

# Summary



Education for All

THE QUALITY  
IMPERATIVE



Education for All  
THE QUALITY  
IMPERATIVE

Summary

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The analysis and policy recommendations of this Report do not necessarily reflect the views of UNESCO. The Report is an independent publication commissioned by UNESCO on behalf of the international community. It is the product of a collaborative effort involving members of the Report Team and many other people, agencies, institutions and governments. Overall responsibility for the views and opinions expressed in the Report is taken by its Director.

#### Data issues

The availability of accurate, timely and consistent data, both quantitative and qualitative, is essential for the effective monitoring of progress towards the EFA goals. Such data are also vital for evidenced-based education policy and for the rigorous evaluation of practice. Disaggregated data are needed to identify areas of greatest inequality and to facilitate better national and local planning and evaluation.

This Report draws heavily on administrative data provided annually by national governments to the UNESCO Institute for Statistics (UIS). Those for the 2001/02 school year are the latest available from this source. They comprise a quality-assured data set, compiled in such a way that statistics are comparable for the majority of countries, using the International Standard Classification of Education. Inevitably, there is some time lag between the collection (and often the publication) of data by national governments and their release by UIS for use in this and other reports.

Major efforts are under way by UIS to accelerate data collection and halve the current two-year time lag. Success in this endeavour will depend in many cases upon governments strengthening their own data collection and analysis capacities, with assistance from UIS and other agencies. UIS is also seeking to put in place a major programme of statistical capacity building, since the quality of data published reflects the quality of data that countries provide.

It should be noted that the Report also uses many other data sources, including national household surveys and specially commissioned studies. These enrich its analysis and enable it to map recent policy changes in countries and their potential impact on progress towards the achievement of EFA goals.

#### The EFA Global Monitoring Report Team

Director

Christopher Colclough

Steve Packer (Deputy Director),

Albert Motivans (UIS),

Jan Van Ravens, Ulrika Pepler Barry, Lene Buchert,

Nicole Bella, Cynthia Guttman,

Vittoria Cavicchioni, Yusuf Sayed, Valerie Djioze, Carlos Aggio,

Jude Fransman, Ikuko Suzuki, Delphine Nsengimana,

Liliane Phuong, François Leclercq, Fadila Caillaud, Roser Cusso

For more information about the Report,  
please contact:

The Director

EFA Global Monitoring Report Team

c/o UNESCO, 7 place de Fontenoy

75352 Paris 07, France

e-mail: [efareport@unesco.org](mailto:efareport@unesco.org)

Tel.: +33 1 45 68 21 28

Fax: +33 1 45 68 56 27

[www.efareport.unesco.org](http://www.efareport.unesco.org)

Published in 2004 by the United Nations Educational,  
Scientific and Cultural Organization  
7, Place de Fontenoy, 75352 Paris 07 SP  
Graphic design by Sylvaine Baeyens  
Printed by Graphoprint Paris  
©UNESCO 2004  
*Printed in France*

Previous EFA Global Monitoring Reports

2003/4. Gender and Education for All – THE LEAP TO EQUALITY

2002. Education for All – IS THE WORLD ON TRACK?

# Where does the world stand on the six goals of Education for All?

## **Goal 1 Early childhood care and education.**

Progress towards wider access remains slow, with children from disadvantaged backgrounds more likely to be excluded from ECCE. A child in sub-Saharan Africa can expect only 0.3 years of pre-primary schooling, compared to 1.6 years in Latin America and the Caribbean and 2.3 years in North America and Western Europe. In many developing countries, ECCE programmes are staffed by teachers with low qualifications.

**Goal 3 Youth and adult learning.** Efforts to raise the level of skills among youths and adults are marginal in the few developing countries that have conducted evaluations of skills development programmes. Progress remains difficult to assess on a global basis.

**Goal 5 Gender.** Although many countries around the world have made significant progress towards gender parity at primary and secondary levels over the past decade, large gaps remain, particularly in the Arab States, sub-Saharan Africa and South and West Asia. Girls accounted for 57% of the out-of-school children of primary school age worldwide in 2001 and for more than 60% in the Arab States and in South and West Asia. Girls' participation remains substantially lower than boys' (a gender parity index below 0.97) in seventy-one out of 175 countries at primary level. Gender disparities become more extreme at secondary level and in higher education. Of eighty-three developing countries with data, half have achieved gender parity at primary level, fewer than one-fifth at secondary and only four at tertiary. Almost two-thirds of the world's adult illiterates (64%) are women.

**Goal 2 Universal primary education.** The number of out-of-school children is declining, having fallen from 106.9 million in 1998 to 103.5 million in 2001. While progress has been made globally, over the past decade, in getting more children into school, the pace remains too slow to achieve UPE by 2015. If past trends continue, the world net enrolment ratio will be about 85% in 2005 and 87% in 2015. Completion of primary schooling remains a major concern: delayed enrolment is widespread, survival rates to grade 5 are low (below 75% in thirty of ninety-one countries for which data are available) and grade repetition is frequent.

**Goal 4 Literacy.** About 800 million adults were illiterate in 2002;<sup>1</sup> 70% of them live in nine countries belonging mostly to sub-Saharan Africa and East and South Asia, notably India, China, Bangladesh and Pakistan.

**Goal 6 Quality.** Countries that are farthest from achieving goals 1 to 5 are also farthest from achieving goal 6. Several indicators provide information on dimensions of quality. Public expenditure on education represents a higher proportion of GDP in rich countries, where the EFA goals are already achieved, than in poorer ones, where the coverage of under-resourced systems needs to be both expanded and improved. Spending has increased over the past decade in many developing countries, notably in East Asia and the Pacific and in Latin America and the Caribbean. Pupil/teacher ratios remain higher than is desirable in many countries of sub-Saharan Africa (regional median: 44:1) and South and West Asia (40:1). In many low-income countries, teachers do not meet even the minimum standards for entry into teaching and many have not fully mastered the curriculum. The HIV/AIDS pandemic is severely undermining the provision of good education and contributing significantly to teacher absenteeism. Data from national and international test scores show that low achievement is widespread in most developing regions.

