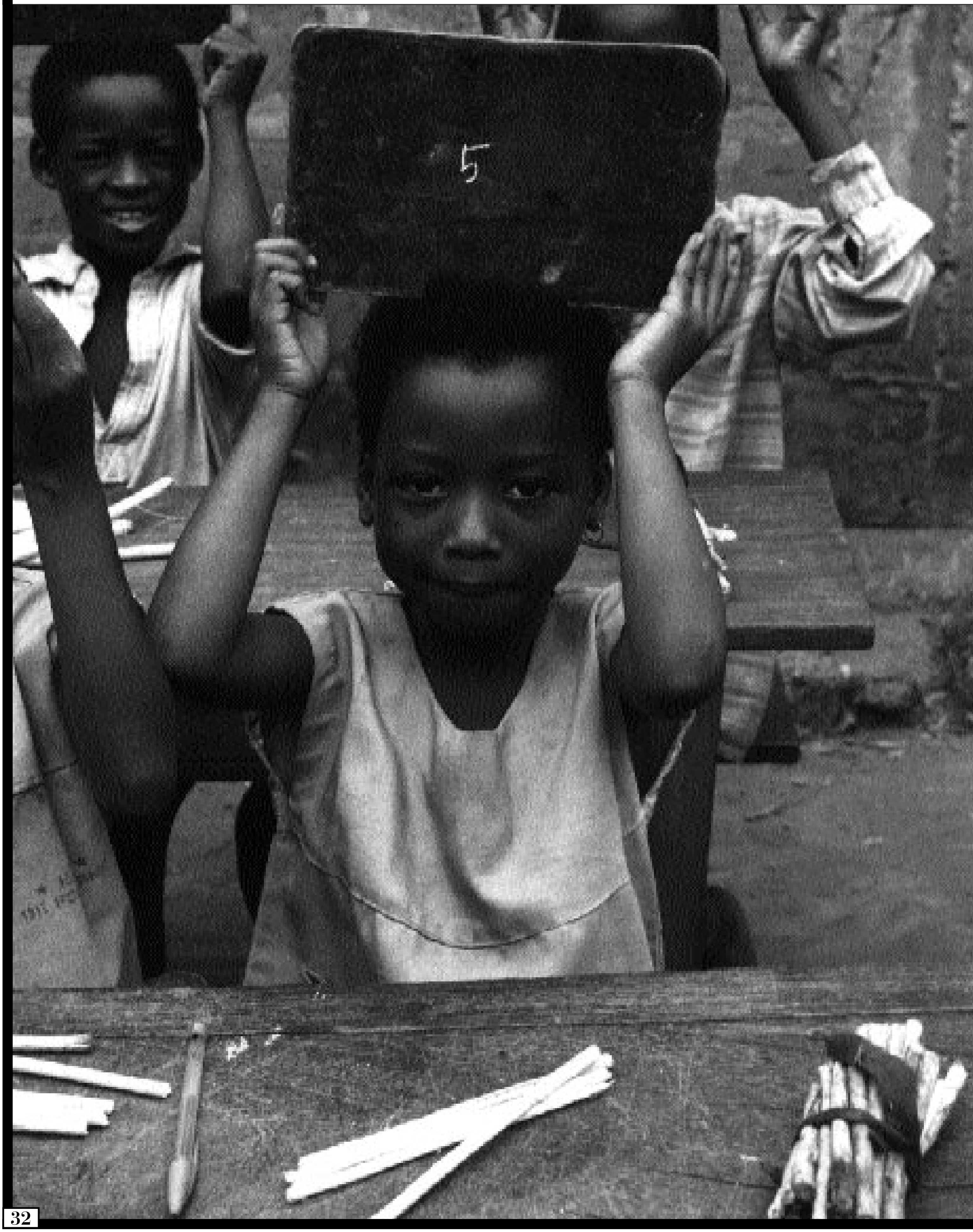


UNICEF/93-1992/Pirozzi

Quality education: One answer for many questions

Harry Sawyerr

Three years before the millennium, 140 million children are still not in school, despite government pledges to achieve universal access to basic education by the year 2000. Many of the youngsters who are in school find themselves squeezed onto crowded benches in dilapidated classrooms, lacking even a slate, while a teacher drills lessons by rote. Over the past 20 years, while countries rushed to increase the numbers of schools and teachers, quality and relevance of education often took a back seat. But quantity is not an acceptable trade-off for quality, and it is time to put more attention into what takes place in the classroom.

How can we instil an understanding of fundamental human rights? Achieve sustainable social and economic development? Resolve ethnic conflict? Stop gender disparity? Put an end to child labour? Eliminate the sexual exploitation of children? Give hope to a new generation of children growing up in an ever more complex world?

