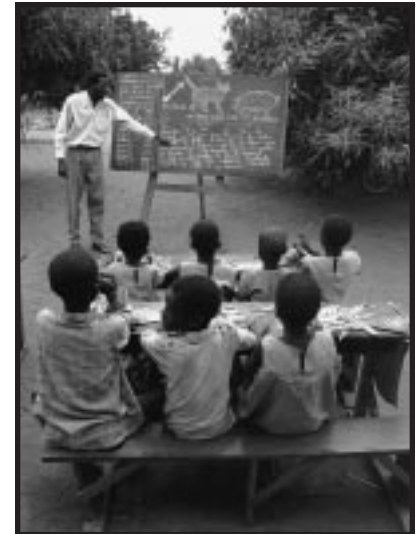
The Bangladesh educators are not alone in discovering the magical interaction with children who want to learn. "We were very worried when we started the course, but now we know we can teach the new way and we enjoy it," said a teacher learning new techniques in the Lao People's Democratic Republic. "It's more fun to teach now," he adds. "Things run more smoothly when the children enjoy it."⁵³ In bringing learning alive for children in their care, teachers are recovering their own sense of self-esteem and mission. "I came because I am tired of what happens in my school," said a teacher explaining why he had attended the Talleres de Educación Democrática (Democratic

Education Workshops) in Chile. "Tired of always doing the same things, of working alone, of the fear to change. I try to do many things. I have always been in favour of change. I would like to believe that all of us walk together towards the same goal."⁵⁴

Language barriers

Another major obstacle to children's access to schools is that, in many countries, lessons are still conducted in the former colonial language — for example, in many of the English-, French- and Portuguese-speaking African countries that have the lowest levels of primary enrolment in the world. If the medium of instruction in school is a language not spoken at home, particularly when parents are illiterate, then learning problems accumulate and chances of dropping-out increase. On the other hand, there is ample research showing that students are quicker to learn to read and acquire other academic skills when first taught in their mother tongue (Panel 8). They also learn a second language more quickly than those initially taught to read in an unfamiliar language.

In the 1990s, several Latin American countries modified their education laws to affirm the rights of indigenous peoples, leading to participation by the indigenous in educational decision-making as well as in planning, implementing and evaluating educational policy and programmes. In Bolivia, for example, indigenous organizations developed an intercultural bilingual education programme, and in Andean and Amazon Basin countries, indigenous groups participated in the development of human resource training programmes. A case study on the Bolivian programme documented girls' and women's enthusiasm about bilingual education as a means to intercultural communication. The Latin



UNICEF/98-1891/Pirozzi

Research shows that learning in the mother tongue in the early grades builds a vital educational foundation and bolsters children's confidence and self-esteem. Students in an outdoor French class in Benin.

Joyful learning: Empowering India's teachers



UNICEF/5852/Vilas

The first hint that this school is different is the building's colour — a warm, inviting pink. Inside, the difference from other Indian schools is even more palpable. It is not just the animal and floral decorations painted on the whitewashed upper walls, nor the displays of children's artwork, nor the metre-high 'blackboard' — the black-painted lower wall — that runs all the way around the room. The most striking difference is in the atmosphere.

Both the children and the teacher are clearly enjoying their work. They want to be here. A more dramatic contrast with the dismal rote-learning that has been the standard practice in Indian classrooms for generations could not be imagined.

This is a *bal mitra shala* — a child-friendly school — and it is part of the strategy of Shikshak Samakhya, the teacher empowerment programme that has rejuvenated primary schools in the Indian state of Madhya Pradesh. The word 'strategy' is care-

fully chosen: This is a different model of teacher education, a change in classroom process and practice and a very effective motivation programme, but it is much more than the sum of these parts. For almost the first time, the education system — the planners and administrators — have placed their faith in the teachers at the grass-roots level. And they have been rewarded by the most heartening success stories.

The district where this venture began was not an easy place for a pilot scheme. Dhar has long been classified as 'backward': Scheduled tribes comprise more than 75 per cent of the population, people regularly migrate to cities to find work and school attendance is poor.

In 1992, when the programme was launched on 5 September — Teachers' Day — in 186 primary schools and 23 cluster resource centres, local teachers initially saw it as yet another wearisome government programme. But Shikshak Samakhya's

great strength is the way it motivates teachers. From the first, they were involved in designing and developing the scheme so that they soon claimed it as their own. The new approach spread rapidly to neighbouring districts, and the commitment of the original teachers to supporting their colleagues in areas new to the scheme has been vital.

By 1995, Shikshak Samakhya was achieving national notice — programmes inspired by it are now operating in 10 other Indian states, under the generic name of teacher empowerment or 'joyful learning'. Joyful learning refers to the movement whereby teachers pledge to teach with enthusiasm and to incorporate song, dance and the use of simple, locally made teaching aids, bringing children more actively into the learning process. Programmes are supported by several United Nations agencies, including UNICEF, the United Nations Development Programme (UNDP) and the United Nations Population Fund (UNFPA).

The programme has helped teachers regain the pride and respect that Indian tradition affords their profession, says Sardar Singh Rathore, a head teacher from Dhar. Such respect had eroded in the past two decades. "Not only are they enjoying their teaching in the classrooms, but they have been able to make it so interesting that children are eager to come to school," said Mr. Rathore. A further benefit has been increased enrolment in the schools served, especially of girls and working children.

Teachers in the programme attend a two-day initial orientation session where they learn about the new philosophy from other teachers and are given practical training in preparing the new classroom aids. The teacher

education itself is conducted along 'joyful learning' lines, with the extensive use of songs, riddles and group activities.

Built on the premise that a motivated teacher and a satisfied student are the best way of transforming an education system, the teacher empowerment/joyful learning strategy is based on the belief that primary teachers can be motivated and successful if they receive sufficient trust, support and guidance. Parents will send their children to school if the learning experience is made relevant, effective and enjoyable.

"Seeing the children both learning and longing to go to school, the parents and community have come forward to support the teacher and the school," continues Mr. Rathore.

The virtuous-circle effect could not be clearer: India's investment in the strategy has succeeded in empowering teachers and making learning and teaching fun. It has had a positive impact on children's learning achievements. The strategy has also crossed national boundaries and has influenced planning in neighbouring Bangladesh, Nepal and Pakistan. The founding principles of teacher empowerment and joyful learning thus hold lessons not just for the rest of India but for the world as a whole.

Photo: New teaching techniques that actively engage children in the learning process are rejuvenating education in India, making school more enjoyable for teachers and students. Here, a teacher and pupils in India.

American experiences in general have also demonstrated that involving the ethnic groups themselves can strengthen solidarity among people and raise awareness about gender and other kinds of discrimination.⁵⁵

There are also innovative bilingual education programmes providing replicable models all over the world. In Viet Nam, the Kinh majority comprises 87 per cent of the population. The remaining 13 per cent is composed of 53 separate ethnic minorities who live in remote hill regions and coastal areas with the lowest school-enrolment rates in the country. Since 1991, the Government has been trying to extend primary schooling to the hill regions via a multigrade teaching project. The language of instruction is Vietnamese, but fast-track training is offered to potential teachers from ethnic minorities. UNICEF and the World Bank have also sponsored the development of bilingual books in ethnic minority languages, such as Bahnar, Cham, H'Mong and Khmer, and are setting up special literacy production centres that will employ local teachers, writers and illustrators who speak and write the local languages.

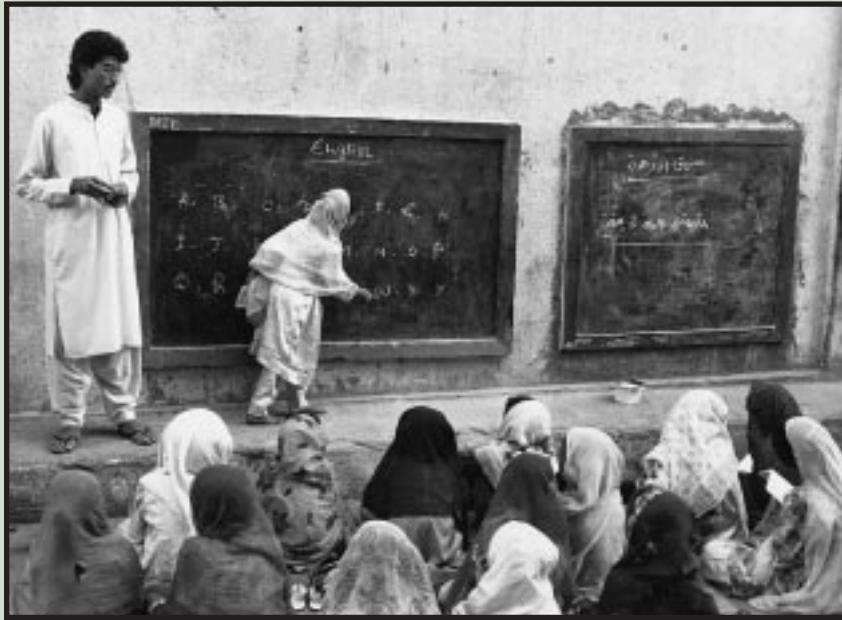
The model for this effort is the Intelyape project, which developed Arrernte literacy materials with Aboriginal Australians in the town of Alice Springs — another example of how the education revolution applies innovations from one part of the world to another.⁵⁶

Emergency measures

The impact of armed conflict on children is so deep and all-encompassing that it is almost impossible to measure fully. We can estimate the deaths in a decade (2 million) and serious injuries (6 million), the numbers orphaned or separated from their families (1 million), and those left homeless (12 million).⁵⁷ But we cannot know the exact num-

In armed conflict, education can serve to both heal and rehabilitate. Keeping schools open, or reopening them as soon as possible, provides children with structure and some sense of normalcy in the midst of chaos.

Which language for education?



UNICEF/5394/Isaac

School can be an alien and daunting place for the many millions of young children who begin classwork in a language different from their own. Compelled to adopt a second language when they are as young as four, five or six, these children must give up an entire universe of meaning for an unfamiliar one. They may also come to believe that the language they have known from birth is inferior to the language of school. In learning complex subjects such as mathematics and reading, they must undergo one of the greatest challenges they will ever face, yet the linguistic skills on which much of their cognitive faculties rest have suddenly been deemed irrelevant to the task at hand.

As these building blocks of knowledge crumble, so can the children's self-esteem and sense of identity. It is no wonder that so many of them struggle to stay in school and suc-

ceed. A recent study in Zambia, for example, showed that students who began school using English instead of their mother tongue did not acquire enough reading proficiency to learn well by grades three to six.

Experts increasingly recognize how important it is for children to use their mother tongue when they begin school. Use of this tongue validates their experiences. It helps them learn about the nature of language itself and how to use language to make sense of the world, including all aspects of the school curriculum.

The mother tongue is an essential foundation for learning. But acquiring proficiency in a national language — or in even a third, international language such as French or English — also has advantages. It broadens communication and, later on, affords greater opportunities for higher education and jobs. Aboriginal educators extol such two-way learning, which

helps students participate in the community and in the wider world as well.

After the first few grades — at least by the end of primary school — students who begin studies in their mother tongue should therefore ideally add a national language. This could be, for example, a Western, former colonial language, such as French in Senegal, or a dominant indigenous language, such as Hindi in India. Ascertaining which national language to introduce in schools, however, can be a matter of political debate.

In many countries, the two-language education ideal is rarely attained, despite the fact that most people in the world deal with more than one language in their daily lives. Cultural and political considerations often come into play. Many parents and decision makers, for example, advocate teaching in the national language from the start as a way to assimilate children into the dominant culture. For this reason, some parents will not send their children to a school that uses only the mother tongue.

Shortages of materials and training programmes have also hindered the two-language goal. To begin with, teachers may not speak the local or indigenous languages of their students, and they are often hard-pressed to find curriculum materials in these languages. Moreover, even teachers proficient in a local tongue will require training in how to teach the national language as a second language in the later grades.

For governments, the costs of developing learning materials and teacher-education courses can be enormous, especially where many languages exist. West Africa, for example, has 500 to 1,000 languages. Yet those costs need to be weighed against the price society pays for

high drop-out and repetition rates in schools where such language programmes do not exist.

Whether they learn a second language in first or fourth grade, children often struggle with a new language, which can be radically different from their own in terms of vocabulary, sentence structure and meanings. For example, Khmer, an indigenous language of Viet Nam, uses a script derived from a South Indian alphabet, whereas Vietnamese, the national language, uses the Roman alphabet. Most children learn a writing system from scratch in the early grades, but those learning to write in a new language have to overcome the obstacle of attaching symbols to unfamiliar words.

Countries, such as Ecuador, have made considerable progress in bilingual education. Bolivia recently passed its Education Reform Act in support of the right to a mother tongue. Burundi, Kenya, Rwanda, Somalia, Tanzania and Zimbabwe have introduced mother-tongue instruction in primary schools, and villages in Burkina Faso have introduced it in community-managed schools. Education policy in Papua New Guinea allows communities to decide the language of instruction for grades one and two. In Nepal, UNICEF supports government efforts to produce learning materials in four languages.