1. UIS has re-estimated the number of illiterates, using the latest data revisions. The present estimate is considerably lower than the 862 million for 2000 given in *EFA Global Monitoring Report 2003/4*. This is a consequence of several factors, notably the release of literacy data from recent censuses and surveys in many countries. For instance, China's 2000 census resulted in the UIS estimate of the number of adult illiterates in the country decreasing by over 50 million.

## The Education for All Development Index

**The Education for All Development Index** measures the extent to which countries are meeting four of the six EFA goals: UPE, gender parity, literacy and quality. Several countries – including some of the poorest – sharply improved their EFA achievement levels between 1998 and 2001. This indicates that poverty is not an unavoidable barrier to rapid progress towards EFA. On the other hand, massive educational deprivation continues to be concentrated in sub-Saharan Africa, the Arab States and South and West Asia.

■ Forty-one countries (one-third of those for which the index can be calculated), most of them in North America and Western Europe and Central and Eastern Europe, have achieved the goals or are close to doing so.

■ Fifty-one countries have EDI values between 0.80 and 0.94.<sup>2</sup> In about half of these, mostly in Latin America, the quality of education is lagging behind the other goals.

■ Thirty-five countries are far from meeting the goals, with EDI values below 0.80. Twenty-two of these countries are in sub-Saharan Africa. Three very high-population countries of South Asia – Bangladesh, India and Pakistan – are also in this group.

2. EDI value can range from 0 to 1. The closer the value is to 1, the closer a country is to meeting its goals and the greater is its EFA achievement.

## Better quality:

■ **The challenge:** Education for all cannot be achieved without improving quality. In many parts of the world, an enormous gap persists between the numbers of students graduating from school and those among them who master a minimum set of cognitive skills. Any policy aimed at pushing net enrolments towards 100% must also assure decent learning conditions and opportunities. Lessons can be drawn from countries that have successfully addressed this dual challenge.

■ **Defining quality:** Two principles characterize most attempts to define quality in education: the first identifies learners' cognitive development as the major explicit objective of all education systems. Accordingly, the success with which systems achieve this is one indicator of their quality. The second emphasizes education's role in promoting values and attitudes of responsible citizenship and in nurturing creative and emotional development. The achievement of these objectives is more difficult to assess and compare across countries.

■ **Benefits:** Better education contributes to higher lifetime earnings and more robust national economic growth, and helps individuals make more informed choices about fertility and other matters important to their welfare. For example, it reduces exposure to HIV/AIDS: research shows that cognitive gains from basic education are the most important factor in protecting teenagers from infection. Such benefits are closely linked to the education levels achieved.

■ **Years in school:** Higher quality in education improves school life expectancy, though opportunities differ widely by region. On average for all countries, pupils can expect 9.2 years of primary plus secondary education; a child in sub-Saharan Africa, however, can expect to receive five to six fewer years of schooling than one in Western Europe and the Americas. People in countries with the highest levels of school life expectancy can expect to stay in school up to five times as long as those in countries at the bottom of the range.

■ **Test scores:** International achievement tests reveal that socio-economic status has a strong influence on levels of school outcomes. Both educational and economic policies need to address initial and ongoing socio-economic inequalities among learners.

■ **Resources:** In low-income countries, increasing spending to provide more textbooks, reduce class size and improve teacher education and school facilities has a positive impact on learners' cognitive achievement, though the relationship is weaker in richer countries where overall standards of provision are much higher. Improvements in quality can often be achieved at modest cost and are within reach even in the poorest countries. Where repetition rates in schools are very high, modest increases in quality can be partly self-financing because they reduce the length of time pupils take to complete the cycle.

■ **Inclusion:** Uniform models of reform that ignore the multiple disadvantages faced by many learners will fail. Educational approaches for those who live with HIV/AIDS, emergency, disability and child labour should be given more support.

■ **Coordination:** Stronger links among government departments responsible for early childhood care and education, literacy and health can help improve quality. In addition, gender-sensitive policies in education and broadly-based gender reforms in society can directly improve the quality of education.

## headline messages

■ **Better learning:** A solid body of evidence provides guidance on what makes schools effective. It emphasizes the dynamics of the teaching and learning process: how teachers and learners interact in the classroom and how well they use instructional materials. Policies for better learning must focus on:

● **Teachers.** Achieving UPE alone calls for more and better-trained teachers. Countries that have achieved high learning standards have invested steadily in the teaching profession. But in many countries, teachers' salaries relative to those of other professions have declined over the past two decades and are often too low to provide a reasonable standard of living. Training models for teachers should be reconsidered, in many countries, to strengthen school-based pre- and in-service training rather than rely on lengthy traditional, institutional pre-service training.

● **Learning time.** Instruction time is a crucial correlate of achievement: the broadly agreed benchmark of 850–1,000 hours of instruction per year for all pupils is not reached in many countries. Test scores clearly show that the amount of class time spent on mathematics, science and language strongly affects performance in these subjects.

● **Core subjects.** Literacy is a critical tool for the mastery of other subjects and one of the best predictors of longer-term learning achievement. Reading must be considered a priority area in efforts to improve the quality of basic education, particularly for learners from disadvantaged backgrounds.

● **Pedagogy.** Many commonly used teaching styles do not serve children well: they are often too rigid and rely heavily on rote learning, placing students in a passive role. Many educational researchers advocate structured teaching – a combination of direct instruction, guided practice and independent learning – in a child-friendly environment.

● **Language.** The choice of the language of instruction used in school is of utmost importance. Initial instruction in the learner's first language improves learning outcomes and reduces subsequent grade repetition and dropout rates.

● **Learning materials.** The quality and availability of learning materials strongly affect what teachers can do. Lack of textbooks can result from an inefficient distribution system, malpractice and corruption.

● **Facilities.** To achieve UPE, unprecedented refurbishing and building of classrooms is needed in many countries. Clean water, sanitation and access for disabled students are vital.

● **Leadership.** Central governments must be ready to give greater freedom to schools, provided that adequate resources are available and that roles and responsibilities are clearly defined. Head teachers/principals can have a strong influence on the quality of schools.

In the many countries that are striving to guarantee all children the right to education, the focus on access often overshadows attention to quality. Yet quality determines how much and how well children learn and the extent to which their education translates into a range of personal, social and developmental benefits. Goal 6 of the Dakar Framework for Action emphasizes the need to improve all aspects of the quality of education. Yet, as this report highlights, too many pupils are leaving school without mastering a minimum set of cognitive and non-cognitive skills.