The answer is education—quality, relevant education that prepares our young people to participate meaningfully in their own development, both in their immediate communities and in the larger world. Education is a fundamental human right—pledged by the Convention on the Rights of the Child. Without it, few if any of these problems can be solved.

Not only do good schools instil basic skills in children, they also educate them about their rights—and shield them from violations of those rights. The International Labour Organization has said that the single most effective way to stem the flow of children into abusive forms of employment is to extend and improve schooling so that it will attract and retain them.

It is no secret that most countries are falling far short of fulfilling the promise made at the World Summit for Children in 1990: universal access to basic education by the year 2000. About 140 million young people are currently not in school, and almost 1 billion adults, two thirds of them women, are illiterate.

The obstacles to education are the same ones that have undermined economic and social advancement: widespread poverty, lack of skilled personnel, top-down bureaucracies, the inferior treatment of women, rapid population growth, skewed distribution of education funds, bloated military spending and onerous foreign debt burdens. But in the end, all the reasons add up to one: insufficient will.

Education requires a greater commitment than any other development activity because it is not a one-time injection but a continuous, labour-intensive process. It requires skilled, highly trained staff to dedicate year after year of patient toil. It requires quality curricula and plenty of books, slates and chalk. It requires buildings and benches. To provide these tools, countries—and parents—must make the decision that educating a child is worth sacrificing other priorities. Education simply cannot be sold short.

If the will can be found, so can the funds. In sub-Saharan Africa, for example, just an extra \$2.5 billion (about 20 per cent of the \$10 billion to \$13 billion annual cost of servicing the over \$200 billion foreign debt) would provide a seat in a classroom for every child. Reallocating one third of the region's military spending would do the same. Worldwide, if just \$3 billion to \$6 billion of the estimated \$680 billion currently spent on the military per year could be diverted to education, most experts believe that every child would have a place in a decent school.

This is not happening. In Africa, average per capita education spending declined from \$41 in 1980 to \$26 in 1985, and in 1995, it stood at only \$28. These figures actually underestimate the decline in spending because they are not adjusted for inflation. The portion of international aid dedicated to education declined steadily from 17 per cent in 1975 to 9.8 per cent in 1990, increasing slightly to 10.7 per cent in 1994.

After the 1990 World Conference on Education for All (Jomtien,

Harry Sawyerr recently retired as Minister for Education of Ghana, a position he had held since 1993. He spearheaded the development of the strategic plan for the country's major education reform, the Free, Compulsory and Universal Basic Education programme, kicked off in 1996. In 1995, Mr. Sawyerr was elected President of the Caucus of African Ministers of Education and Chairman of the Bureau of African Ministers. His career in public service spanned almost 30 years.

Thailand), countries around the globe made the push to get all their children in school. The emphasis was on quantity—numbers of schools, numbers of teachers, numbers of children enrolled. Those efforts are not lost, but they are not enough. Parents can recognize poor schools and they do not send their children to them; youngsters quickly lose interest when the curriculum and teaching style do not suit their needs. Insufficient quantity—of schools and teachers—is certainly the main explanation for the failure so far to achieve universal access to basic education. But another important reason is insufficient quality and relevance, for they lead to disenchanted families and wasted resources.

If parents are persuaded that education is more valuable in the long term than their children's contribution from an unskilled job or domestic duties, they will do whatever it takes to send their children to school. In some cases, economic necessity keeps children at home. Some youngsters begin school but drop out because they are inadequately prepared: They are malnourished and cannot pay attention, or they did not have the physical and emotional attention in early childhood that is essential to the development of young minds and bodies. These problems are well known, and if we are not addressing them, the quality of our schooling is surely lacking.

Teachers are key

The classroom needs to be a stimulating place for children—and that depends on quality teachers. According to some projections, low-income countries (not even including China and India, the highest population countries) need about 4.5 million more teachers to achieve universal primary education by the year 2000—1.8 million more than will exist if current trends continue. There is simply not enough time to build all the training colleges needed if we are to achieve the goal of education for all by the year 2000. To do so, we must find alternative ways to train teachers, such as on the job, through regular sessions and seminars.

Good schools not only instil basic skills, they also educate children about their rights.

One model for improving teacher training is India's Teacher Empowerment Project. Begun in 1994, it is now in place in two of India's poorest states, Madhya Pradesh and Uttar Pradesh. The project, also known as *Shikshak Samakhya Pariyojana*, or 'equal say', is based on the idea that local control improves teachers' self-respect and builds trust and cooperation between teachers and communities. The project emphasizes teacher-to-teacher skills training and makes use of resource centres where teachers can exchange ideas. It encourages individual attention to students and includes singing, dancing and art in the curriculum.