Early mother-tongue instruction is a key strategy to reach the more than 130 million children not in school — and help them succeed.

Photo: When children as young as four, five or six are compelled to adopt a second language, they give up a universe of meaning for an unfamiliar one. Girls attend an English class in Pakistan.

bers of children who are spiritually scarred and emotionally damaged by the violence they have seen and, in some cases, been forced to take part in; by the massive disruptions in the social fabric of their lives; and by the increasingly frequent experience of being the targets of attacks.

In armed conflict, education can serve to both heal and rehabilitate. Keeping schools open, or reopening them as soon as possible, provides children with structure and some sense of normalcy in the midst of chaos. Teachers and other professionals can attend to the psychosocial and emotional effects of violence on children. They can teach about survival and safety and monitor for human rights abuses.

In an effort to restore and protect children's right to education in emergencies, UNESCO and UNICEF developed the 'Edukit' concept, in which educational and teacher training materials are sent to the affected areas as rapidly as possible. Children get pens and paper, chalk and erasers, notebooks and exercise books. Teachers receive curriculum guides, teaching materials and textbooks. And disrupted communities gain a start on rebuilding. First used in Rwanda and Somalia, Edukits have been sent to Afghanistan, Ghana, Iraq, Liberia, Mali, the Republic of Moldova, Sierra Leone, Somalia, Sudan, Tanzania and Zambia.

There are also programmes to help make schools places where peace is practised and learned. In Lebanon and Sri Lanka (Panel 9), educational approaches born in conflict have become part of the national curricula. Children are taught problem-solving, negotiation and communication skills and respect for themselves and others; they come to know that peace is their right. The goal is to reconcile divided communities and prevent future conflicts.



Education helps restore normalcy and heal the trauma after armed conflict. Attentive students in Angola, which has endured 30 years of conflict, use educational materials provided in a UNESCO-UNICEF 'Edukit'.

A new beginning: Education in emergencies



UNICEF/Tanzania/Pirozzi

It is 7:30 a.m. on a misty Monday, and the morning haze is mixed with the smoke of campfires drifting across rows of tightly packed, blue plastic 'homes'. Dressed in her best — a striped sweater drooping to her knees, donated by someone from another continent — Veridiane joins the trail of small figures swinging empty plastic bags. The line of children snakes its way to a clearing under a wide acacia tree called 'school'. There are benches of stones or logs lovingly aligned by parents. The teacher welcomes Veridiane and the others to their first day of school.

Such sights were typical in refugee camps in Tanzania after the massive influx of 500,000 refugees from Rwanda in 1994. From these first days of 'schools under trees', emergency education eventually reached 65 per cent of all the children in the camp, providing much needed stability in their lives.

Veridiane and the other refugees were forcibly repatriated to Rwanda

in December 1996. By then, a new wave of refugees from civil conflict in Burundi and the Democratic Republic of the Congo had arrived in Tanzania.

Many lessons learned from the Rwandan refugee experience were applied: Within a few weeks of their arrival, 'schools under trees' began with materials provided by UNICEF, the Office of the United Nations High Commissioner for Refugees (UNHCR) and others. For the 58,000 Burundian children, textbooks identical to those used in their schools at home were printed and distributed. The 20,500 Congolese children in the camps will also soon receive educational materials.

The curriculum, the same as that used in the children's country of origin, is recognized in many cases by school systems at home. So it was that six Congolese children, by agreement with both Governments involved, took the Democratic Republic

of the Congo's national examinations in 1997, which were conducted in Tanzania. Negotiations continue with the Burundian Government over recognition of camp-acquired qualifications, so that children will not have to repeat a grade when they finally return home.

Some elements of refugee schooling nevertheless remain particular to the situation. For example, children are taught English and Kiswahili in Tanzania's camps so they can communicate with surrounding communities. Child rights are taught through the use of illustrated booklets produced by Kuleana, an NGO based in Mwanza (northern Tanzania). Conflict resolution is also a vital part of the school curriculum — as well as of adult-education initiatives in the camps.

In phased approaches to education in emergencies around the globe, children suffering from psychosocial stress should have their needs addressed first. Before more formalized curricula and pedagogic responses can be organized, recreational programmes — sports, drama and art — can give children opportunities to express and release their feelings. In acute crisis situations, training packages such as the Teaching Emergency Package (TEP), developed by UNESCO, UNICEF and UNHCR for Rwanda, are instrumental as an early response to educational needs.

However, none of these should be considered stopgap measures. On the contrary, emergency situations can provide a new beginning, laying the groundwork for education systems that are more sensitive to child rights and that include education in democracy, human rights and peace — topics that are still too infrequently addressed in mainstream classrooms.

The UNICEF-supported Education for Peace project has grown out of Lebanon's 16 years of civil war. Launched in 1989 in collaboration with the Lebanese Government and 240 NGOs, the project has trained 10,000 young people who have, in turn, organized educational activities reaching approximately 200,000 children. The goal is to promote peace and a culture of reconstruction and reconciliation; emphasis is placed on child rights and child development, conflict resolution and environmental education.

In Sri Lanka, in its 15th year of civil conflict, the Education for Conflict Resolution project is weaving the values of tolerance, compassion, understanding and peaceful living, appreciation of other cultures and non-violent conflict resolution into school curricula. Since the project began in 1992, it has reached more than 1 million primary school children and trained more than 75,000 administrators and 30,000 student leaders. In 1999, the project will be introduced into Sri Lanka's secondary schools.

In a world where nearly 50 million people have been uprooted from their homes, either forced to flee across borders as refugees or displaced within their own country's borders — 1 in every 120 of the world's population — the new understanding of how to educate people in emergency situations has never been more urgently needed.

Photo: In Tanzania, 'schools under trees', like this one, provide stability and educational continuity to refugee children from neighbouring countries.

In Croatia, where children have endured bitter civil war, an innovative project offers children in primary schools 20 weeks of training that aims to address psychosocial stress, increase bias awareness, promote conflict resolution and teach ways of achieving peace. It is one of the various approaches being used to help mitigate the effects of conflict on children, as well as to address their very special educational needs.

A collaboration between UNICEF, CARE, Canada's McMaster University and the Croatian Ministry of Education, the project was begun with fourth-graders during 1996 in one of the four war-affected areas of the country with the purpose of helping children resolve everyday problems, build their self-esteem and improve their communication skills. As of the 1997/98 school year, the project was in place in all four war-affected areas, with Mali Korak (Little Step), a local NGO, handling the teacher education component.

Successful results include reduced psychosocial stress, improved classroom atmosphere and positive attitudes towards school, parents and life in general. The hope is to extend this kind of training to teachers and students in all eight grades of primary school and to adolescents in youth associations.

Countering child labour

The majority of out-of-school children are likely to be working. ILO estimates that there are 250 million children working full or part time in the developing world.⁵⁸ Work prevents many children from gaining or benefiting from education, but it is equally the case that education systems fail to take into account the special circumstances of working children. Most working children want to go to school. To attract out-of-school working

Education systems fail to take into account the special circumstances of working children. Most working children want to go to school.

In India: Helping the poor choose school



UNICEF/5888/Vilas

In Andhra Pradesh, India's fifth largest state, 75 villages are child labour-free because their children are enrolled in school, due in large part to the efforts of the M. Venkat-rangaiya Foundation (MVF) over the past seven years. From the inception of the programme in 1991, MVF efforts have been guided by two inter-related objectives: No child shall go to work; all children shall go to school.

The MVF programme began in five villages by enrolling 16 children, all girls, in school. By 1998, more than 80,000 children, 5 to 14 years old, boys and girls alike, from 500 villages were enrolled by MVF in government-run schools throughout the rural areas of the Ranga Reddy district.

"The essence of the programme lies in making the community accept the idea that no child should work," explains Shanta Sinha, the Foundation's Secretary-Trustee and a professor of political science at the University

of Hyderabad. "This in itself is an extremely difficult task since an enormous conflict of interest is involved. To the parent it means an immediate loss of a helping hand, while to the employer it implies the loss of an accessible labour force. To the teacher it results in a large increase in the number of children to teach, while the community as a whole takes on additional responsibility."

Even more difficult than resolving these conflicts of interest is transforming the social values and cultural norms that support the concept of children working. How MVF accomplished this shift is a model of community organizing and consensus building among parents and the children themselves, with teachers, many of whom have joined together in a 'Forum for Liberation of Child Labour', youth volunteers known as 'education activists', local officials and employers. First, MVF

contacted every family directly with the help of the volunteers to determine the status of each child in the district. Children 5 to 8 years old were enrolled in regular schools and children aged 9 to 14 were sent to special night schools or residential camps for three months in the summer as a sort of 'bridge course', preparatory to being enrolled in regular schools. The experiences and progress of both groups of students were monitored by committees of parents.

Simultaneously, MVF held public meetings, poster campaigns and rallies. Parent-teacher associations were activated at the village level and administrative committees at the district level. "Just as community pressure is built up to encourage parents to send their children to school," says Professor Sinha, "employers are also encouraged to stop hiring children. There have been a number of instances where employers have, under pressure from the community, come forward to sponsor for education children whom they once employed. The community has responded by honouring these former employers."

With the increased number of children in school, the teaching staff faced new demands. Additional community teachers, funded partially by the community and many of whom were first-generation literates themselves, were hired to serve the students as a link between the worlds of work and school. Government teachers were supported by MVF through workshops that focused on teachers' attitudes towards the working child attending school for the first time, and others that addressed the specific problems of working children.

As the programme matured, MVF's role evolved. In 1997, the Foundation trained more than 2,000 youth volunteers, government teachers, 'bridge course' teachers, women leaders, and elected and NGO officials.

In contrast to most programmes, MVF provides no economic incentives or recompense to either the children or their families. Yet the approach has been so successful that the state government is now duplicating it in other villages. How does MVF explain its experience?

"The view of the Foundation," says Professor Sinha, "is that in many cases children have been put to work because they were not in school rather than the other way around." MVF's experiences clearly refute the prevailing theory that economic necessity makes poor parents choose work for their children rather than school. The poor families of Andhra Pradesh, given the opportunity and encouraged to do so, readily withdrew their children from work and enrolled them in school.

"We seem to have hit upon an agenda that is close to parents' hearts for what they wanted for their children," says Professor Sinha. "The programme strikes a chord."

Photo: Social values and cultural norms that support the idea of child labour must be changed to keep children in school, something that requires the involvement of the entire community. A girl works in a tea shop in India.

children into school, to retain all children there to an appropriate age and level of learning, and to reintegrate children who have dropped out, education must be structured to fit the specific needs of working children, their families and communities (Panel 10). In particular, agricultural and domestic labour, the most hidden forms of child labour, which impact disproportionately on girls, must be addressed.

To transform education from being part of the child labour problem into a key part of the solution will entail considerable innovation and the use of non-traditional techniques. It will involve upgrading teacher education and school materials, and introducing greater flexibility and creativity into education management, teaching and learning methods, curricula, school schedules and locations. It means mobilizing civil society, especially children. Children are participating in planning their own school activities more regularly, for example, in Escuela Nueva in Colombia, where children's councils are commonly held as part of education for citizenship.

UNICEF is cooperating with governments on a number of approaches to meet the educational needs of working children. Scholarship programmes in Brazil have provided education grants to the poorest families as an economic incentive to reduce the drop-out rate. For example, the Bolsa Criança Cidadã, a federal government programme in regions of the country where child labour is prevalent, gives grants to families and to municipal education secretariats to expand sports, cultural activities and school tutoring when child workers are in school. Working children in the Federal District are targeted by the Bolsa-Escola programme, which provides the equivalent of a minimum wage (about \$100 a month) to their



UNICEF/90-002/Tomie

A girl casts her ballot during a student council election in Colombia, where children regularly participate in planning school activities.

Egypt's community schools: A model for the education of girls



UNICEF/98-0402/Goodsmith

Surprisingly, educational innovations are more easily found in the deprived rural communities of Egypt's south than in Cairo's wealthy neighbourhoods. Where the desert meets the lush agricultural fields next to the Nile and where mountains loom over the valley, time-honoured traditions are giving way to child-centred schools that are attracting the most estranged students: girls.

About 25 per cent of southern Egypt's rural population resides in isolated, sparsely populated hamlets at least 3 km from the nearest village school. Girls are most affected by these conditions. In most rural areas in the south, girls' net enrolment rates range from about 50 per cent to 70 per cent, compared with 72 per cent nationally. In the most extreme situations in some remote areas, only 12 girls are enrolled for every 100 boys.

In Asyut, Suhag and Qena — among the most deprived governorates in the south — close to 200

community schools have been established. Their success, in reducing the obstacles to girls' education and in fostering the active participation of both girls and boys in the classroom, has led to the integration of their principles of quality teaching and learning into the formal education system.

Nadia, who thrived in the child-centred environment of the Al Gaymayla hamlet school, is now an adolescent, with sound self-esteem and solid educational skills. Currently attending a preparatory middle school in Om Al Qossur village, Asyut, she plans to pursue her education all the way through university, an aspiration emphatically supported by her family.