After setting the quality debate in historical context, the report offers a map for defining and understanding the issues (Chapter 1). It synthesizes an extensive body of research stemming from different perspectives about the factors that influence education quality (Chapter 2) and puts forward strategies and key policy areas for improving it, especially in low-income countries (Chapter 4). As in previous editions, international assistance to basic education and efforts to strengthen coordination are assessed (Chapter 5). Finally, the report monitors progress towards the six EFA goals adopted at Dakar in 2000, with an emphasis on quality indicators. The Education for All Development Index introduced in the previous report has been further elaborated and now provides a summary of progress towards four of the goals in 127 countries (Chapter 3).



## Chapter 1

# Understanding education quality

- Quality at the heart of EFA
- Finding common ground: cognitive and creative development
- The rise of a rights-based approach
- The heritage of education traditions
- A five-dimension guide

Although the right to education has been reaffirmed on many occasions since the Universal Declaration of Human Rights was proclaimed in 1948, many international instruments are silent about the qualitative dimension of learning. Most recently, the United Nations' Millennium Declaration, adopted in 2000, states that all children will be able to complete a full course of primary schooling by 2015 but makes no specific reference to its quality.

Achieving universal participation, however, depends fundamentally upon the quality of education available. How well pupils are taught and how much they learn have a crucial impact on frequency and duration of school attendance. Parents make judgements about school quality when investing in their children's education. People in all countries expect schooling to help children develop creatively and emotionally and acquire the skills, values and attitudes necessary for them to lead productive lives and become responsible citizens.

The World Declaration on Education for All (1990) and the Dakar Framework for Action (2000) – the two most recent United Nations conference declarations focusing on education – recognize quality as a prime condition for achieving Education for All. The Dakar Framework affirms that quality is 'at the heart of education'. Goal 2 commits nations to providing primary education 'of good quality'. Goal 6 includes commitments to improving 'all aspects of the quality of education and ensuring



The smile of renewed hope in Afghanistan

© Radu Sighet / REUTERS

excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills'.

## Searching for common principles

Despite a growing consensus about the importance of quality, there is much less agreement on what the concept means in practice. Two principles, however, characterize most attempts to define the quality of education. The first, which identifies learners' cognitive development as the major explicit objective of all education systems, sees the success with which the latter achieve this as one indicator of their quality. The second emphasizes the role of education in promoting commonly shared values, and creative and emotional development – objectives whose achievement is much more difficult to assess.

## Human rights legislation reflects a belief that all children can develop basic cognitive skills, given the right learning environment

Common ground is also found in the broadly shared objectives that tend to underpin debates about quality: respect for individual rights, improved equity of access and of outcome and increased relevance to everyday life. Human rights legislation (see box) emphasizes access to education and equality of learning outcomes. This reflects a belief that all children can develop basic cognitive skills, given the right learning environment, and that if some do not it is at least partly due to education system deficiencies. Analyses confirm that poverty, rural residence and gender discrimination remain the strongest inverse correlates of school attendance and performance and that poor instruction is a significant source of this inequality.

### International legislation on quality

The International Covenant on Economic, Social and Cultural Rights addresses the principle of equity by stressing governments' responsibility to ensure that all children have access to education of acceptable quality. Brazil, Costa Rica and the Philippines have constitutional provisions guaranteeing that a percentage of the budget goes to education, in accordance with the Covenant.

The Convention on the Rights of the Child (1990), in Article 29, expresses strong and detailed commitments about the aims of education, which have implications for its content and quality. It indicates that education should allow all children to reach their fullest potential in terms of cognitive, emotional and creative capacities.

More recently, globalization has led many governments to question whether graduates have the skills needed for their countries' economic growth.

## Historical pointers

The various approaches regarding quality have their roots in different traditions of educational thought. That espoused by such philosophers as Locke and Rousseau, often referred to as the humanist tradition, views human nature as essentially good. It states that all people are born equal, that subsequent inequality is a product of circumstance and that individuals play a leading role in defining their existence. These principles have inspired many educational thinkers. Most notably, James Dewey and Jean Piaget were influential in advocating more active and participatory roles for children in learning,

emphasizing how learners construct their own meanings.

Behaviourist theory leads educationists in the opposite direction. It had a significant influence on education reform in the first half of the twentieth century. The main tenet is that human behaviour can be shaped, predicted and controlled through reward and response (e.g. tests and examinations). Although few educationists accept the full behaviourist agenda, elements of its practice can be observed in many countries in teacher-training programmes, in curricula and in the ways teachers actually operate in classrooms.

Over the last quarter of the twentieth century, several critiques of these two approaches emerged. Sociologists of various schools saw education as a key mechanism for legitimizing and reproducing social inequalities. They questioned the view that the spread of universal schooling would result in equal development of all learners' potential. Such thinkers tend to view good education as that with the greater potential to promote social change.

Efforts to develop alternative ideas on education have sprung from the realities of lower-income countries, often as challenges to the legacies of colonialism. Prominent proponents of such alternatives include Gandhi and later Nyerere in the United Republic of Tanzania. Both proposed education systems with culturally relevant emphases on self-reliance, equity and rural employment.