In Zimbabwe, education was revamped after independence in 1980. Now, training combines full-time study with on-the-job learning in the classroom. Teacher salaries rise with each successfully completed year of study, leading to full qualification and pay. Antiquated pay scales based on race and gender have been abolished. For the first two years, there was a shortage of qualified candidates, but the success of the programme soon brought an influx of skilled teachers into the country's classrooms.

Regular, high-quality in-service sessions are part of the reason why the *Escuela Nueva* approach has been so successful in raising enrolment in rural Colombia. Workshops provide teachers the opportunity to share ideas and methods, especially important in areas where they may be isolated from their peers. The benefit of ongoing training lies not just in the specific techniques the teachers learn but also in the underlying message that their professional skills are valued.

Escuela Nueva schools also succeed because they are relevant to the students' lives and lifestyles. The learning process is dynamic, with extensive student participation, and flexible, allowing students to proceed at their own pace and to take time off when necessary, such as during the harvest. The curriculum is practical, covering such topics as farming and local customs.

The cost of teachers

Preparing an *Escuela Nueva* teacher costs only about $500 more than regular teacher training, and it has been a worthwhile investment. In just 15 years, 2,000 schools blossomed into 20,000. Drop-out rates have fallen and scores on achievement tests have improved.

UNICEF/95-0248/Davies

A good teacher makes the classroom a stimulating place, but low-income countries need about 4.5 million more instructors to reach the goal of universal primary education. A teacher works with her students at a primary school in Burundi's capital, Bujumbura.

Teacher pay is another key issue for improving the quality of primary schooling. Salaries are the major share of education budgets—50-60 per cent for education as a whole and even more at the primary level.

In just 15 years, 2,000 Escuela Nueva schools blossomed into 20,000.

Nonetheless, teachers are widely underpaid and in many countries make poverty-level wages. In Uganda, for example, teachers' salaries are below the poverty line and lower than the pay of other skilled professionals. As a result, headmasters often provide supplements with funds collected by Parent-Teacher Associations, which means that teacher incomes depend on the ability of parents to bear extra costs. Thus, wages vary widely from region to region.

After major declines in pay in Africa and Latin America during the 1980s, there is growing recognition that low salaries have hindered attempts to attract and retain qualified professionals. Incentives can help make up the difference. In Indonesia, for example, teachers in rural or other 'less desirable' areas receive a 50 per cent salary bonus. Many African countries require villages to house rural teachers. In Tanzania, the lack of accommodation for teachers in rural areas became so severe that in 1991 a presidential fund was established to help resolve the shortage.

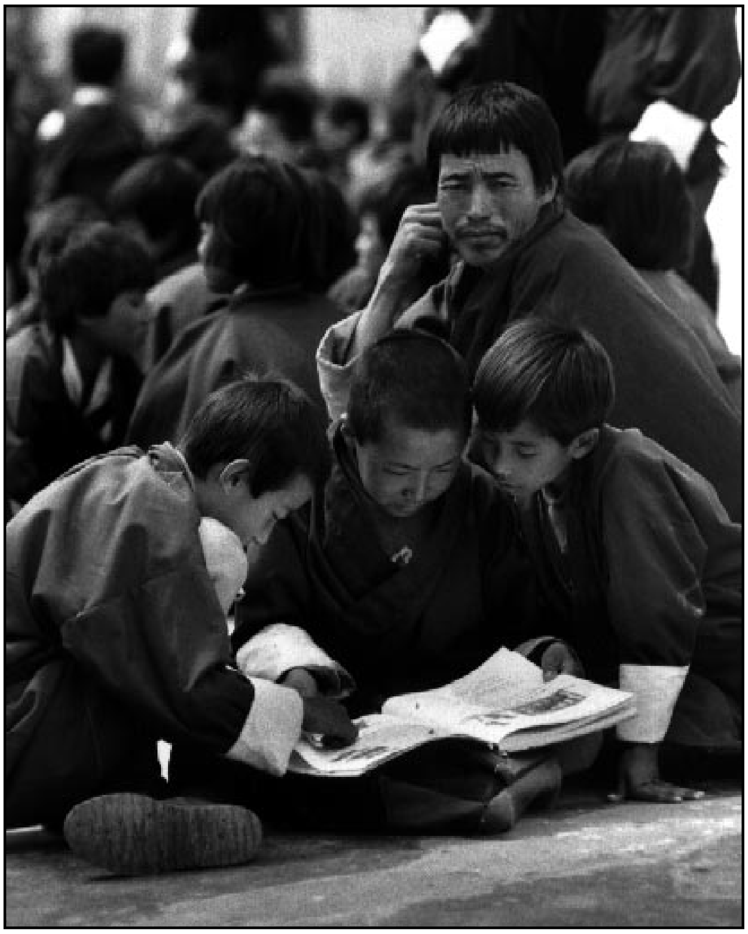
Another way to control expenditures while improving quality is to use lower cost teaching assistants recruited from the local community. Assistants spare teachers from routine tasks and allow them to spend more time working with students. And, through ongoing training, paraprofessionals can gradually work their way into the professional ranks.