"When she was only in the third grade she could read and write with greater ease and proficiency than her older brother who had attended the nearest village school. We then began to rely on her for advice. She became the one to write our confidential letters to her uncle who is working abroad in the Gulf," said her father.

Nadia's middle-school teachers quickly noticed her academic prowess and her active participation in class, leading them to approach the community school project for guidance about their new methods of active learning, including self-directed activities, learning by doing, working in groups and children's participation in managing the classroom.

It is the accomplishments of students like Nadia and 4,000 other children who have become active learners that have prompted Egypt's Ministry of Education and the Government to expand the community school project. A number of elements are going to scale, such as training teachers and principals in active learning pedagogies, developing self-instructional materials and piloting flexible promotional systems that advance children when they complete levels of learning rather than when they pass a specific exam.

The community schools began in 1992 through strong partnerships among the Ministry of Education, communities, NGOs and UNICEF. Combining multiple grades in one class, they represent a model of active learning especially attractive to girls, based on the principles of community ownership and parents' participation in their children's education. True to the principles contained in the Convention on the Rights of the Child, the schools foster creativity, critical thinking and problem-solving skills as the basis for lifelong learning.

With support from the Canadian International Development Agency (CIDA), the community schools are being integrated with a government initiative begun in 1993 called the 'one-classroom' schools, which also target girls in deprived rural hamlets. The schools are operating in more

than 2,000 communities across the country.

The integration of the two projects began in earnest in 1995. By ministerial decree, an Education Innovation Committee (EIC) was created to bring the two initiatives closer together and to incorporate the best practices of the projects into the formal basic education system at large, to encourage innovations in education as an ongoing process. Active learning and child-centred class management are being incorporated into the formal schools.

EIC sits in the heart of the Ministry of Education, with membership drawn from universities, the national literacy agency, the media and the staff of the Ministry of Social Affairs. Recently, the Ministry of Education proposed that NGOs, community members, businessmen and women as well as health and environment officials also be included.

With such evident demand from communities, parents and policy makers for quality education, a movement is on its way, with community schools viewed as a catalyst for social change and personal transformation. The quest for quality learning with communities taking responsibility and ownership of their schools is building a solid foundation for sustainable development and life-long learning. Some refer to it as a silent revolution: a cherished collaboration for community learning and empowerment.

Photo: A girl in a classroom in Asyut, Egypt.

families, a subsidy lost when their child's attendance falls below 90 per cent during the school year. Linked with efforts to improve the quality of primary education, the programmes have reduced drop-out rates.

In Bangladesh, a memorandum of understanding (MOU) has been both a rapid and creative response in developing non-formal approaches for children formerly working in the garment industry. Signed by the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), ILO and UNICEF in July 1995, the agreement stipulates that children under 14 be removed from the workplace, placed in schools and given a monthly stipend. Lessons learned from the MOU have been incorporated into a basic education programme for hard-to-reach urban children.⁵⁹

Element 3. Gender sensitivity and girls' education

'Growing tomatoes' is the topic of today's agricultural lesson in the al-Akarma community school in Upper Egypt. In the middle of the lesson, Nagwa raises her hand. The teacher gives her permission to speak, and Nagwa very politely but assertively corrects the teacher's information on how and where tomatoes grow. The teacher thanks Nagwa and encourages the class to applaud her.⁶⁰

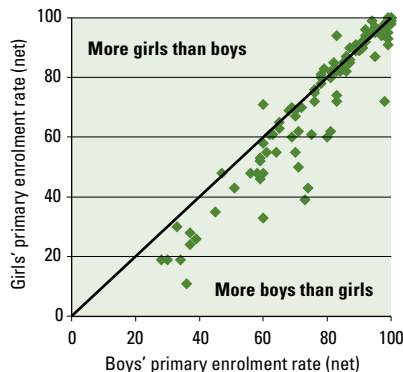
This is a gender-sensitive classroom in action. The subject matter is relevant to the students' lives; the teacher-student interaction is mutually respectful; a girl is encouraged to participate rather than just listen passively; and her contribution is then affirmed (Panel 11).

Investing in education systems to make them inclusive benefits all children. Unfortunately classrooms like

Discrimination against girls is the largest impediment to achieving Education For All.

Fig. 7 Primary enrolment: Where the boys and girls are

As this scatter diagram of boys' and girls' net primary enrolment rates in all developing countries shows, more boys than girls are enrolled in countries where overall enrolment is low and gender parity is greater at higher overall enrolment levels. Higher boys' enrolment can be seen in the lower section of the chart, while higher girls' enrolment can be seen in the upper section.



Source: *The State of the World's Children 1998*, UNICEF, New York, 1997 (Table 4).

Nagwa's are still very much the exception. Discrimination against girls is the largest impediment to achieving Education For All.

Girls' right to a high-quality education that serves their needs is all too often denied, even to those who reach the classroom. Their learning and self-esteem can be undermined by lessons and textbooks filled with implicit and explicit messages that girls are less important than boys. Their teachers — women and men alike — may praise boys more, reward them with attention and offer them more opportunities for leadership. At school, girls may be routinely assigned house-keeping tasks that would only be given to boys as a punishment.

A gender-sensitive class should contain roughly equal numbers of girls and boys, and their performance should be at parity, but many classes in the world do not fulfil that most basic criteria. For example, of the estimated 130 million out-of-school children aged 6 to 11 in the developing world, 73 million are girls.⁶¹ The importance of reducing this gender gap by targeted strategies to promote girls' education has been stressed throughout the 1990s. It loomed large in the World Declaration on Education for All in 1990, adopted by 155 countries: "The most urgent priority is to ensure access to, and improve the quality of, education for girls and women, and to remove every obstacle that hampers their active participation. All gender stereotyping in education should be eliminated."⁶² (See Figs. 7 and 9.)

These words were carefully chosen to focus not only on the quality of the education available to girls and the need to remove all barriers to attending school, including those related to cultural tradition or lack of political will, but also related to the physical aspects of the problem, such as lack

of school places or appropriate facilities. Many girls drop out of school at the onset of menstruation, which makes them particularly vulnerable when there are no separate toilets.

The broad social benefits of educating girls are almost universally acknowledged. They include the following:

- ▶ The more educated a mother is, the more infant and child mortality is reduced (Fig. 8).
- ▶ Children of more-educated mothers tend to be better nourished and suffer less from illness.
- ▶ Children (and particularly daughters) of more-educated mothers are more likely to be educated themselves and become literate (Fig. 10).
- ▶ The more years of education women have, the later they tend to marry and the fewer children they tend to have.
- ▶ Educated women are less likely to die in childbirth.
- ▶ The more educated a woman is, the more likely she is to have opportunities and life choices and avoid being oppressed and exploited by her family or social situation.
- ▶ Educated women are more likely to be receptive to, participate in and influence development initiatives and send their own daughters to school.
- ▶ Educated women are more likely to play a role in political and economic decision-making at community, regional and national levels.

While the bigger global problem concerns girls' lack of access to a quality education, a problem in boys' education appears to be looming. It is clear that in some regions boys' enrolment is lower and their drop-out rates higher. This is a long-established phenomenon in countries with pastoral traditions such as Lesotho and Mongolia where boys have always been expected to tend the herds. But it is also

a growing problem in the Caribbean, where girls are not only staying in school longer, but significantly outperforming boys at primary and secondary levels. These findings are possibly the first reflection in the developing world of a ‘boys’ education’ problem that exists in industrialized countries (Panel 12).

To protect children’s right to education, schools and education systems must be ‘gender sensitive’. What does this mean? In practice, most reforms to improve quality and guarantee child rights will also make education more gender sensitive. Key measures proven to promote girls’ schooling and enhance the quality of the school experience for all children include:

- ▶ *Offering* a child-centred learning experience in the classroom that elicits the best in each individual, starts from the life and environment of the community and includes learning in the local language.
- ▶ *Recruiting and training* teachers to be sensitive to gender and child rights. In some areas, more women teachers are needed to serve as role models for girls as well as to ensure that parents are comfortable with the classroom environment. A UNICEF study of countries that achieved universal primary education early in their development process shows that these countries did exactly that — they employed a much higher proportion of women teachers.⁶³ The goal for all teachers, male and female, however, is to create classrooms in which girls and boys can contribute equally. Recruiting more women teachers will be of limited use if girls’ needs continue to be disregarded. The educational process must change.
- ▶ *Rooting out* gender bias from the images and examples found in textbooks and materials. Since

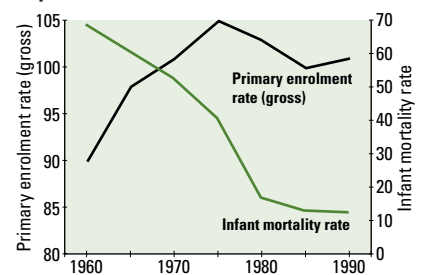
these images tend to show males in positions of activity, power and authority, their elimination may seem like a reform detrimental to boys. In reality, boys benefit from curricula that encourage them to behave on the basis of who they are rather than on what society expects them to be. Thoughtful revision of textbooks, classroom materials and lesson plans is likely to increase their general quality and relevance to all children’s lives.

- ▶ *Giving* the local community more control over and involvement with schools and ensuring that parents and families are involved in achieving gender sensitivity in education.
- ▶ *Ensuring* that principals, supervisors and other administrators are sensitive to gender issues, which will result in schools where girls and boys have a good learning environment that is safe and clean. This would include facilities that do not discourage girls’ attendance. It would also include a better gender balance among principals, supervisors and other administrators.
- ▶ *Collecting* education statistics and ensuring they are disaggregated by gender, to get a true picture about girls’ access to and participation in education. Data disaggregated by geographical location, socio-economic group and, where relevant, ethnic and linguistic group will help identify other possible areas of discrimination as well.
- ▶ *Providing* programmes that foster early childhood care for child growth and development (see ‘Element 5. Care for the young child’). All children’s self-esteem and preparedness for school are enhanced by this kind of pre-school care and stimulation, but girls’ staying power in primary school seems to be increased even more than that of boys.

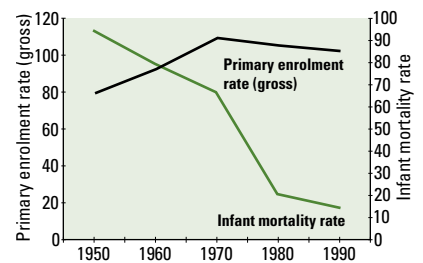
Fig. 8 Education’s impact on child mortality

A 1997 UNICEF study examined the impact of health, nutrition, water and sanitation and education interventions on health in nine countries and the Indian state of Kerala, all of which had made significant reductions in infant mortality. Of the interventions, education was found to have the greatest impact on health indicators, including rates of infant and under-five mortality, life expectancy at birth and total fertility. By way of example, the graphs below show a drop in the infant mortality rate preceded by a rise in primary enrolment in the Republic of Korea and Costa Rica.