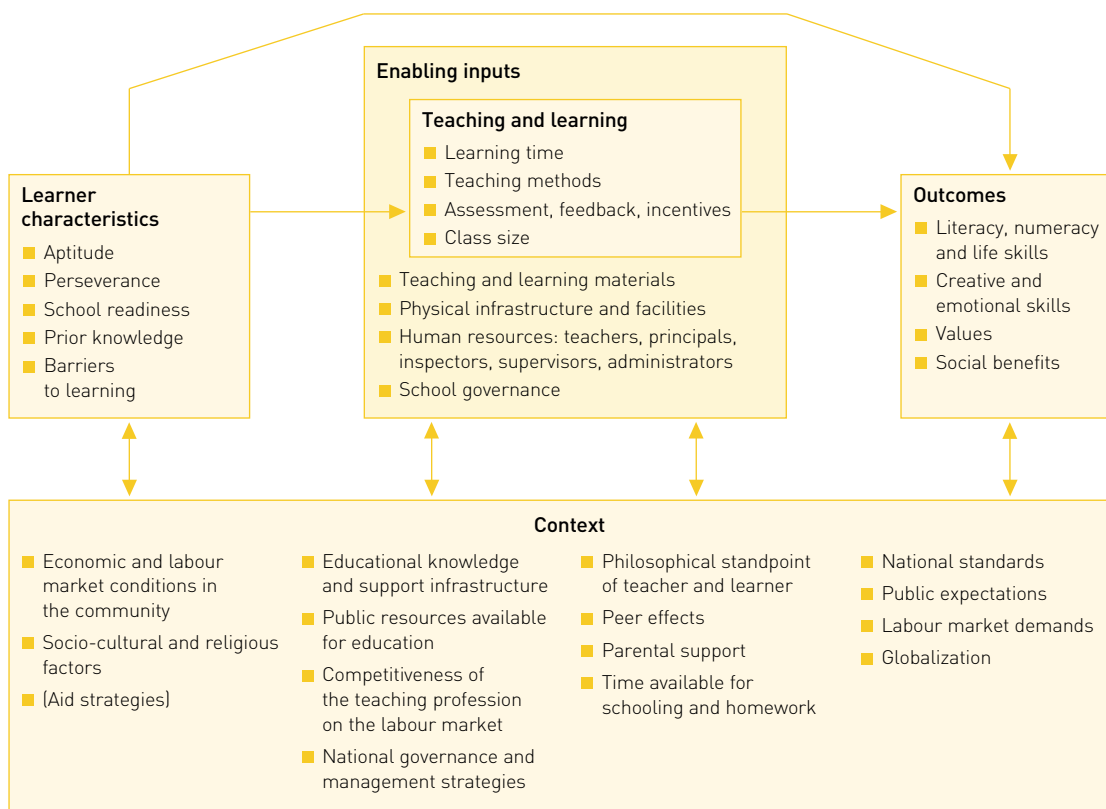
Elements of all these approaches also appear in adult education. Some writers stress the experience of adults as the central resource for learning, while others see adult education practices as part of the transformation of socio-cultural, political and historical contexts.

## Mapping quality

How can quality be studied in light of these very different approaches? One way is to return to basics: the objectives of cognitive development and nurturing of particular sets of values, attitudes and skills that are important aims of all education systems. A review of the main elements of education systems and how they interact provides a useful map for efforts to understand, monitor and improve quality.

This framework (see figure 1.1) takes into account five major factors affecting quality. It is a comprehensive vision, encompassing issues of access, process and outcomes.

**Figure 1.1: A framework for understanding education quality**



*Learner characteristics:* Learners do not come to the classroom equal. Socio-economic background, gender, disability, race, ethnicity, HIV/AIDS and emergency situations such as conflicts and disasters create inequalities that must be taken into account in policies to improve quality. The extent to which pupils and students have benefited from learning opportunities in early childhood also comes into play.

**Learners do not come to the classroom equal**

*Context:* Education tends to strongly reflect society’s values and attitudes. Circumstances ranging from a society’s wealth to national policies on goals and standards, curriculum and teachers have an influence on quality.

*Inputs:* This category includes material resources (textbooks, learning materials, classrooms, libraries, school facilities) and human resources (managers, supervisors, inspectors and, most importantly, teachers). The indicators most widely used to measure these inputs are pupil/teacher ratios, teacher salaries, public current expenditure per pupil and proportion of GDP spent on education.

*Teaching and learning:* This dimension involves what happens in the classroom and the school. Pedagogical processes lie at the heart of day-to-day learning. Indicators such as time spent learning, use of interactive teaching methods and how progress is assessed are among those applied to these processes. School safety, community involvement, expectations and leadership have an indirect impact on teaching and learning.

*Outcomes:* This dimension can be expressed in terms of academic achievement (generally examination performance) but also in broader social and economic gains.

This report synthesizes an extensive body of research on the benefits and determinants of good quality education (Chapter 2), identifies strategies for improvement, with a particular focus on developing countries (Chapter 4) and monitors international support of this task (Chapter 5). Like its predecessors, this third *EFA Global Monitoring Report* assesses progress towards the six EFA goals. In this case, the emphasis is on quality indicators for each goal (Chapter 3).



## Chapter 2

Learning together, living together: a school playground in Senegal

# The importance of good quality: what research tells us

- Higher incomes
- Better protection against HIV/AIDS
- Insights from achievement tests
- Caution over factory models of education
- School effectiveness research: inside the education process
- Links between school resources and performance
- Lessons from eleven countries
- Quality learning for pre-schoolers and adults

Does better education make a difference to development outcomes? If so, how is it best achieved, particularly in developing countries? Understanding what determines education quality is a prerequisite for designing policies that will secure better learning. Over the past twenty years, a large body of research on these subjects has arisen, rooted in different models and measures of quality assessment.

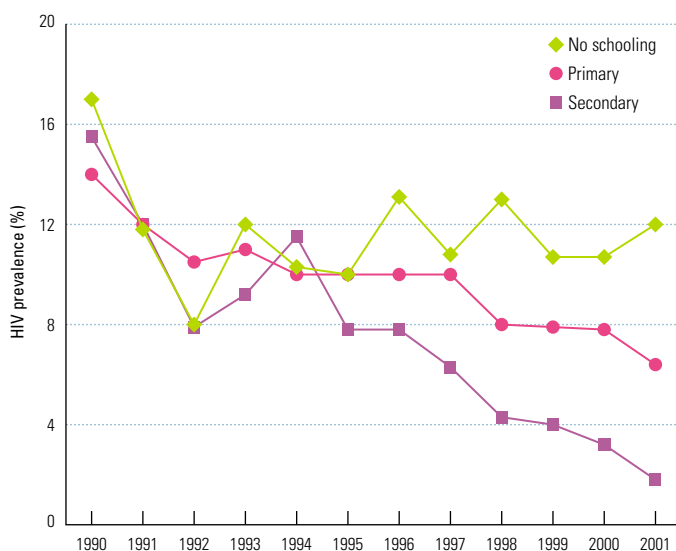
### Higher incomes, informed choices

Improving education quality helps achieve a wide range of economic and social development goals. Here, the evidence is clear. Taking standardized test scores as proxies for the quality of cognitive skills, studies consistently show the impact of higher academic

performance on lifetime earnings. Studies have also focused on the relationship between a country's human capital and its economic growth. International achievement tests now make it possible to incorporate measures of school quality into such analyses. Mathematics and science scores are an indicator of the future productivity of a country's labour force. This fact underlines the strong links between poverty reduction and educated population.