These are all innovative strategies to squeeze every last bit from the funds available, an activity that becomes even more important when demand for schools is expanding. But efforts to stretch budgets must not be allowed to undermine the quality of education. While Myanmar has undergone rapid expansion of primary schooling, in 1993-1994 two thirds of its teachers had no training and only 4 per cent had access to in-service training.

Tanzania illustrates what can happen if funds are cut when spending is already at a minimum. In response to repeated calls by international donors to reduce per-pupil expenditures, the country cut education expenditures dramatically. A 1990 survey found that half of all primary school teachers were depending on other sources of income and a quarter of secondary school teachers were holding down additional jobs, sometimes cutting class hours short to do so. Dilapidated schools lacked chairs and were jammed with an average of 60 students in every classroom. Books and materials were almost non-existent.

The dearth of supplies is a serious impediment almost everywhere in the developing world. A 1995 study in 14 of the world's least developed countries found that in 9, fewer than half the classrooms had a usable chalkboard. Children need to read daily to solidify their skills, but in 13 of the 14 countries, at least 70 per cent of pupils had no books at home. In most African countries, pupils must provide their own notebooks, pens and slates. Since books are often imported and therefore very expensive, few children have any books at all. In 1990 in Tanzania, an average of 12 students were sharing each book.

In these situations, parents and communities are asked to fill the gap. In Viet Nam, communities have been reasonably successful at providing school buildings at low cost through voluntary labour and contributions. In Uganda, construction of primary schools has been left entirely to parents and communities, resulting in great discrepancies from one community to another. Fewer than half the country's classrooms are permanent structures, and in some regions, almost half the classes are held outdoors for lack of classrooms. Currently, 1 million children (one third of those aged 6-10) are not enrolled in primary school.



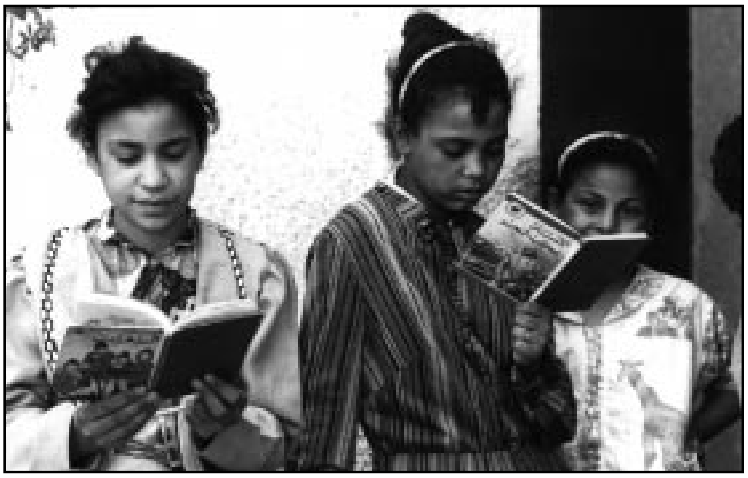
UNICEF/HQ96-0551/Charton

Despite the obstacles of mountainous terrain and isolated villages, Bhutan is making efforts to expand education access. Three boys share a book in the yard of a school.

When communities and parents are simply asked to pay the bill, they may view education as a burden. But if they are given a meaningful role, they usually contribute willingly. In Guinea, for example, parents take part in resolving issues such as quality of teaching. Committees of parents and community members have also been formed in Zimbabwe to encourage participation in planning and managing education.

Curricula for today

Once they arrive in the classroom, primary school teachers often find a curriculum that is out of date and irrelevant to the lives of the students. But revising it is primarily a question of political will, as Zimbabwe found soon after its independence in 1980. Over a period of about two years, panels of teachers, university educators and government officials at national and local levels collaborated in the effort. The new curriculum highlights the country's history and culture, the environment and national unity. Care was



UNICEF/96-0248/Toutounji

The lack of books, slates and other school supplies is a serious problem almost everywhere in the developing world. These Egyptian girls are reading books borrowed from a mobile library in a suburb of Cairo.

taken to include people of different ethnic groups in illustrations and examples.