Republic of Korea



Costa Rica



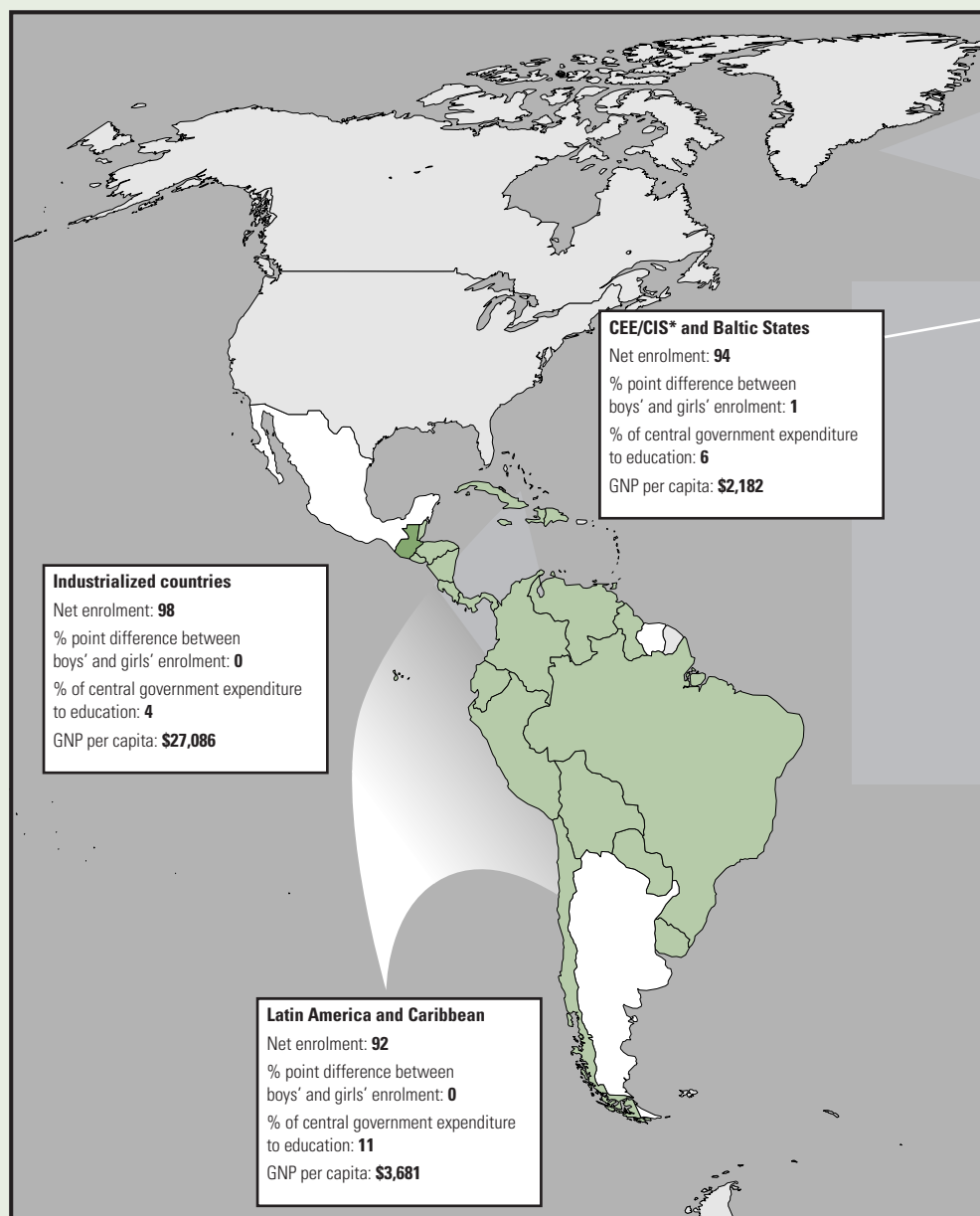
Source: Santosh Mehrotra and Richard Jolly, eds., *Development with a Human Face*, Clarendon Press, Oxford, 1997.

Fig. 9 At a glance: The gender gap in primary education and related indicators

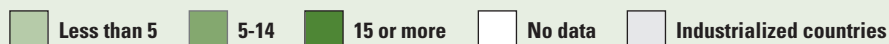
The gender gap in primary education, shown on this map, is the percentage point difference between boys' and girls' net primary school enrolment. In most developing countries, boys' enrolment exceeds that of girls. The difference is largest in South Asia, where boys' enrolment exceeds girls' by 12 percentage points, in the Middle East and North Africa by 11 percentage points and in sub-Saharan Africa by 9 percentage points. There is no difference between boys' and girls' enrolment in industrialized countries.

Source: UNESCO and UNICEF, 1998, for net enrolment; *The State of the World's Children 1998* and *The State of the World's Children 1999* for percentage point difference between boys' and girls' enrolment, per cent of central government expenditure to education and GNP per capita (1996); UNAIDS for HIV/AIDS figures; ILO for child labour figures.

Note: The map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan and the respective China and India boundary claims.

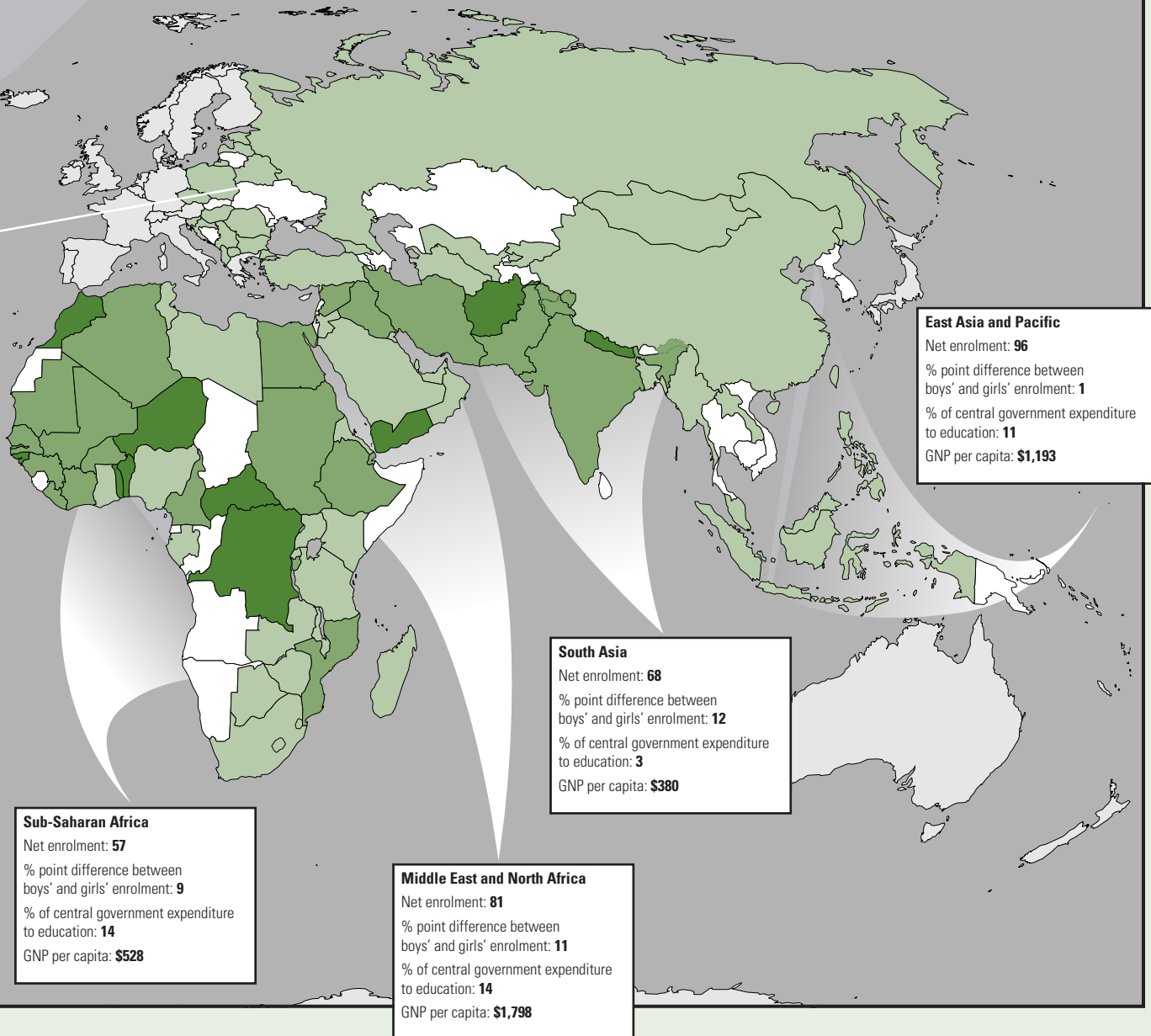


Percentage point difference between boys' and girls' primary school enrolment



Numbers to note

Over 8.2 million children aged 14 or younger have lost their mother or both parents to AIDS — 7.8 million in sub-Saharan Africa alone — and that number is increasing by 50,000 a year. In developing countries, about 250 million children between the ages of 5 and 14 work — around 153 million in Asia, 80 million in Africa and 17.5 million in Latin America. These millions of child workers and AIDS orphans are at risk of being denied their right to basic education, making it all the more difficult to lift themselves out of poverty and exploitation.



For a list of countries in each region, see the Regional summaries country list on page 122.

*Central and Eastern Europe and the Commonwealth of Independent States.

Heads of schools and administrators must promote high-quality, child-centred learning and ensure that schools are safe places, where girls feel respected and are safe, physically and intellectually, from teasing, rowdiness, violence and sexual harassment.

- ▶ *Locating* schools closer to children's homes. This can be achieved through school mapping to identify the least served locations, and by establishing small multigrade schools in remote rural areas. These measures make schooling more accessible to all children but particularly encourage girls' enrolment.
- ▶ *Scheduling* lessons flexibly to allow children to participate who might otherwise be deterred by family responsibilities in the fields or the household.
- ▶ *Offering* free education, or ensuring that children are not denied education because their parents cannot afford it. Faced with a choice between sending their sons or daughters to school, poor families often send their sons.

Gender sensitivity is not merely a facet of the education revolution but is woven into its very fabric. Measures aimed at girls' participation advance the cause of universal education on every front.

A gender-aware approach must, therefore, inform decision-making at every level of the system. At the national level, decisions about education must be based on gender-specific information to ensure equality as an absolute priority. Sufficient resources must also be found so that families no longer have to bear the direct and indirect costs of schooling.

Heads of schools and administrators must promote high-quality, child-centred learning and ensure that schools are safe places, where girls feel respected and are safe, physically and intellectually, from the teasing, rowdiness, violence and sexual harassment that overwhelms them in so many schools.

Teachers must use gender-sensitive materials and monitor their own bias, making sure that girls participate as frequently as boys and in the same

ways. They also need to include in the curriculum material about women's contributions to society and the local community, especially where that contribution is hidden or undervalued.

The global UNICEF Girls' Education Programme is currently pursuing these goals in more than 50 countries, including the three regions with the widest gender gap: sub-Saharan Africa, South Asia and the Middle East and North Africa. The latter two face a long and challenging road to equity but have at least increased girls' enrolment in primary school over the last decade.

In the Middle East and North Africa, progress has been notable, but within the region, however, country circumstances vary widely. Bahrain and Jordan have completely eliminated the gender gap in primary schooling, and Saudi Arabia has nearly done so. Morocco, on the other hand, has a 19 percentage point difference between boys' and girls' enrolment.

In general, though, most countries in the region show substantial progress, which reflects the priority that governments and international agencies have placed on improving girls' educational opportunities since the Jomtien conference.

All 17 UNICEF country programmes in the region have a significant female education component; aid donors have been particularly favourable to this area; and countries have been persuaded of the need to educate girls — not least by the growing need for a better trained and qualified labour force. The Government of Iran, in recent years, has been particularly supportive of education for rural girls and women.

In sub-Saharan Africa, on the other hand, girls' net enrolment rate, at 51 per cent, is lower than it was in 1985. The region's gender gap is smaller

only because the boys' enrolment rate has fallen even more.

At the Pan-African Conference on the Education of Girls, held in Ouagadougou (Burkina Faso) in 1993, UNESCO recognized that Africa is lagging behind other regions and called on African governments, regional, bilateral and international agencies and NGOs to make girls' education a priority.

Fortunately, energy is being devoted to progress in the 1990s with every prospect that it will pay significant dividends over the next decade. The African Girls' Education Initiative, supported by UNICEF, now operates in over 20 countries and has substantial financial backing by the Canadian and Norwegian Governments to carry it through to the end of 1999.⁶⁴

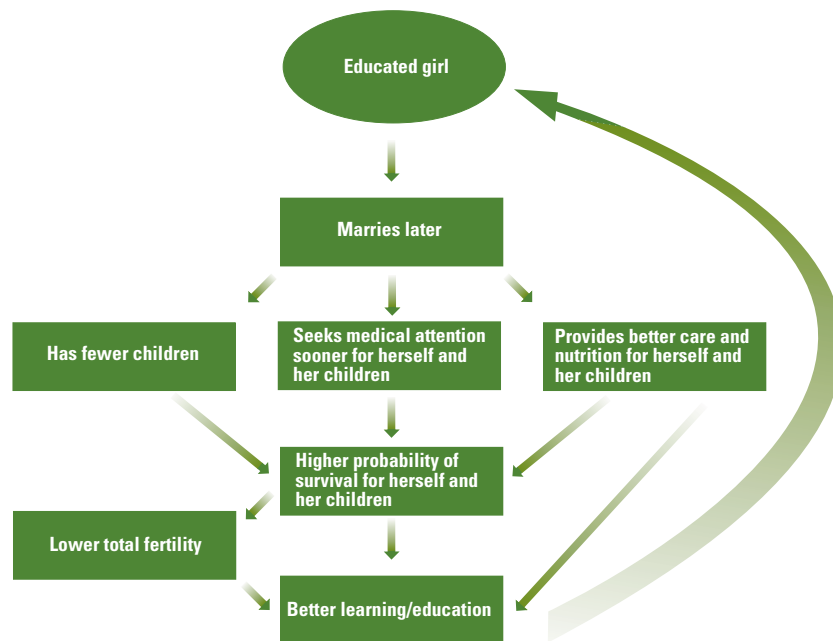
The Initiative is helping countries try different approaches to close the gap between boys' and girls' enrolment, but one common measure is to improve education systems overall in order to better the educational experience of girls.

In Mali, for instance, constraints to girls' education are seen in the broad context of weaknesses in the entire basic education system, so that rather than using a piecemeal project approach, the focus is on decentralized planning and making the curriculum more relevant. Preliminary results are encouraging. In participating schools, girls make up a much larger percentage of the student population than they do in schools in neighbouring villages.⁶⁵

Zambia's Programme for the Advancement of Girls' Education (PAGE) has targeted gender issues within the system by using a host of initiatives ranging from piloting its own single-sex classes (no results are available to date), to increasing parental support for girls' education via

Fig. 10 Generational impact of educating girls

The benefits of girls' education accrue from generation to generation. Educated women are likely to have smaller families and healthier children who themselves are likely to be better educated than children of uneducated women. Over time, lower child mortality leads to behavioural change, lowering fertility. Smaller household size improves the care of children, and lower fertility reduces the size of the school age population.