Education quality also has profound consequences for attitudes and behaviour. A recent study of six African countries with a high prevalence of HIV/AIDS found that people acquired the skills necessary to reducing risky sexual behaviour from a complex network of formal and informal sources of information, including the education system. Cognitive skills required to make informed choices were closely linked to education levels and literacy, with condom use rising sharply with increased levels of schooling. Cognitive gains from basic education came across as the most important factor in protecting teens and young adults from infection, underlining education's role as a 'social vaccine'. Figure 2.1 shows that rates of HIV/AIDS prevalence by level of education in rural Uganda were initially closely comparable but that over time people with more education had much lower prevalence rates than those with less schooling. This evidence is mirrored in other African countries.

**Figure 2.1: HIV prevalence in rural Uganda (%) by education category, 1990-2001 (individuals aged 18-29)**



Notes and sources: See Chapter 2 in the full EFA Report.

## Reading test scores

Test scores provide a valuable measure of how well the curriculum is being learned and help indicate how well students do at the main exit points of the school system. They may also form a basis for estimating relationships between education quality, economic growth and personal income. They cannot serve as the only barometer of educational quality, however, as they do not explicitly take into account traits such as honesty, reliability, determination and leadership qualities that have a significant influence upon labour-market success.

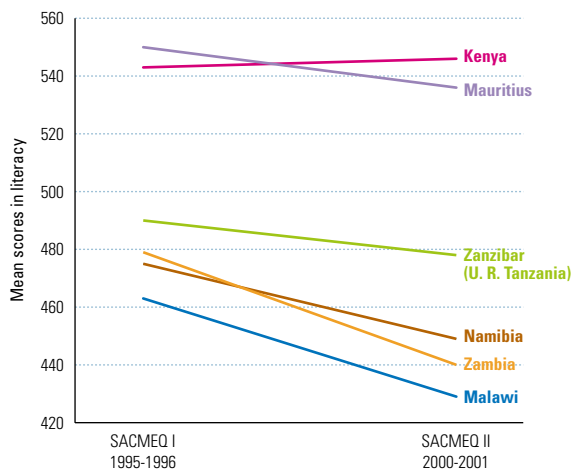
### The big tests

International testing has been conducted since the 1950s, when the International Association for the Evaluation of Educational Achievement (IEA) was formed. It initiated what would become a major set of studies aiming to compare cognitive achievement at various levels of schooling in several countries and to identify the main causes of the differences measured. By 2000, some fifty countries were participating in surveys covering mathematics and science (TIMSS), reading (PIRLS) and other subjects. Other cross-national studies include the Programme for International Student Assessment (PISA), set up by the Organisation for Economic Development and Cooperation (OECD) in 1998 and now covering fifty-nine mainly industrialized and middle-income countries, the fifteen-country Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) and the Latin American Laboratory for the Assessment of Quality in Education (LLECE), covering sixteen countries. Two other international programmes - the UNESCO/UNICEF joint project on Monitoring Learning Achievement (MLA) and a research programme in the French-speaking African countries (PASEC) - have good country coverage but have not yet monitored learning achievement over time.

Studies such as those identified in the accompanying box allow valuable comparisons of learning achievements among countries and over time, though the studies themselves cannot be compared, since their parameters vary. They reveal that education quality in Africa has faced particular difficulties in recent years. For example, comparisons between the SACMEQ studies of 1995-1996 and 2000-2001 show a 4% decline in grade 6 literacy achievement scores, with the most significant differences occurring in Malawi, Namibia and Zambia (see figure 2.2). Although no clear cause could be identified, household income appears to have fallen in the three worst-affected countries. In Malawi, where the number of primary school pupils doubled in a decade (school fees were abolished in 1994), school resources fell in absolute terms over the two SACMEQ studies.



**Figure 2.2: Changes in literacy scores between SACMEQ I and SACMEQ II in six African countries, 1995-1998 and 2000-2001**



Notes and sources: See Chapter 2 in the full EFA Report.

### Socio-economic status is closely linked to achievement in all contexts

Among the lessons that can be drawn from studying achievement tests over time are, first, that socio-economic status is closely linked to achievement in all contexts: in Africa and Latin America, wide differences exist between urban and rural areas, with

urban areas served by better qualified teachers. Second, class time spent on mathematics, science and language strongly affects performance. Third, teacher gender has an impact in many developing countries: in Africa, pupils

– in particular girls – taught by women performed better than those with male teachers.

Several studies show that the impact of pupils' socio-economic background can be partly offset by improvements in school environment, teacher commitment, school autonomy and learning resources (notably textbooks).

### Assessing the quality of schools: research models in focus

Common sense suggests that higher per-student spending equals higher student performance. In eleven OECD countries, however, mathematics and science test scores generally fell, over the quarter century ending in 1995, though per pupil spending more than doubled in many cases. Certain factors help explain the low impact of spending increases on learning outcomes over the period: real per capita income sometimes increased faster than per pupil spending, school systems expanded so that a more heterogeneous group of students was enrolled for a longer cycle and, in many cases, teachers' status and salaries relative to those of other professions declined.

### Production function studies: inconclusive evidence

In the 1960s, a landmark survey in the United States concluded that schools were instrumental in reproducing social inequalities. Family background

In Kichwa Tembo, Kenya, students from the local primary school share their only blackboard among different classes – held outdoors due to inadequate building facilities. Enrolments spiralled after the government abolished primary school fees, in 2003.



© THIERRY DUDDIT / L'EXPRESS / EDITINGSERVER.COM

and peer groups were found to have a much larger impact on outcomes than variations in school resources. This led to a flood of research aimed at seeing whether these findings could be confirmed. Researchers adopted a 'production function' approach widely used in economics in an effort to analyze which policy-controlled inputs – teacher education, experience, salaries, facilities, pupil/teacher ratio – had the largest impact on outcomes. An overall analysis of such studies published prior to 1995 in the United States finds no significant measured relationship between resource inputs and student performance. Results are more conclusive in developing countries, where a majority of studies using this model suggest that better teacher education and experience, higher expenditure per pupil and decent school facilities do affect learning outcomes. Nonetheless, although many studies have used this approach, it is widely criticized. One of the main objections is that student behaviour and learning processes cannot be modelled like raw materials and finished products.