Once consensus on content was achieved, attention turned to textbooks. Commercial publishers were encouraged to develop their own books, as long as they matched the curriculum. Meanwhile, the Ministry of Education printed inexpensive booklets on newsprint and distributed them free of charge so that every school would have a basic supply. For the first 11 years, the Ministry required that textbooks be published in the country. Along with getting learning materials into the hands of its students, Zimbabwe's policy turned publishing into one of the most vibrant industries in the country.

The curriculum used in the schools of the Bangladesh Rural Advancement Committee, or BRAC, aims to teach basic literacy, numeracy and social awareness, while also developing the child's creative and social skills through poetry, crafts and singing and dancing.

BRAC is probably best known for its success in placing girls in quality schools. In its 30,000 schools, which aim to serve the poorest families, two thirds of the seats are filled by girls. BRAC succeeds in part by building its facilities in rural villages close to children's homes and giving preference in hiring to women, who make up about three quarters of the teachers.

The success of the programme demonstrates that the goal of universal primary education cannot be achieved unless efforts are made to make schooling equally accessible to girls. In the developing world, 20 per cent of girls are not enrolled. Just one in four of Burkina Faso's school-age girls attends school, and in Yemen, 39 per cent of girls are enrolled—compared with 73 per cent of boys.

Girls' lower rates of school attendance result from a complicated set of issues stemming from poverty and cultural practices: their domestic duties, teachers' preferential treatment of boys, the lack of female teachers, fear of sexual harassment and rape, distance from schools, lack of sanitation and traditions that put greater value in educating boys than girls.

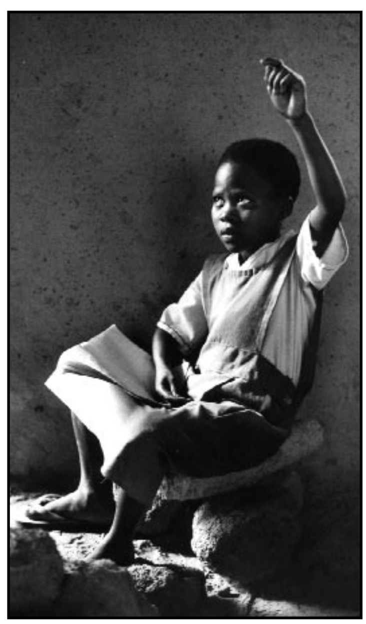
These obstacles are hard to overcome, but political will and demonstrated support for girls have already made a big difference in many cases. Schools in countries including Kenya, Nepal, Pakistan and Senegal adapt to accommodate girls' domestic and other responsibilities. Throughout the developing world, new cadres of female teachers are easing parents' concerns about sending their daughters to school.

Localizing education

Here in Ghana, a quarter or more of all girls are not enrolled in primary school. Getting them into the classroom is one of the goals of our current programme to improve education quality. This activity has paralleled efforts to recover from the devastating economic decline of the 1970s and early 1980s.

In 1980/1981, just before the reform began, education's share of the national recurrent budget was 17 per cent, but by 1994 it had reached a peak of 41 per cent, with a budget of 187 billion Cedis ($100 million). Although it dropped to 35 per cent in 1997, the share of the education budget devoted to primary schooling climbed to 66 per cent this year, from 44 per cent in 1984.

After a decade of reform, we are working to improve the quality of instruction, strengthen and decentralize management and make sure more children have a seat in the schoolroom. In 1996, we initiated a plan for Free, Compulsory and Universal Basic Education, or FCUBE, aimed at expanding access, improving teaching quality and increasing efficiency in administration.



UNICEF/Pirozzi

One of the goals of Ghana's education reform programme is to get more girls in the classroom. In the rural town of Tamale in northern Ghana, a girl in primary school uses a stone for a seat.

One of our main objectives is to localize education. District Education Oversight Committees and local School Management Committees have been established nationwide to participate in teacher recruitment and school upkeep. FCUBE also provides scholarships for girls. The quality of teaching is receiving a big boost with teacher colleges earmarked for renovations and new training programmes.

A new curriculum is being developed, and our policy requiring that children be taught in their mother tongue for the first three years of primary school will be more vigorously pursued. The curriculum will continue to address new challenges and trends, such as teen pregnancy, drug abuse, HIV/AIDS, safe motherhood and the environment. Science resource centres are being established in all 110 districts, building know-how in science and computer literacy to prepare our children for the future—and the present.

The challenges faced by all countries in fulfilling people's human rights are substantial. Education is not only a fundamental right, it is also the best tool governments have for guaranteeing that their citizens have the ability to claim their other rights.