Source: Santosh Mehrotra and Richard Jolly, eds., *Development with a Human Face*, Clarendon Press, Oxford, 1997.

joint pupil-parent sessions. The attempt to reach out to parents — which has helped encourage rural parents to evaluate how they allocate household tasks to their sons and daughters — is a recognition that gender sensitivity begins at home and in the community and cannot be left to the school alone.

At school and community meetings organized by PAGE, attitudes towards girls' education remain divided, but it is clear that the dialogue has helped reduce entrenched opposition. The seven provinces not included in the original programme asked to join, resulting in the Government's launch of PAGE in 1998.

The macho problem: Where boys are underachieving



UNICEF/95-0653/Tourounji

Parents look after girls more," says 16-year-old Sebastian Brizan. "Boys need protection, too." Sebastian, who lives in Trinidad and Tobago, feels that both parents and schools pay less attention to boys than to girls. He started skipping school at the primary level. He says that he found school boring and felt the teachers lacked commitment. Ultimately he failed the Common Entrance Examination — a test required for entrance into secondary school in the English-speaking Caribbean.*

In the Caribbean, unlike the majority of the developing world, boys are doing significantly worse than girls at school: Fewer boys pass the Common Entrance Examination and they are more likely to drop out of school. Part of the problem seems to be that boys grow up with rigid ideas about gender roles.

"I never wanted nobody to tease me and call me a 'sissy'," says 17-year-old Algie, from Dominica, on why he used to skip classes. It has become routine for boys in the Caribbean to perceive academic effort as 'sissy', 'effeminate' or 'nerdy'.

"The boys don't utilize education in the same way," says a female teacher from St. Vincent and the Grenadines. "Much of it has to do with image. They don't want to be seen as a nerd, and a nerd is someone who works hard at school." A teacher from Barbados agrees: "They also prefer to be seen not working. It's not popular to be male and studious. It's not macho."

The problem is exacerbated by the low proportion of male teachers in the Caribbean — especially in Jamaica — where positive educational role models for boys are as hard to come by as they are for girls in many developing countries. This is also true of primary schools in the in-

dustrialized world, where boys are taught almost exclusively by women. The problem of boys' educational underachievement is currently ringing alarm bells there, too.

As recently as the early 1980s, the dominant concern in the industrialized world was, as in most developing countries now, with female rather than male underachievement. But now girls are routinely surpassing boys in average educational attainment. Some observers link this trend to changes in the economy and job market. These observers believe men's traditional role has been taken away, and the resultant feeling of hopelessness is percolating through even to boys who are quite young.

Yet in Nigeria, as in many countries in Latin America, it is precisely boys' greater access to the labour market that is proving a problem. In eastern Nigeria, the number of boys dropping out of school is spiralling: In the states of Abia, Anambra, Enugu and Imo, 51 per cent of boys were out of school in 1994 and 58 per cent in 1996.

Chima Ezonyejiaku is one of them. His father is a retired head teacher and his mother still teaches in a village school, yet Chima has abandoned his studies to apprentice himself to a wealthy trader in the town of Onitsha. Like most of his friends, he feels that school is a waste of time and wants to begin the process of making money.

Boys like Chima are unlikely to go back to school and need special educational opportunities tailored for them. UNICEF is assisting the Nigerian Government and Forward Africa, a local NGO, to provide non-formal educational opportunities in local market places, mechanic workshops and Koranic schools. New curricula and instructional materials address

*The exam will be abolished in Trinidad and Tobago in the 1999/2000 school year.

the realities of young boys and girls outside the formal school system. Classes and school hours are flexible, and instructors emphasize reading, writing and survival skills for present-day life.

When Sebastian failed Trinidad and Tobago's Common Entrance Examination, he was lucky to enrol at the Cocorite Learning Centre. UNICEF in the Caribbean supports children at risk of staying out of school — particularly boys — through assistance to centres such as Cocorite. There, he says, the students are taught right from wrong; teachers talk to him "about life" and give him guidance. He is able to gain practical as well as academic skills that help keep him interested. He no longer skips school because one of the teachers checks up on him and ensures that he doesn't.

The focus is on improving overall life skills — including negotiation, coping, decision-making, critical thinking, conflict resolution, interpersonal relationships and communication — and providing vocational training with an emphasis on building self-esteem and confidence.

In the Caribbean, as elsewhere, the need is to transform the education system so that it is 'gender sensitive' — ready to address in school and, where possible, out of school, the social and cultural problems of being a girl or a boy, which may impede children's educational development. And that change is just beginning.

Photo: In the Caribbean, initiatives aimed at keeping boys in school offer practical as well as academic skills. Boys learn carpentry at a vocational training centre in Haiti.

At the national level, meanwhile, Zambia's Ministry of Education has agreed on the following 10 criteria by which inspectors will judge whether a school is gender sensitive, which could prove useful to other countries as well:

1. At least 45 per cent enrolment of each sex.
2. A completion rate of 80 per cent.
3. A girls' progression rate of 85 per cent.
4. At least 40 per cent of teachers from each sex.
5. The head teacher and deputy should be of opposite sex.
6. A catchment area of no more than 5 kilometres.
7. Separate toilet facilities for each class of 40.
8. Gender-sensitive teaching.
9. Use of gender-sensitive materials.
10. Active parental and community support.

As these criteria make clear, 'gender-sensitive' means a concern for gender equality that also benefits boys. PAGE points to a survey in one area that showed the programme had succeeded in increasing the number of girls passing the grade seven final exam, while the number of boys passing the exam had increased even more.⁶⁶

"Getting girls into school is merely the first step on a long rugged road that is filled with ruts and roadblocks, some cultural, others economic,"⁶⁷ said Priscilla Naisula Nangurai, a head teacher in Maasailand (Kenya), speaking of the pressures for girls to drop out of school. Ms. Nangurai was one of a group of 'dynamic African headmistresses' profiled by the Forum for African Women Educationalists (FAWE) to promote girls' education by providing positive role models.

A remarkable organization in itself (Panel 13), FAWE is collaborating with a team from the Institute of



UNICEF/93-2288/Pirozzi

Girls' learning and self-esteem can be undermined by lessons and textbooks filled with implicit and explicit messages that tell them girls are of less value than boys. A schoolgirl participates in class in Ghana.

Women educators push the limits for girls in Africa



UNICEF/93-1220/Andrew

Impassioned about making a difference in girls' education in Africa, 60 visionary and influential women — current and former ministers of education, university vice-chancellors and education specialists — make up the Forum for African Women Educationalists (FAWE). The organization's agenda on behalf of Africa's young women and its expectations of Africa's policy makers are clear. "Girls and women are the intellectual resource in Africa that will contribute to the crucial change that the continent is looking for," says Dr. Eddah Gachukia, FAWE's Executive Director. "Girls must not only be educated, they must also be accorded the opportunity to use their education and their skills to make decisions about and be participants in the development of Africa."

And FAWE insists that problems — even the unmistakable issue of funding — are solvable. "We at FAWE never want to hear resources cited as an excuse for the lack of Education

For All," Dr. Gachukia told UNICEF during an interview in her downtown Nairobi office. "Africa has the resources, internal and external. What Africa needs is to manage these properly for the benefit of everybody."

With 26 associate members, comprising male ministers of education and senior policy makers, and 31 national chapters in all areas of sub-Saharan Africa, FAWE has worked since 1992 to promote Education For All, especially for girls, through advocacy, concrete actions and policy reforms. Now, after six years of operation, FAWE's mission extends beyond just access to education and improving its quality.

In certain ways, FAWE's members — accomplished in their individual spheres and working together as a network of professionals across nations, sectors and disciplines — personify the organization's vision of educated women actively engaged in the public life of Africa. In 1994, for example, citing research findings,

they successfully lobbied the ministers of education in several African countries to change policies that excluded pregnant girls from re-entering school. "The message has been," says Dr. Gachukia, "that education is the right of every child, even the girl who becomes pregnant, and not a privilege for those who do not become pregnant."

Through FAWE's national chapters, the organization supports grassroots efforts with grants and awards to individuals and institutions that have found cost-effective, innovative, replicable ways of promoting girls' education and gender equity in education. By the end of 1997, FAWE had awarded more than 40 grants in 27 countries.

"We do not compete with other girls' education programmes, we recognize them as partners," explains Dr. Gachukia. "All we do is link them to policy makers so that their local ideas can gain national and regional recognition and support."

FAWE's most prestigious award is the Agathe Uwilingiyimana Prize for innovative achievements in female education in Africa. The Prize, first awarded in 1996, is dedicated to the memory of the late Rwandan Prime Minister, a dedicated educationalist and a FAWE member, who had been a teacher in a girls' secondary school and once served as Minister of Education. Projects in eight countries (Burkina Faso, Ethiopia, Ghana, Guinea, Kenya, Malawi, Sierra Leone and Zambia) have been recognized for their success, and the lessons learned through them have been documented and shared.

The organization's greatest strength, according to its Executive Director, is in policy outreach. In 1995, in Ethiopia, Guinea and Tanzania,

FAWE began its programme of Strategic Resource Planning (SRP) in collaboration with the Institute of Development Studies, Sussex University (United Kingdom). The project has since expanded to Ghana, Malawi, Mali, Senegal, Uganda and Zambia. Through SRP, the organization assists ministries of education to identify specific problems affecting girls, collect and analyse data and develop a range of policy options to close the gender gap and assure primary schooling for all.

“We present the findings of SRP for each country and we invite everyone — community members, teachers, donors, policy makers — to sift through the findings and recommendations,” says Dr. Gachukia, explaining that partners at the national level are then ready to work together to put their recommendations into action. “We believe that this strategy makes everybody involved feel part and parcel of the process and whatever policy that emerges.”

In the final analysis, as effective as its programmes and activities have been, FAWE’s most valuable contributions to Africa’s development may well be in the demonstrated capabilities of the organization’s members to change the consciousness — minister by minister, country by country — about what to expect of girls.

Photo: FAWE believes that girls’ education is the key to Africa’s development. Here, girls stand in the doorway of a classroom in Malawi.

Development Studies at Sussex University (United Kingdom) on a major new girls’ education programme, Gender and Primary Schooling in Africa (GAPS). The aim of GAPS is to adapt the influential research and financial modelling in the book *Educating All the Children** to the practical needs and cultural circumstances of various African countries. It recommends a package of reforms that will “deliver schooling for all, at levels of quality and gender equality which are defensible, within 10 to 15 years.”⁶⁸

Each country’s national government takes joint responsibility for the research project. The first three countries studied — Ethiopia, Guinea and Tanzania — have moved into the second phase in which the reforms will begin to be implemented, and research is now under way in a second group of countries.

Reform proposals are bold and wide ranging, charting a route by which Ethiopia might plausibly move from its current primary gross enrolment rates of 39 per cent for boys and 24 per cent for girls to 102 and 106 per cent, respectively, over a 15-year period. They include cost-saving reforms such as automatic promotion in grades one to five, and increasing double-shifting to 75 per cent at both primary and secondary levels.

The cost of such a dramatic increase in educational provision would inevitably be high, especially since it depends for its overall success upon “quality-enhancing and gender-equalizing reforms,” such as increased spending on learning materials, higher wages for teachers, and subsidies for stationery and clothing material to 50 per cent of rural girls. Nevertheless,

Even when a country manages to offer universal primary schooling — as many countries do in East Asia, the industrialized world and non-indigenous parts of Latin America — the need for gender-sensitive education remains.

*The book referred to is by Christopher B. Colclough with Keith Lewin (Clarendon Press, Oxford, 1993).

the model suggests that Ethiopia, which has farther to travel than many other countries to reach schooling for all,⁶⁹ could achieve the goal by a combination of increased spending, modest economic growth and targeted aid.

Guinea, meanwhile, is working to overcome some of the social and cultural factors inhibiting girls' education. It has reduced direct costs of schooling through tax relief and by abolishing compulsory uniforms. As the primary reason girls drop out of school in Guinea is to marry, the Government has also made it illegal to force a girl into marriage before the ninth grade. To address the second major cause of dropping-out among girls — domestic responsibilities and household chores — it has introduced devices such as mechanical mills and has dug wells to reduce girls' burdens. It has also passed regulations specifying the times and parameters for chores in school, ensuring that these fall equally upon boys and girls.⁷⁰

Even when a country manages to offer universal primary schooling — as many countries do in East Asia, the industrialized world, and non-indigenous parts of Latin America — the need for gender-sensitive education remains. Indeed, at the junior secondary level, girls face serious obstacles in continuing their education. It is particularly critical for girls to cross the precarious bridge from primary to secondary school in South-East Asia, because, when they enter adolescence, many face the risk of being recruited into the sex industry and other hazardous and unhealthy work settings.