### What happens in schools

The production function approach largely ignores the ways in which the process of learning and teaching – the creative interaction that happens in the classroom – affects education quality. Hence, a new school of interdisciplinary researchers began to focus on what makes schools effective. This research shows that successful primary schools are typically characterized by strong leadership, an orderly and secure school and classroom environment, emphasis on acquiring basic skills, high expectations of pupil attainment and frequent assessment of progress. Nevertheless, even these studies explain a relatively small proportion of the variation of cognitive achievement for rich countries. Family background, pre-school experience and other hard-to-measure differences remain important. Once again, however, for developing countries, the results are stronger, with sufficient teaching time, adequate textbooks and instructional materials and teacher quality playing a clearer role in achieving higher student performance.

### How teachers spend their time has a major impact on learning outcomes

This body of research also shows that how teachers spend their time has a major impact on learning outcomes.

Structured teaching approaches have

high pay-offs, especially for less able primary school students and, more generally, in the higher grades. These methods require that teachers clearly formulate goals, sequence learning tasks and allow time for questioning, practice and regular testing. Grouping students by ability works well for learning specific skills,



Fun learning: in Bahia, Brazil, young girls trace their hands on the blackboard

particularly reading and mathematics. Not all education practitioners accept this approach, defending a 'constructivist' method that emphasizes self-directed learning through discovery. The key lies in determining how much structure is required, in the light of learners' abilities and the curricular objectives.

### Experimental studies: the case for more resources

Researchers have conducted randomized experiments to measure the impact of a particular policy intervention on learning outcomes in a specific context, allowing for comparison with a control group. Although results may not yet offer sufficient cause for scaling up, some of these studies demonstrate strong links between school resources and performance. In the late 1980s, the Student-Teacher Achievement Ratio (STAR) project in Tennessee (United States) covered almost 12,000 students from kindergarten to grade 3, over a four-year period, to study the impact of class size on pupil achievement. The results showed that reducing class size had a positive impact, especially for children from disadvantaged social backgrounds. In Kenya, better school inputs (meals, uniforms, textbooks) enhanced learning even when class size increased. In the Philippines, an experiment in thirty schools found that the provision of pedagogical materials significantly reduced dropout rates. In India, urban slum children lagging in primary school who received remedial education in an NGO-run programme showed learning gains.

## Steering systems toward higher standards: policy highlights from eleven countries

Country	Key facts	Strong points
<b>Ambitious Group</b>		
Bangladesh	<ul style="list-style-type: none"> <li>■ Low income</li> <li>■ Impressive progress in access to primary: NER = 86.6% in 2001, up from 71.2% in 1990</li> <li>■ Gender parity achieved in primary education</li> <li>■ Learning achievement assessments point to low mastery of basic skills</li> <li>■ 2.2% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>■ 2 million children in NGO-sector schools (against 19 million in formal system) <ul style="list-style-type: none"> <li>— Bangladesh Rural Advancement Committee schools significantly better on life skills and writing compared with regular schools, equal achievement in reading and literacy and higher transition to secondary</li> </ul> </li> <li>■ Continued strong government commitment to education reform. Top challenges: high teacher absenteeism and low number of learning hours</li> </ul>
Brazil	<ul style="list-style-type: none"> <li>■ Lower middle income</li> <li>■ NER = 96.5% in 2001, up from 85.6% in 1990</li> <li>■ 4.2% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>■ Strong policy efforts in 1993-2003 EFA Plan to reduce regional and social inequalities through large projects: <ul style="list-style-type: none"> <li>— FUNDEF equalization fund to reduce primary school financing inequalities between regions</li> <li>— FUNDESCOLA to enhance school attendance and combat dropping out</li> <li>— Bolsa Escola scholarship programme for poor families</li> <li>— Proformação, to train unlicensed teachers through distance learning</li> <li>— Accelerated Learning, to give late entrants a chance to catch up</li> <li>— National Schoolbook Programme</li> </ul> </li> </ul>
Chile	<ul style="list-style-type: none"> <li>■ Upper middle income</li> <li>■ NER = 88.8% in 2000</li> <li>■ Gender parity achieved in primary and secondary education</li> <li>■ 4% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>■ Doubling of education spending in a decade</li> <li>■ Rise in achievement due to efforts to target 10% poorest performing schools</li> <li>■ More participatory teaching and learning styles</li> <li>■ Expansion of annual number of school hours from 990 to 1,200 underway</li> <li>■ ICT as key to modernizing education</li> </ul>
Egypt	<ul style="list-style-type: none"> <li>■ Lower middle income</li> <li>NER = 90.3% in 2001, up from 84% in 1990</li> <li>■ Strong expansion brings universal primary education and gender parity within reach</li> </ul>	<ul style="list-style-type: none"> <li>■ Declines in grade repetition and dropout rates since early 1990s</li> <li>■ Strong emphasis on early childhood education</li> <li>■ Late 1990s: increase in teacher salaries, smaller classes, 'aggressive' in-service training and better support systems</li> <li>■ Five-Year Plan 2002-2007 emphasizing 'excellence for all'</li> <li>■ Decentralized and ICT-based management forms part of business-style approach to evaluating school performance</li> </ul>
Senegal	<ul style="list-style-type: none"> <li>■ Low income</li> <li>■ Expansion of access: NER = 58% in 2001, up from 47% in 1990</li> <li>■ GPI = 0.91</li> <li>■ Relatively high repetition in higher grades</li> <li>■ 3.2% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Faire-faire</i> ('getting it done') approach <ul style="list-style-type: none"> <li>— Sharing of duties and responsibilities with local actors. Approach applied to literacy programme: over 1 million adults and 0.5 million out-of-school boys and girls enrolled</li> </ul> </li> <li>■ <i>Collectifs des directeurs</i> in formal education: regional groups of school principals encourage mutual learning</li> </ul>

Such experiments strengthen the case for smaller classes, more textbooks, in-service teacher training and teaching strategies focusing on learner needs, particularly in poorer countries and for less able groups.