In the early 1990s, more than one quarter of the 94 million children who enrolled in school in developing countries each year did not reach the fifth grade. More than 25 million girls and boys walked through the classroom door full of excitement and anticipation—only to have their hopes thwarted. That is a human tragedy. If we can find the will, we can create schools that fulfil their hopes and dreams. ■

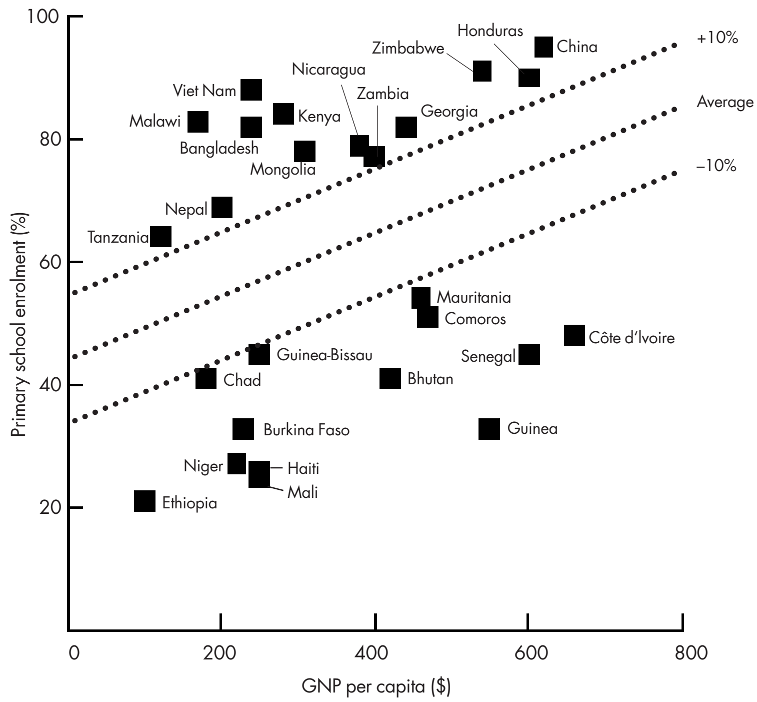
PROGRESS AND DISPARITY

Doing more with less

UNICEF/94-0731/Booker

Despite per capita income of only $240 a year, 88% of Viet Nam's children, like this girl in Ho Chi Minh City, are in school.

Enrolment and GNP per capita



Note: Graph includes only those countries that have annual GNP per capita below $800, school enrolment rates 10% or more above or below the average and data from 1990 or later. Enrolment figures are for children aged 6 to 10 years except Burkina Faso (7–13) and Niger (7–12).
Sources: Demographic and Health Surveys and other national surveys, various years, 1990–1995.

When it comes to getting young people into the schoolroom, some countries are doing far better than others with comparable or higher incomes. Thirteen countries have primary school enrolment rates 10 or more percentage points above the average rates for their per capita GNPs. In contrast, 13 other countries have rates 10 percentage points or more below average for their income.

Among the poorest countries, with per capita GNPs below $300, Bangladesh, Kenya, Malawi and Viet Nam have enviable enrolment rates of over 80%, about 20 percentage points above what could be expected at their income level. But in a similar income bracket, Ethiopia, Haiti, Mali and Niger enrol less than 30% of their primary school age children. Malawi's rate compares well even with that of Saudi Arabia (not on the chart), which at 63% is 20 points lower than Malawi's, although its per capita GNP ($7,040) is 40 times higher than Malawi's.

Zimbabwe (per capita GNP of $540) has a remarkable 90% rate; Guinea, at the same economic level, comes in under 35%. China's rate of 95% is an impressive 20 percentage points above the average rate for its income; in the same income category, Côte d'Ivoire and Senegal have rates nearly 30 percentage points below average.

The Convention on the Rights of the Child mandates that countries make primary education free and compulsory, and the World Summit for Children goal for the year 2000 is universal access to basic education and completion of primary school by at least 80% of primary school age children.

Girls' education: Commitment or neglect?

UNICEF/93-1170/Horner

Nicaragua is one country where a higher percentage of girls are enrolled in school than boys. This girl in Managua does her homework outside a building damaged during the country's civil war.

Twelve countries with annual per capita GNPs below $500 show little or no disparity between girls' and boys' primary school enrolment rates. However, in 8 countries with incomes in the same range, girls' enrolment lags 15 percentage points or more behind boys' rates.