Pregnancy, another risk during this period, leads in many countries to girls' automatic expulsion from school, in contravention of the Convention on the Rights of the Child (article 2). The suspension or exclusion of pregnant

girls from school was the subject of a 1997 ruling by the Committee on the Rights of the Child.⁷¹

Botswana is addressing the discrimination through a pilot project that gives pregnant girls three months' maternity leave, during which they would keep in touch with school via extension courses. When they return to school, their baby would be cared for in a centre located alongside the junior secondary school. In return, girls would work in the day-care centre, which would double as a living classroom, teaching parenting and life skills to both male and female students, and aiming to reduce the number of adolescent pregnancies. Community response has been positive. Popular demand, in fact, forced Botswana's Government to permit pregnant students to take exams and be readmitted to their original school.⁷²

Work is a major factor in denying millions of girls their right to education:

Asabe Mohammed, a 14-year-old food hawker from the village of Soro in Nigeria, had been on the street selling food cooked by her mother throughout her primary school years. "I think I was not that big when I started hawking food," she commented, pointing to a seven-year-old girl. But Asabe had a second chance, attending the Soro Girl-Child Education Centre, established in May 1993 as part of an initiative by UNICEF and the Nigerian Government to give out-of-school girls the opportunity to acquire basic education and then feed into mainstream secondary schools. In September 1997, Asabe was among the 35 girls who graduated at a colourful ceremony. She received a post-literacy certificate as well as prizes for excellence in arithmetic, writing and tailoring and is now enrolling in a junior secondary school in Darazo, about 30



UNICEF/93-0080/Murray-Lee

Household responsibilities keep millions of girls out of school. This invisible barrier needs to be broken to assure their right to education. A class in Bangladesh.

kilometres away. Those girls who will not be continuing their education have benefited from the training and are now setting up their own businesses in trades such as embroidery, tailoring, knitting and soap-production.⁷³

There are girls like Asabe in virtually every town and village of the developing world. This is why the success of gender reforms in education may have to be judged, not just by their results in terms of enrolment rates or even learning achievement, but by the extent to which they change the lives of girls for the better.

Element 4. The State as key partner

The obligation to ensure all children's right to education and to achieve Education For All lies with national governments. But within this encompassing obligation, many actors play vital roles in delivering high-quality basic education to all children, from central to local governments, from international agencies to local communities, NGOs and religious groups. Only the State, however, can pull together all the components into a coherent but flexible education system.

Historically, provision of education in developing countries has gone awry because governments have focused on higher education to the detriment of primary and secondary levels. As inheritors of colonial education systems, most developing countries, immediately after independence, preferred to use limited resources to create universities and schools aimed at meeting the needs of industrialization. Many countries continue this focus on higher (tertiary) education to the detriment of primary and secondary levels (Fig. 11). The most extreme example is the Comoros, which spends 8 per cent of GNP per capita on each

pre-primary or primary pupil and 1,168 per cent on each college student.⁷⁴

There are many countries where the imbalance is almost as alarming. The inevitable result is that universal primary education has not been achieved. In the minority of countries that have accomplished that goal, the State provided the policy and leadership, and in most cases became the main provider of primary education, working in partnership with communities, private schools and the private sector. In many of these cases, the concentration of state resources on primary education meant a greater reliance on other providers for secondary education.

The most critical role of the State in education is as a guarantor of children's right to basic education. Experience in the last few years has led to a more textured understanding of the role of the State, and of the State itself. It is no longer useful to think of the State in monolithic terms as a single national authority, but better to understand that the State's authority exists at all levels from the national or federal to the local, and the roles that the State will play with regard to policy, funding and provision often vary significantly from one level to another.

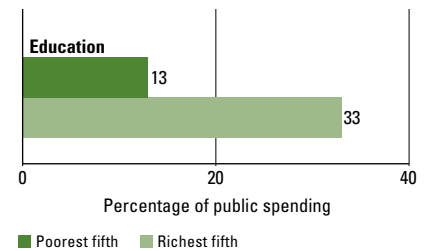
The Convention reiterates and reinforces the responsibilities of the State vis-à-vis children's education in a number of clauses. Article 28 ensures the right of children to education, and article 29 elaborates a vision of quality education that fulfils that right. The State, therefore, must ensure that children successfully complete primary education and must set standards to ensure minimum levels of quality and learning achievement (see 'Element 1. Learning for life').

Buttressing these are article 3, which calls upon States to ensure that

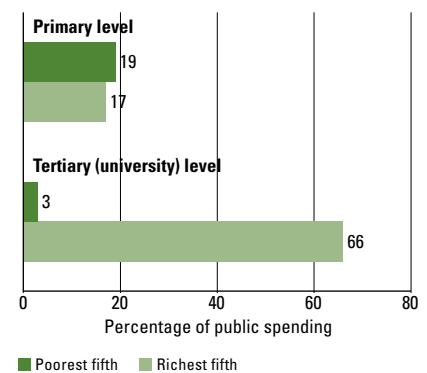
Fig. 11 Who benefits from public spending on education?

On average 33 per cent of public spending on education benefits the richest fifth of the population, while only 13 per cent benefits the poorest fifth. Public expenditure on basic social services such as primary education benefits society more equitably, while spending at the tertiary (university) level benefits the richest fifth of the population.

Beneficiaries of public education



Beneficiaries of public education expenditure at the primary vs. tertiary level



Source: The World Bank, as cited in UNDP, UNESCO, UNFPA, UNICEF, WHO and the World Bank, *Implementing the 20/20 Initiative: Achieving universal access to basic social services*, UNICEF, New York, 1998, pp. 8-9.

Above all, the State, as a vital role player in the education revolution, must supply the political will to make things happen.

the best interests of the child are taken into consideration in all decisions and actions concerning the child, and article 2, which mandates that States protect children from all forms of discrimination; article 2 encompasses the educational ostracism of girls, who represent nearly two thirds of out-of-school children in developing countries. Thus States must implement all key policy measures proven to increase the chances of girls' entering and staying in school (see 'Element 3. Gender sensitivity and girls' education').

States can use a variety of approaches to protect these rights, including legislation. Laws appear most useful in holding a State itself responsible for meeting its own obligations, one of the most important of which is ensuring that all children have access to school. Others are reducing exploitative child labour and mobilizing society in support of Education For All.

Above all, the State, as a vital role player in the education revolution, must supply the political will to make things happen. Irrespective of how flexible and diverse the education system becomes, the State must still be involved in planning for the entire system, designing and supervising the curriculum, educating teachers, setting standards, contributing to school construction and paying salaries. But its role is also changing rapidly. Instead of acting as an omnipotent central authority, States are finding that partnerships with multiple sectors of society offer a greater chance of achieving Education For All, and many are passing power to lower levels of the system to improve efficiency and responsiveness.

Mobilization

Education For All was intended to galvanize the international commu-

nity into action — from the level of governments and global institutions, to private companies and media outlets, to local schools and villages. The 1990s has witnessed the power of that concept.

Brazil offers an important example of mobilization and partnership that embrace the whole society beyond the education sector and the traditional education constituency. In 1993, Brazil's nationwide mobilization effort culminated in a 'National Week on Education for All,' resulting in a 10-year plan that led to concrete government action on many fronts. In 1995, the new Brazilian Government expanded actions that included transferring federal funds to local schools and municipalities, improving the national testing of students' learning achievement and using television as the medium for a national distance-learning teacher-education programme.⁷⁵

The Government's most important role has probably been to mobilize the whole nation behind the universal education campaign. The most visible member of this effort has been President Fernando Henrique Cardoso himself who, soon after he took office in January of 1995, demonstrated that education was his top priority by teaching the first class of the year at the Jose Barbosa School in Santa Maria da Vitória, in the state of Bahia. This was followed by a national mobilization campaign called 'Acorda Brasil. Esta na Hora da Escola!' (Wake Up, Brazil, It's Time for School!).

The public response exceeded all expectations. A round of debates took place throughout the country. A toll-free telephone service, Fala Brasil (Speak Brazil), was established for members of the public to express their views on education and issues concerning the Ministry of Education's programmes; it receives an average of

1,500 calls per day. A national database was set up to record successful educational projects or innovations and make them available for replication or adaptation in other regions. It became available on the Internet in September 1997.⁷⁶

Brazil put into practice almost all of the key guidelines for successful mobilization:

- ▶ clearly articulating the goal and vision, with specific time objectives;
- ▶ monitoring progress frequently and effectively via a few clearly defined indicators;
- ▶ placing the goal of universal basic education at the very centre of national life;
- ▶ building a national consensus so that the results survive changes of government;
- ▶ using the power of the new information and communications technology effectively;
- ▶ identifying, emulating and creating success stories.⁷⁷

Other countries have successfully mobilized for Education For All. Since 1995, the Philippines has designated the last Monday in January as National School Enrolment Day (NSED). On that day every year, schools throughout the country stay open from 7 a.m. to 6 p.m. to enrol children eligible to begin first grade the following June. The aim is not only to increase enrolment via media attention to NSED, but also to help education authorities plan for the number of teachers, classrooms and materials required the following academic year. On NSED, children receive medical and dental examinations, an arrangement that also helps prepare schools for students with special needs.⁷⁸

This kind of national mobilization raises public expectations. It also

creates challenges for the authorities. In the first years of NSED, there were still shortages of teachers and classrooms when the children arrived at schools the following June.⁷⁹ Nevertheless, the Philippine Education Ministry was sufficiently flexible to back up the mobilization campaign with a far-reaching decision. It assigned the best teachers, especially those gifted in language, to the first grades to ease the transition from home to school and make children's first experience of education as positive as possible.

The power of an idea to mobilize enthusiasm and resources has also been evident in Malawi. There, in 1994, the new government marked its break with the autocratic era of the former President Hastings Kamuzu Banda by proclaiming universal free primary education. At a stroke, the move released children's families from the crippling dual burden of paying school fees and buying school uniforms, producing a massive leap in enrolment from 1.9 million to 3.2 million children, including broadly equal proportions of girls and boys.⁸⁰

The bold approach clearly had major implications for the Government's budget, but it caught the imagination of international donors and lenders to such an extent that Malawi has been able to sustain and refine its commitment in the succeeding years. Rewarded for its daring, Malawi has received high levels of international aid and loans for building classrooms, educating teachers and improving educational supplies.

Mobilization campaigns can tap new funds for education, though the benefits to society of involving the private sector are not restricted to money. In Brazil, the Itaú Bank, the second largest private bank in the country, and the Odebrecht Foundation have worked closely with the



Education, key to human and social development, needs to assume a place at the centre of nation's lives. Two boys read together in the Philippines, where the Government has launched a nationwide campaign to increase school enrolment.

UNICEF/96-051/Noorani

A community that participates actively in the running of an educational facility — whether a nursery, primary school or secondary school — has greater opportunities to make educational services relevant and a greater incentive to make them work.

Government and UNICEF to support and promote education and child rights in the media and through fund-raising campaigns.

The two donors have also provided concrete support for projects. The Itaú Bank donated all the equipment for the Fala Brasil education telephone centre, trains the operators and maintains it;⁸¹ additionally, it funds an Education and Participation prize to acknowledge the work of NGOs, community groups and trade unions and supports NGOs with training and networking opportunities. The Odebrecht Foundation was a strong supporter of Brazil's Statute of Children and Adolescent Rights, one of the world's most creative responses to the Convention on the Rights of the Child, and a partner in national mobilization efforts for Education For All.

Partnerships

The formation of partnerships has become a central concept in planning and managing education, especially in situations where significant numbers of children are deprived of education. The State retains responsibility for setting national objectives, mobilizing resources and maintaining educational standards, while NGOs, community groups, religious bodies and commercial enterprises can all contribute, making education a more vital part of the life of the whole community.

The role of local communities extends far beyond raising money for schools, although in some countries 'partnership with parents and local communities' means 'fund-raising'. The costs of sending children to school have, in fact, risen markedly for families. A 1992 household budget survey in Kenya showed that households directly contributed 34 per cent of the total cost of primary education.⁸² Cambodian households contribute three quarters of the total

cost of public primary education, and those in Viet Nam contribute half⁸³ — a dramatic departure from the totally free education offered until recently. The inevitable effect of these costs is a decline in the enrolment and retention of children in school. Studies carried out in two African and three Asian countries by UNICEF confirm that private costs are a major factor in discouraging school attendance.⁸⁴

Partnership with a community may well lead to more funds becoming available, but this should be a by-product of the collaboration rather than its only goal. If parents are asked to contribute more money but have no voice in the organization and management of schools and see no improvement in educational quality, they and their children will soon disappear from view.

On the other hand, a community that participates actively in the running of an educational facility — whether a nursery, primary school or secondary school — has greater opportunities to make educational services relevant and a greater incentive to make them work. Any project has a higher chance of success if it is based on the expressed needs of the community and if that community is a key actor in its implementation, monitoring and evaluation (Fig. 12).