### The social dimension

Teaching and learning take place in a social and political context. Organizational weaknesses of schools are increasingly pointed to as a major cause of low learning achievement, especially in government schools of developing countries. Some analysts advocate radical

changes in the structure of teacher incentives as a means of boosting learning outcomes. Evidence suggests a weak relationship, however, between merit pay and teacher effectiveness. The social context of the school, on the other hand, is a key dimension. Studies in the sociology of education suggest that students whose family backgrounds and peer groups have ideals close to those promoted by their school tend to demonstrate greater learning effort and achieve higher levels of cognitive skills than others, who may try to escape the contradiction between their own and their school's ideal by rebelling, e.g. reducing learning effort. The need for



Country	Key facts	Strong points
<b>Ambitious Group</b>		
South Africa	<ul style="list-style-type: none"> <li>Lower middle income</li> <li>NER stagnant at just below 90%</li> <li>GPI = 0.96</li> <li>5.5% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>Measures to reduce inequities and boost quality since abolition of apartheid in 1994</li> <li>Compulsory nine-year education, equalized school expenditure for all racial groups</li> <li>Introduction of school governing bodies</li> <li>Deployment of better teachers to poorer schools</li> <li>Launching of new curriculum in 1997</li> <li>Special attention to building self-esteem in the teaching profession</li> </ul>
Sri Lanka	<ul style="list-style-type: none"> <li>Lower middle income</li> <li>Universal primary education achieved as well as gender parity at this level</li> <li>1.3% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>Sharp decline in grade repetition and dropout in 1990s</li> <li>Comprehensive approach to reform (from 1998) involving civil society</li> <li>Focus on teachers and on in-built monitoring and evaluation capacity</li> </ul>
<b>High performance</b>		
Canada	<ul style="list-style-type: none"> <li>High income</li> <li>Universal primary education achieved as well as gender parity at this level and in secondary education</li> <li>5.5% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>High performance of immigrant children, cultural diversity as linchpin of nation building</li> <li>High respect for the teaching profession, stiff entry exams for teacher colleges</li> <li>Extensive in-service training</li> <li>Strong support system at district and school levels</li> <li>Close tracking of schools, districts and provinces to detect inequities</li> </ul>
Cuba	<ul style="list-style-type: none"> <li>Lower middle income</li> <li>NER = 95.7%</li> <li>GPI = 0.96</li> <li>8.7% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>Education as a cornerstone of the Cuban Revolution</li> <li>Sustained investment</li> <li>Highly valued teachers</li> <li>Incentives to reward excellence of pupils, teachers and schools</li> <li>Principle of competition, solidarity and collaboration to encourage improvement</li> <li>Experience-sharing mechanisms for mutual learning and joint development of the curriculum</li> </ul>
Finland	<ul style="list-style-type: none"> <li>High income</li> <li>Universal primary education achieved as well as gender parity at this level</li> <li>6.4% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>Sustained investment in human development to recover from the 1990s economic crisis</li> <li>Highly qualified teachers</li> <li>Comprehensive pedagogies</li> <li>Cultural importance of both learning and leisure</li> </ul>
Republic of Korea	<ul style="list-style-type: none"> <li>High income</li> <li>Universal primary education achieved as well as gender parity at this level and in secondary education</li> <li>3.6% of GDP on education</li> </ul>	<ul style="list-style-type: none"> <li>View of education as vital to economic expansion</li> <li>Strong focus on quality since 1980s</li> <li>Expansion of distance-learning and adult education to ease pressure on school system</li> <li>Longer teacher training, better incentives</li> <li>Network of research institutes, financed through education tax</li> </ul> <p>NER: net enrolment ratio in primary education                      GPI: gender parity index in primary gross enrolment ratio                      ICT: information and communication technology</p>

education policy to be built around an explicit social goal presents challenges for the quality of schooling that cannot be addressed by technical means alone.

## Lessons from eleven countries

With these findings in mind, case studies from eleven countries provide insights into how both rich and developing nations have tackled the quality issue. Four of the eleven – Canada, Cuba, Finland and the Republic of Korea – have achieved high standards of education

quality, as measured by international tests. The Republic of Korea is ranked first for science and third for mathematics in PISA, Canada comes second for reading and Finland has the highest overall scores, while in Cuba students' average performance topped countries in the region surveyed in 2002 by OREALC<sup>1</sup>/UNESCO. Seven other countries can be described as ambitious because of their strong commitment to EFA, reflected in rapid expansion of primary education and progress towards gender parity. All are making serious efforts

1. UNESCO Regional Bureau for Education in Latin America and the Caribbean.



A first and influential learning experience: pre-schoolers in Washington D.C.

to strike a better balance between quantity and quality. Brazil and Chile are among the countries that symbolize the enormous progress towards EFA in Latin America and the Caribbean. Both, along with Argentina, performed relatively well in the OREALC/UNESCO survey. Brazil, a high population country, has made strong policy efforts to improve the quality of the education system through initiatives that address regional and social inequalities in inputs (especially funding) and achievement. Funding for the poorest schools has increased significantly (explaining the growth of enrolment) and teachers' salaries and training have been improved. Although the impact on learning outcomes is modest, several policies and strategies deserve highlighting in both categories, as the accompanying table shows.

Several common strands emerge in the four high-performing countries. All hold the teaching profession in high regard and support it with investment in training. There is policy continuity over time and a strong, explicit vision of education's objectives. The seven ambitious countries have made genuine progress in expanding access, with recent policy initiatives aimed also at raising cognitive outcomes. While there are no universal recipes, a robust long-term vision for education, strong government leadership and a motivated, well-supported teaching corps are conditions for successful qualitative reforms. For the ambitious countries, teacher motivation and support often pose a challenge.

## Beyond school: early childhood and adult learning

Most of the evidence from the above countries focuses on the school system. Much less emphasis is placed on qualitative aspects of two other EFA targets: early childhood care and education (ECCE) and literacy and

life skills. What can be said about the quality of these programmes and can they be affordably improved? Although ECCE programmes are difficult to compare, research indicates that the teacher's education level, small group activities and the availability of equipment and materials play positive roles. Better childcare for pre-school children is associated with better cognitive and social development. While most success stories come from high- and middle-income countries, India and Nepal are exceptions, with low-cost programmes showing a relatively strong positive impact on children and their families. In countries where achieving universal primary education is the main challenge, such low-cost measures offer an appealing option.