Girls' enrolment: A primary problem in 8 countries

Primary school enrolment in countries with per capita GNP below $500

Gender gaps 3 percentage points and under	% point gap	Gender gaps 15 percentage points and over	% point gap
Nicaragua	*–3	Benin	36
Haiti	*–1	Yemen	34
Bangladesh	0	Chad	28
Malawi	0	Guinea-Bissau	26
Rwanda	0	Togo	22
Zambia	0	Nepal	20
Georgia	1	Gambia	18
Ghana	1	Niger	15
Madagascar	1		
Kenya	2		
Mauritania	2		
Nigeria	2		

* A negative gender gap indicates a higher enrolment rate of girls.

Sources: UNESCO and UNICEF.

Maths and science: Some developing countries score high

UNICEF/91-029/Sprague

Slovakia achieved the fourth-highest math score among countries with per capita GNP below 5,000.

In the largest-ever international education survey, 13-year-olds from Singapore outscored those from 40 other countries and areas in mathematics and science tests. Students from the Republic of Korea placed second in maths, and those from the Czech Republic stood second in science.

In addition, Thailand achieved higher scores in maths than wealthier countries such as Denmark, Germany, Spain and the United States, and performed almost as well in science. Iran, with relatively low scores, is close to Denmark in science. Six of the top 15 places in both maths and science went to students from Eastern European countries, while some wealthier industrialized countries, including France, Germany and the United States, were not in the top 20.

The tests were given to the students as part of the Third International Mathematics and Science Study. Comparisons of factors such as class size, spending per pupil and class time spent on subjects indicate that none of these alone determines how well students perform.

National wealth clearly does not always predict educational performance. Six countries with per capita GNPs of less than $5,000 had maths scores higher than other countries with per capita GNPs 5 times greater.

Educational success and wealth

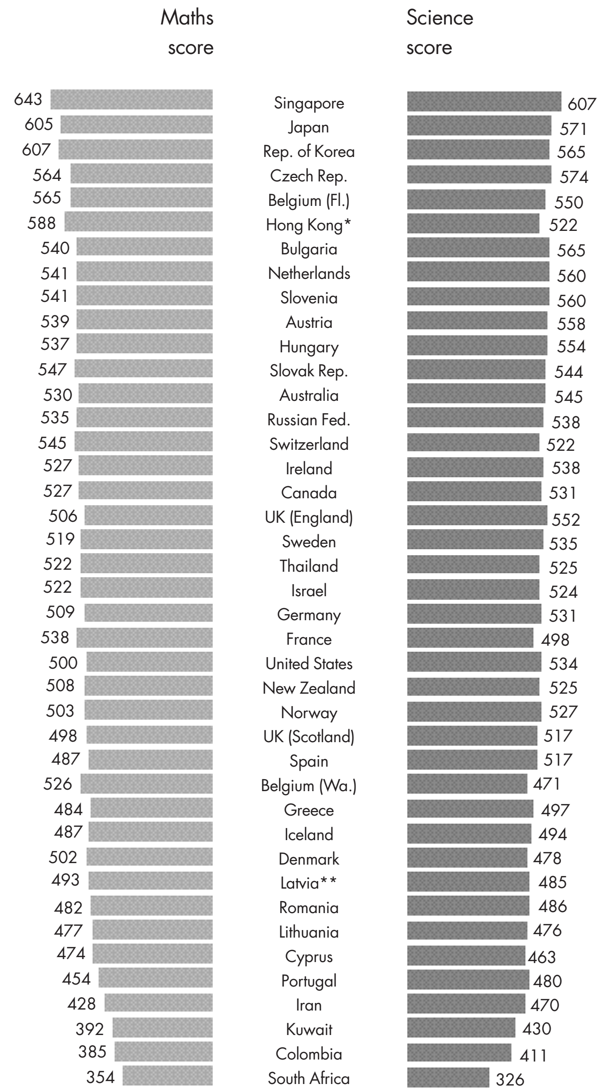
Per capita GNP less than $5,000	Maths score	Per capita GNP more than $25,000
	643	Singapore
	605	Japan
Czech Rep.	564	
Slovakia	547	
	545	Switzerland
Bulgaria	540	
	539	Austria
Hungary	537	
Russian Fed.	535	
Thailand	522	
	509	Germany
	503	Norway
	502	Denmark
Overall average	**500**	United States
Latvia*	493	
Romania	482	
Lithuania	477	
Iran	428	
Colombia	385	
South Africa	354	

*Latvian-speaking students.

Source: Reports from the Third International Mathematics and Science Study 1994–1995, November 1996.

Student achievement in maths and science

Eighth graders' scores on the Third International Mathematics and Science Study



Note: Countries are listed in order of combined maths and science scores. There are two UK entries, England and Scotland, and two entries for Belgium, Flanders and Wallonia.

*Study carried out prior to reunification with China.