"We decide what's good for our children and we are capable of doing something about it," says Enamul Huq Nilu, chair of a school management committee in Jhenaidah Sadar Thana (Bangladesh).⁸⁵ His school is part of the IDEAL project, which has aimed to reinstitute the community and parental involvement in primary schools that ended when the national Government assumed control in 1973. Through a local planning process facilitated by government and UNICEF officials, members of the school management committee, parents and

Fig. 12 School mapping



This map was created as part of the Lok Jumbish project in the Indian state of Rajasthan by a team of villagers, trained by a local organization working in cooperation with Lok Jumbish. It is based on a household survey conducted to ascertain whether boys and girls aged 6 to 14 were attending school regularly. The survey became the basis of a provisional plan for school improvement after its findings were presented to the community for discussion.

Such village school mapping surveys, being conducted in small communities around the world, help to gauge educational needs by identifying pre-school age and school age populations. Well-defined surveys can provide communities and local and regional education planners with

accurate and timely information that can be used to improve educational efficiency, including school coverage and existing and future teacher and capacity needs. Analysis of the data can contribute to a better understanding of the reasons for low enrolment, or the low rate of attendance of girls, for example.

The surveys are especially useful when reliable data are lacking or when aggregated data at the national or regional level do not capture the particulars of the local situation. Reliance on community members in all stages of the process — collection, analysis, verification and use of disaggregated data — enhances their stake in their children's education as envisaged in the Convention on the Rights of the Child.

Source: 'Lok Jumbish, 1992-1995.' Lok Jumbish Parishad, Jaipur, India, n.d.



UNICEF/93-1992/Prozzi

Parents and local communities must be the State's vital partners in school management to ensure that educational services are relevant to the community's needs. Children learn to count in a mathematics class in Benin.

teachers work together to write a yearly plan for the school that is then monitored by all involved.⁸⁶

A similar philosophy underpins the CHILDSCOPE project in the Afram Plains district of Ghana. Its main strategy has been to empower the communities surrounding its 11 primary schools to identify impediments to their children's education and devise their own solutions. Parents actively participate in the education and development of their children, with resulting improvements in literacy, numeracy and general enrolment, particularly that of girls. In addition, the project's holistic approach has led to a greater community awareness of the health and nutritional needs of developing children.

As the CHILDSCOPE project illustrates, schools can serve as vital change agents. They can reach out to local communities in partnership with other agencies, for example, to identify children who may need protection. In this sense, teachers and school employees are the local agents of the Ministry of Education, assuming a measure of responsibility for tracing children who do not appear in school and whose rights are more likely to be endangered.

Partnership in the service of Education For All involves all segments of society in guaranteeing child rights. For it to work, however, the State must be prepared to relinquish some of its decision-making powers to lower levels of the system.

Decentralization

Imagine you are a teacher in a primary school in a rural district. You hear that a family member has died and wish to attend the funeral. Instead of asking your head teacher or board of school governors for permission, you must make your request to a ministry official in the distant capital.

There, your plea will be dealt with by bureaucrats who have never met you, have never seen your school and do not know what provision might be made to cover your absence. This was the rule until recently in Venezuela, which had one of the most centralized education systems in the world.⁸⁷

On the surface, the organization of public schooling is remarkably similar throughout the world. Individual schools are managed by a head teacher or principal. At the district level, an administrative body offers supervision and technical support. A state or provincial education agency may be available only in larger countries, but nearly all countries have a national education ministry that plans and has administrative responsibility for the system as a whole.

Centralized control may be more efficient when it comes to textbooks — ensuring that children in all parts of the country have access to quality material and that the material does not promote ethnic hatred, for example. But there is increasing recognition that if schools are to improve and be more responsive to local communities, they have to be given more autonomy to assess and resolve their own problems.

Decentralization is an important option, but one that carries a cost. It is likely to require more careful planning, more expensive training, more extensive data collection and even more staff and resources. Decentralization should be selected not because it is the cheapest option but the best, and it strengthens the State's commitment to and ability to achieve Education For All.

As experience is increasingly revealing, decentralization becomes most dynamic when control of schools is redistributed, concentrating power not entirely in the hands of head teachers but involving the community

in management through creation of a governing body with membership drawn from parents, teachers and the wider community. Decentralization, so conceived, should be a tool to encourage partnerships and mobilization — key features of the education revolution.

The recent experiences of the Brazilian state of Minas Gerais, one of the country's largest and most developed states, shows decentralization at its best. After examining the reasons for an appalling drop-out rate — in 1990, only 38 in every 100 students who had entered primary school completed the first year — the state made decentralization the top educational priority. It also shifted decision-making from the state capital to school boards headed by an elected principal and composed of equal numbers of parent representatives and school staff. The boards were originally responsible for the financial and administrative issues with which parents felt comfortable, but they are now involved in pedagogy as well. Community involvement and local control have already significantly improved educational standards: In 1994, 11 per cent more students completed their first year than in 1990; grade repetition tumbled from 39 per cent in 1990 to 19 per cent in 1994.

Ana Luíza Machado Pinheiro, Secretary of Education for Minas Gerais, says, “Three or four years ago, when the schools were falling apart, if you put forward a pedagogical proposal people would say: ‘What for, if we have no desks and no teaching materials? If the school is in a chaotic situation, how are we going to implant a new pedagogical proposal?’ Today, with the schools all neat and tidy, everybody is talking about quality.”⁸⁸

Contrary to expectations, participation in schools has been greatest in poorer communities, and it is these

schools that have registered the greatest student improvement. The Minas Gerais model has inspired many other Brazilian states to follow its example; it is particularly attractive because it requires no additional resources but simply better management of what is already available.⁸⁹

Other successful models of decentralized school management are appearing throughout the world. In Poland and some other Central and Eastern European countries, decentralized school systems are a reaction to the former highly centralized socialist systems. In Asia, school clusters — in which schools are grouped together to share resources, save costs and maximize community mobilization — have proved particularly useful. The strengthening of school clusters has been a vital part of the Continuous Assessment and Progression System (CAPS) project in Myanmar, which aims to reduce drop-out and repetition rates at the primary level. The effectiveness of school management flowing from the cluster system is as important as teacher education, child-centred learning or community mobilization in terms of keeping children in the classroom. Good management generates higher-quality education just as predictably as good teaching.⁹⁰

Decentralization can create educational opportunities for groups that may be traditionally excluded from a centralized education system. El Salvador's EDUCO (Programa de Educación con Participación de la Comunidad) project, for example, which vests control of schools and pre-schools in community associations, targets children mainly in rural areas. The needs of ethnic minorities for special provisions, such as teaching in their own language, are more likely to be recognized by a local teacher than a national education authority.

Good management generates higher-quality education just as predictably as good teaching.



UNICEF/93-1967/Prozzi

On average, nearly half the children in the 47 least developed countries do not have access to primary education. Girls in a primary school class in Niger.

The recruitment of more girls into school can be improved through decentralization. In the Mopti and Kayes regions of Mali, where girls' enrolment rates are very low, district-level teams, including local NGOs, work intensively with communities to elect and train school management committees responsible for ensuring gender parity, among other things. Mauritania places a high priority on the decentralized collection of data about girls' education through local education management committees and regional observatories.

In fact, the almost universally acknowledged need for better educational data broken down by gender — on enrolment and drop-out rates and on learning achievement — can be met much more easily through decentralization.

Yet, as the accelerating process of globalization causes national governments to privatize an increasing number of functions, decentralization may be undertaken in the interests of cost-cutting or privatization. Public education in this event is likely to be weakened, with access to education as well as the quality of that education falling in lower-income regions simply because they have fewer resources to devote to schooling. Inequality of this kind mushroomed, for example, after Chile introduced a voucher scheme in 1981 that siphoned off students from public into private schools and public school revenues dropped.⁹¹ In addition, decentralization places additional demands on local professional and administrative capacity, and if not accompanied by a strong and effective programme of strengthening that capacity, it can result in a decrease in quality and substantially higher costs.

Decentralization can provide enormous benefits if undertaken from a position of strength and commitment to educational equity and quality and

community empowerment. The most successful examples occur when a national education ministry is also strong and not driven by the dictates of finance constraints — and where the education ministry can intervene, as necessary, to stop emerging inequalities.

Element 5. Care for the young child

The principle that learning begins at birth was reaffirmed in the Jomtien conference's World Declaration on Education for All.⁹² Awareness of the central educational importance of the early years has grown along with programmes that put this concept into practice.

Every year new research adds to our understanding of the way children develop. The rapid development of a young child's brain depends largely on environmental stimulation, especially the quality of care and interaction the child enjoys. Recent work in molecular biology has established that brain development in the first year of a child's life is more rapid and extensive than had previously been thought. By the time of birth, a child has 100 billion neurons in the brain linked by complex nerve junctions called synapses.⁹³ These synapses are the connections allowing learning to take place, and in the first few months after birth their number increases twentyfold.⁹⁴ Physical, mental and cognitive development all depend on these communication links in the brain.

The good nutritional health of both a mother (while pregnant and lactating) and baby is vital not just for child survival and physical growth, but for mental development and future educational prospects.⁹⁵ In addition, there is convincing evidence that the quality of the care — including nutrition, health care and stimulation — a child

receives during the first two to three years can have a long-lasting effect on brain development. And beyond that, attention to child development at least through age eight is crucial in helping children reach their potential.

Given this significance of early nutrition and care, any meaningful approach to 'basic education' has to include early childhood programmes that promote child survival, growth and development. There is a growing consensus that childcare and early education are inseparable: Children cannot be well cared for without being educated and children cannot be well educated without being cared for.⁹⁶

The world is finally recognizing that a child's rights to education, growth and development — physical, cognitive, social, emotional and moral — cannot be met without a comprehensive approach to serving their needs from birth. It is acknowledging that the mental, social and emotional development of pre-school children has a huge impact on their ability to thrive in the classroom and later in the adult world.

Childcare: A social imperative

Families are the first line of love, care and stimulation for their children, and parents are the first, and most important, teachers (Panel 14). But increasingly the nurture and stimulation so essential to a child's physical, emotional and intellectual development are being provided today in a patchwork of formal and informal services provided by governments, businesses, NGOs and others.

Full-scale kindergartens or day care for all children are not the only way of meeting children's and families' needs for good quality childcare. Expansion of ECCD (early childhood care for child growth and development) services, though rapid, has been

hampered by many governments' misconception that the Western model of formal, prohibitively expensive, pre-school centres is the only way to meet children's needs in the early years.

Research suggests that structured day care outside the home is the most effective — a Turkish study between 1982 and 1986 showed it to achieve better results in all measures of psychosocial development. Nevertheless, the same survey showed that children whose mothers cared for them at home but received training and some outside support gained significantly over children whose mothers received no training. The children tested higher in language use, mathematics and overall academic performance during the five years of primary school and demonstrated better levels of social integration, personal autonomy and even family relationships. As adolescents in 1992, more of them were still in school than peers whose mothers had not received training.⁹⁷ The most practical, low-cost way for a developing country to pursue the manifold benefits of ECCD, therefore, is to try to raise parental awareness of child development issues.

The better the care and stimulation a child receives, the greater the benefit — for the national economy as well as the child. For example, children with good early childhood experiences (health, education, nutrition, stimulation, growth and development) are less likely to 'waste' public funds by dropping out of school or repeating grades; they will also suffer less from illness and be more productive in adulthood.

Often, formal programmes have been used to ensure that children are ready for school, especially in cases where parents have to work and cannot provide the primary care for their children. Few developing coun-

The world is finally recognizing that a child's rights to education, growth and development — physical, cognitive, social, emotional and moral — cannot be met without a comprehensive approach to serving their needs from birth.

Parent education: Supporting children's first teachers



UNICEF/90-00137/01me

In most societies, the home and family are the most powerful socializers of children. Children's learning begins at birth and continues through early childhood, serving as a strong preparation for schooling. The role of parents and other caregivers becomes especially important, therefore, in fostering the social, intellectual, emotional and physical characteristics that will enhance children's later learning, both in school and in life.

Cultures have long perfected ways of transmitting knowledge to children, and the common wisdom of societies provides a basis for child care and development that is usually well adapted to the needs of the particular situation. But the world is changing, and sometimes parents, especially young ones, can benefit from new information and knowledge now available about children's healthy growth and development.

"Many times local or traditional practices are sound, but increasingly they do not take advantage of all that is known," says Dr. Robert Myers, the

founder of the Consultative Group on Early Childhood Care and Development, an inter-agency group, and an international authority on ECCD.

Indeed, recent studies on child-rearing practices by UNICEF and the Latin American Episcopal Conference have found that many parents are aware of 'new' information on children's development, but that the information is often not put into practice.

Parent education programmes can fill this knowledge gap, helping parents and other caregivers understand what is needed for better child development, adopt good child-care practices and effectively use existing services directed at children's health, nutrition and psychosocial development needs. Such programmes also bolster parents' self-confidence, making it easier, in turn, to promote their children's development.