**Latvian-speaking students.

Source: Reports from the Third International Mathematics and Science Study 1994–1995, November 1996.

UNICEF/93-1883/Zaman

A teacher reads to her students in an open-air classroom in Dhaka. More than 80% of Bangladesh's teachers have had teacher training.

Do teachers make the grade?

School enrolment ratios are a fundamental indicator of a country's commitment to education, but they tell nothing about the quality of teaching. A pilot survey of 857 primary schools in 14 least developed countries (with GNPs per person below $1,000) sponsored by UNESCO and UNICEF points to teacher education and absenteeism as two areas in dire need of improvement.

In 8 of the 14 countries, more than 50% of primary school teachers have only 8 to 11 years of schooling—or less. In Benin, Tanzania and Uganda the rate is above 90%. Benin and Tanzania have compensated for lack of education by training almost all their teachers, but only 50% of Uganda's teachers are trained. And in Burkina Faso, Cape Verde and Togo, more than 25% of teachers have no training.

In 9 out of the 14 countries, 10% or more of teachers were absent two or more days during the week before the survey, and in Tanzania, Uganda and Zambia 25% or more were absent. However, the survey counted attendance in training courses among the reasons for absenteeism. Other reasons include teachers' health, family sickness or other family matters.

Most of the countries surveyed face economic distress; however, investment in education, beginning with the basics, is one of the most important steps in promoting social progress and economic development.

Primary school instruction quality in least developed countries

	% teachers with a lower secondary education or less	% teachers without teacher training	% teachers absent at least 2 days in week before survey
Bangladesh	44	18	8
Benin	92	1	2
Bhutan	30	8	14
Burkina Faso	70	27	10
Cape Verde	87	35	10
Equatorial Guinea	77	8	8
Ethiopia	0	13	18
Madagascar	46	10	18
Maldives	89	22	8
Nepal	32	3	11
Tanzania	91	0	38
Togo	77	41	7
Uganda	91	50	30
Zambia	24	14	25

Source: A. Schleicher, M. Siniscalco and N. Postlethwaite, *The Conditions of Primary Schools: A Pilot Study in the Least Developed Countries: Report to UNESCO and UNICEF*, September 1995.

Rural kids short-changed

In Burkina Faso, 75% of primary school age children in urban areas attend school, but in rural areas only 26% do. The 49 percentage point gap is the greatest among 41 countries surveyed during the period 1990–1995; in Mali, Morocco, Niger and Senegal the gaps exceed 30 percentage points. Nearly two thirds of the countries surveyed have urban/rural gaps of at least 10 percentage points or more. In only 3 of the 41 countries—Bangladesh, Kenya and Namibia—are attendance rates in rural areas slightly higher than in urban areas.

The surveys also measured disparities between boys' and girls' school attendance and found that these were not as great as those between urban and rural attendance. In only 2 of the 41 countries—Yemen and Nepal—were gender disparities greater than urban-rural differences. In Yemen, the attendance rate for girls is 34 percentage points lower than for boys. In Nepal, it is 20 percentage points lower.

Disparities between regions within countries are also often significant. In India, the rate of primary school attendance in Kerala is 95%, while in Bihar it is 51%. The rate in Lower Egypt is 89%, but drops to 69% in Upper Egypt.

Disparity in urban and rural attendance

	% urban	% rural	Percentage point difference
Burkina Faso	75	26	49
Niger	62	20	42
Morocco	73	35	38
Mali	50	16	34
Senegal	65	32	33
Madagascar	84	54	30
Nigeria	89	59	30
Zambia	79	50	29
Yemen	79	51	28
Congo, Dem. Rep.	76	48	28
Central African Rep.	70	44	26
Haiti	86	60	26
Guatemala	73	51	22
Côte d'Ivoire	64	43	21
Guinea	47	27	20
India	84	64	20
Ghana	82	63	19
Cameroon	76	59	17
Rwanda	64	47	17
Uganda	78	62	16
Egypt	93	78	15
Pakistan	75	60	15
Nepal	82	68	14
Mauritania	61	48	13
Dominican Rep.	88	76	12
Tanzania	74	62	12
Algeria	97	88	9
Colombia	94	85	9
Malawi	91	82	9
Zimbabwe	87	78	9
Indonesia	97	89	8
Myanmar	91	84	7
Paraguay	84	78	6
Peru	90	84	6
Philippines	81	75	6
Turkey	74	70	4
Bolivia	90	87	3
Jordan	98	96	2
Kenya	83	84	1
Bangladesh	72	74	2
Namibia	75	77	2

Sources: Demographic and Health Surveys and other national surveys, 1990–1995.