Innovative programmes that support and educate parents and other caregivers are in place around the world, from Cuba to Indonesia, China to Turkey. They have proven popular

because they reach large numbers of people through existing community networks at a relatively low cost.

The results are tangible and impressive. In Mexico, parents who have been trained in the nationwide Initial Education Programme, which targets caregivers of 1.2 million of the country's poorest children under the age of three, say that their attitudes about child-rearing have changed. Many add that they now recognize that traditional punishments for children are often inappropriate. This non-formal programme, run by the Government with UNICEF support, reports that gender roles in childcare are also changing. In remote rural villages, it is the fathers who attend the training sessions.

A parent training programme in Turkey has become a model of non-formal, multipurpose education designed to keep children in school and learning. Group discussions are held on such topics as children's health, nutrition and creative play activities, and mother-child interaction. In follow-up studies of the first pilot project, significant differences were found in cognitive development between children whose mothers had undergone the training and those who had not. As hoped, children in these families stayed in school longer. Since expanded, the programme is conducted in cooperation with the Turkish Ministry of Education and has served more than 20,000 mother-child pairs.

For 15 years, the Promesa (Promise) project in Colombia has served about 2,000 rural families. It began by encouraging groups of mothers to stimulate the physical and intellectual development of their pre-school children by playing games with them in the home. Gradually, the mothers in the groups started to discuss health,

nutrition, environmental sanitation and vocational training. Over time, the project expanded, with residents spontaneously organizing themselves to solve other family or community issues.

In the Philippines, the Parent Effectiveness Service combines home visits by volunteers with regular parent discussion groups. An evaluation of the programme showed that it has contributed to the development of parents' knowledge and related skills in the areas of health, parenting, ECCD, child discipline and husband-wife relationships. In selected regions, parent discussion groups were supported by a 30-minute weekly radio broadcast, 'Filipino Family on the Air', which covered 26 topics, including child rights, gender-sensitive child-rearing, children and the media, and child abuse.

Parent education activities are most effective when they complement and reinforce more formal, organized service programmes, and in fact can sustain children's gains in early development even if a programme or child-care centre disappears.

Yet "parent education programmes are no panacea," says Dr. Myers. To rely on them alone, without the range of more formal programmes such as child-care and health services, deprives parents of the full range of support they need — including resources, facilities, time and information — for their children's growth and development.

Photo: In Colombia, a mother holds her baby daughter. She was chosen by her neighbours to run a home day-care centre for local children and trained to meet their health, nutrition and developmental needs.

tries have the budgets to match the level of childcare in industrialized countries such as Belgium, Denmark, France and Italy, where 80 per cent of three-year-olds attend nursery or pre-school.⁹⁸

Trinidad and Tobago, however, enrolls around 60 per cent of four-year-olds in nursery schools operated, at the Government's request, by Servol (Service Volunteered for All). Each of the Servol pre-school centres has been requested by local communities, which have formed an eight-person school board to provide and maintain facilities and pay the portion of teacher salaries not covered by the small government subsidy.

Teachers in the Servol centres do not try to pressure young children into reading, writing and counting but aim to give toddlers a positive self-image and develop their resourcefulness, curiosity and sense of responsibility. Parent education is fundamental: 'Rap sessions' are held in which teachers explain the harm done to small children by both excessive discipline and neglect, and they communicate the importance of hygiene and nutrition.⁹⁹

Servol's model of nursery school was a significant and successful departure from facilities in which toddlers were expected to sit quietly at desks and listen to the teacher. Many formerly communist countries have been struggling to make the same kind of transition. One of the strengths of the old political system in the former Soviet bloc was its extensive provision of nurseries for the children of working parents. While clean, safe and cheap, however, many followed a rigid curriculum in which all children did largely the same thing at the same time.

In response to declining pre-school enrolment and availability, teachers in 23 Eastern European and former

The better the care and stimulation a child receives, the greater the benefit — for the national economy as well as the child.



UNICEF/589/Hartley

Rigid approaches to pre-school education, in which children are expected to sit quietly and listen to the teacher, are gradually giving way to more child-centred models. In Romania, a child plays with a toy at a crèche that encourages creative learning activities.

Soviet Union countries are moving down a different road today. Funded by the Soros Foundation, they are learning a new curriculum designed by Children's Resources International (CRI) containing the best techniques of early childhood education. Emphasizing child-centred education and child-initiated play, the Step by Step curriculum has proven so popular that the project has expanded to Haiti, Mongolia and South Africa and has developed curricula for infants and toddlers and for children up through age 10.¹⁰⁰ Another initiative, funded by Save the Children (United States) in Bosnia and Herzegovina and in Croatia, combines structured play to enhance children's development with strong parental and community involvement, keeping costs low.¹⁰¹

The Lao PDR is another former 'command economy' pursuing change. Since 1989, the Government has sought external partners, including Save the Children Fund (United Kingdom) to help it introduce more child-centred teaching methods in schools and nurseries. The changes in the 1990s have been profound, according to Mone Kheuaphaphorn, director of the Dong Dok kindergarten. In the old days, *teachers did a lot of talking and the children could only be listeners; they had very little chance to participate.... Teaching aids and toys were not usually available and, if there were any, they didn't relate to the topic and weren't attractive to children.... The activities were controlled by teachers and the children had no access to free play or choice. Now the philosophy is 'learning through play' which includes many activities.... To sum up: The new way of teaching helps children become happy, healthy and creative. Since the implementation there have been regular whole-school meetings and monthly classroom meetings with parents so as to ensure*

*parents can support their children's learning and also contribute to the school when it is needed. Parents are happy to see their children's skills and behaviour change and that the school has become an attractive place for children.*¹⁰²

The new child-centred approach has also made it possible for the Lao PDR to launch a successful project integrating children with special needs and learning disabilities into the school system at the kindergarten stage. The sensitivity and responsiveness of a modern pre-school centre has worked to make education more accessible to those children, such as girls and minorities, who have tended to be excluded from the traditional school system.

Every indicator points to the fact that poor children benefit most — both in psychosocial and educational terms — from ECCD programmes.¹⁰³ This finding makes such interventions particularly appropriate for impoverished communities. The Pratham Mumbai Education Initiative in the city of Mumbai (formerly Bombay) is offering child-centred nursery education to 30,000 children aged three to five from slum communities. Its chief aims are to foster a love of learning in poor communities and prepare children as much as possible for the challenges of schooling.¹⁰⁴ Pratham, an NGO, is confident that the Initiative will cover the city by the year 2001 and is also campaigning for an amendment to the Indian Constitution giving all children under eight the right to education.

Intersectoral links

The lesson of ECCD for Education For All is that all schools can and must change to serve children's developmental needs. Many of the same principles of ECCD programmes — the need for intersectoral links

between education and health or nutrition or the advantages of child-centred, flexible teaching methods — could usefully be put into practice in all schools, especially in the early primary grades.

Until recently, health and nutrition workers tended to concentrate on helping children survive their first few vulnerable years, while education experts focused on school enrolment or improving teaching and learning. Their work rarely connected, but that situation has changed. The education sector's increasing work with professionals in health and sanitation, nutrition and family planning — forging and strengthening 'intersectoral links' — represents another vital aspect of the education revolution.

Since 1987, ECCD programmes in Nigeria have steadily expanded. Each centre offers free immunization and concentrates on children's nutrition; many programmes have, in fact, advocated deworming to control parasitic infection in children. From the start, the aim of the project was to provide low-cost community-based care, since pre-school facilities had previously reached only 2 per cent of children from wealthier families, even in urban areas. Even these programmes paid little attention to health, nutrition, and the psychosocial and cognitive aspects of child development.

The successful strategy has been to reach children wherever they are. Culturally acceptable ECCD facilities have been located in market places, churches, mosques, community halls and annexes to primary schools, and the UNICEF-supported project has home-based facilities in poor areas, serving around 175,000 children. An NGO network plans to extend ECCD services to all Nigerian children under six years of age.¹⁰⁵

The need for a coordinated, interdisciplinary approach to children's

education, health and nutrition is most vital in the early years of life. In order to achieve this goal, collaboration among a variety of partners, such as trade unions, the private sector, NGOs and religious groups, is needed. Children must be better prepared for school, and ECCD, whether provided at home by parents or in formal kindergartens, has proven to be the best means. Schools must also be better prepared to receive young children in a welcoming, suitable environment; they must then educate those children and ultimately enhance their capacity to take advantage of that education. Based on the evidence flowing in from around the globe, that lesson is sinking in.

Globalization and learning

Virtually all the elements of the 'expanded vision' of education that emerged from Jomtien can be, and have been, put into practice, as we have described, in various ways in education systems around the world. What that vision could not have anticipated was the extraordinary pace of political, social, economic and technological changes the world would go through, and which would have great impact on education.

For instance, while the Jomtien vision stressed the importance of the State working in partnership with civil society to ensure access to quality education for all, it did not count on the rapid emergence at the end of the cold war of a plethora of new nation States, many of which had to deal with problems of tenuous authority, limited capacity and precarious resources. The need for partnership suddenly became even more urgent, as did the recognition that the State need not be the only provider of education. The focus on human rights recast the



UNICEF/94-12837/outoutinj

Education for Development builds bridges across continents and cultures by promoting understanding, tolerance and friendship among young people worldwide. By encouraging them to cooperate, to think critically and analytically, to solve problems and to participate actively in learning, it helps lay a foundation for peace, global solidarity, social justice and environmental awareness. Started by UNICEF in 1992 to acquaint young people and educators in the industrialized world with global issues and UNICEF's role in promoting development, Education for Development programmes are now being used by educators throughout the world to promote global citizenship. Students in the United States attach strings to a map to indicate trade links between countries.

Fig. 13 Meena: An animated advocate for girls' rights



Spurred by a desire to go to school like her brother, a girl in a South Asian village learns to count and wins her right to go to school. Her name is Meena, and she stars in a series of 13 animated films created by UNICEF offices in South Asia and the international animation company Hanna Barbera.

The Meena series evolved based on extensive research by UNICEF in Bangladesh, India, Pakistan and Nepal to identify characters, settings and story-lines that struck a common chord among the region's diverse population. The resulting stories are full of adventure and fun, but at their heart lie the real-life problems faced by girls in South Asia.

Meena's resourcefulness in dealing with issues such as unequal access to education, food and health care, AIDS, the practice of dowry, early marriage and

others have made her a positive role model for girls and a powerful advocate for the rights of all children.

The first episode has been dubbed into 30 languages and broadcast in all four South Asian countries, as well as on Turner's Cartoon Network, and will be shown soon in China, Myanmar and countries in the Middle East. In 1998, the full 13-episode series was aired for the first time by television broadcasters in Bangladesh, India, Nepal, Pakistan and Sri Lanka, and a radio programme, co-produced by the BBC World Service, was launched in India. Mobile film units and a comic book series have brought Meena and her message to over one million rural people throughout the region. The potential audience for Meena materials in South Asia alone is estimated at over 500 million people.

principal role of the State as guarantor of every child's right to a quality education.

So while in many cases the State continues to be the principal provider of basic education, in others it is just one in a broad range of different organizations providing basic education. It retains, however, the important role of providing leadership, developing policy and standards, and articulating the national vision. And in every case the State is accountable for ensuring the right of every child to a high-quality basic education.

While the Jomtien vision recognized the importance of the process of globalization, few in 1990 could have anticipated how quick the pace would be in the last eight years. Computer programmers in the Philippines now write programmes for software developers in the United Kingdom, while lawyers in India draft briefs for legal firms in the United States.

From the intermingling of cultures and the growing dominance of certain cultures and languages of the 'global village', two strong trends have emerged — heightened demand for schools to teach an international language that will give access to the global village, and an increasing concern for education to help preserve and protect cultural and ethnic identity and diversity. Education thus is becoming a key strategy to provide access to a world that is increasingly interdependent and also to help ensure the survival of cultural and ethnic identities.

Nor could virtually anyone in 1990 have foreseen the extraordinarily rapid growth of modern communication and information technologies. The Internet existed then but attracted very little attention. The meteoric advance of information processing and electronic communication technologies has created the possibility for changes in education that were not taken seriously in 1990.

Suddenly, and at an awe-inspiring pace, new possibilities are arising for transforming the education vision of Jomtien into reality, using not only mass media and radio as Jomtien proposed, but also the new information and communication technologies, which are already transforming teaching and learning in privileged communities. As potent as they are, unless access to them can be assured for the less privileged, they will simply serve to widen the existing learning gap between communities and countries rather than bridge it.

In the years since Jomtien, significant possibilities have emerged to advance human welfare. At the same time, disparities between the privileged and the poor have widened, and with them the threat of social instability and civil conflict, making the arguments for the education revolution as an investment to promote peace, prosperity and the advancement of human rights even stronger now than they were a decade ago. The next section, 'Investing in human rights', looks more closely at the arguments for that investment.



UNICEF/95-0754/Mera

Recent technological advances have the power to transform education, but unless access to these new technologies can be assured for all, they will simply widen the learning gap between rich and poor. Children sit at a computer terminal in the United States.