**Better childcare for pre-school children is associated with better cognitive and social development**

Over the past forty years, literacy programmes have evolved from a 'one size fits all' approach towards, initially, the notion of 'functional literacy' promoted by UNESCO in the 1960s, which favours programmes tailored to specific occupation groups. Subsequent approaches have built on this model by including contents on health, the environment, nutrition, hygiene and health care. Having skilled instructors, able to relate to learners and possessing good knowledge of the subject leads to strong pay-offs. In many cultures, adult learning works best when instructor and learners are the same sex. Recurrent brief training, teaching in the mother tongue, regular assessment and certification are correlates of quality programmes. Evidence indicates that up to 80% of people who enrol in well-run literacy classes complete their courses. Some 400 hours of structured learning can bring totally unschooled and illiterate adults to a basic level of mastery. ■



Strong dynamics: after overcoming multiple social barriers, Lalita, a woman from one of the lowest castes in India shows pleasure in teaching mathematics to young girls in her village of Koprah.

## Chapter 3

# Assessing progress towards the EFA goals

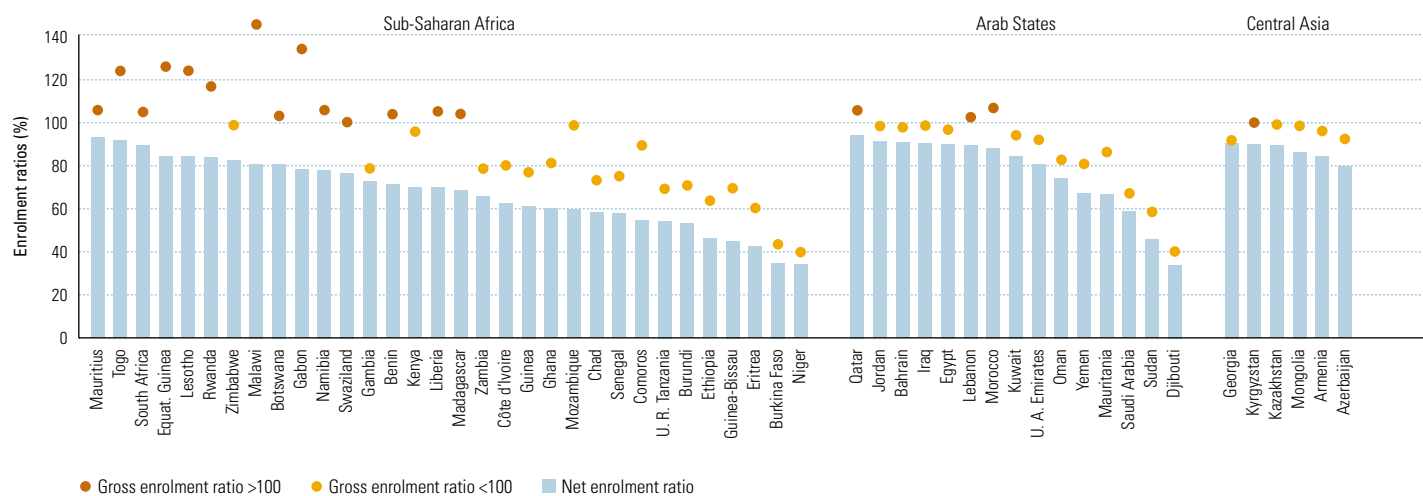
Assessment of the multiple dimensions of quality remains hampered by a lack of standardized indicators. Though figures cannot adequately reflect the complexity of the learning process, most indicators available to assess quality are quantitative. These enable a picture of quality to emerge, albeit an incomplete one. This chapter provides an account of progress towards the six EFA goals, with a focus on quality as reflected by a range of school-related factors and learning outcomes, such as government spending on education, pupil/teacher ratios, teacher qualifications, the duration of students' stay in school and test scores. Overall progress towards the Dakar goals is summarized by the Education for All Development Index (EDI), introduced in the *EFA Global Monitoring Report 2003*.

- Persistent gender disparity at all levels
- Fivefold gap in school life expectancy between rich and poor countries
- Teachers: the qualification crisis
- Widespread low learning achievement
- Education for All Development Index

## Universal primary education: stark variations

Expansion of schooling is translating into a slow reduction in the number of out-of-school children of primary-school age, from 106.9 million in 1998 to 103.5 million in 2001. The pace of this decline is insufficient to achieve universal primary education (UPE) by 2015. Girls account for 57% of the total (more than 60% in the Arab States and South and West Asia), as against 59.5% in 1998.

**Figure 3.1: NER and GER in primary education for countries with NER below 95%, 2001**



Source and notes: See Chapter 3 in the full EFA Report.

The net enrolment ratio (NER) comes close to being an indicator of school quality because it captures the extent to which children who are in the official age group for a specific level of schooling (e.g. primary) are enrolled. NERs do not take into account enrolled children who are outside a given official age group because of early or delayed enrolment or grade repetition.

Regional variations are stark. In many sub-Saharan African countries, several Arab States and Pakistan, NERs are below 70%. Education systems in Central and Eastern Europe also stand out, with several NERs between 70% and 90%. Girls' participation in primary education remains substantially lower than boys' in seventy-one out of 175 countries. With only three exceptions, all the countries with a gender parity index<sup>2</sup> below 0.90 are in sub-Saharan Africa (notably West Africa), the Arab States and South and West Asia.

Factors including cost and distance from school often lead to late enrolment. In sub-Saharan Africa, children two or more years above the official age represent 20–40% of grade 1 students. Furthermore, school systems are sometimes stretched to their limit, notably in countries where gross enrolment ratios (GERs) are below 100%.<sup>3</sup> More than forty countries combine GERs

below 100% and NERs below 90%, reflecting a need to increase school system capacity (see figure 3.1).

Completion of primary schooling remains a major issue. In many low-income countries, children are pushed out by costs, unfriendly classroom environments or the need to supplement family income. Although survival rates to grade 5 increased in many countries during the 1990s (and in some cases rose by more than ten percentage points between 1998 and 2001), they fell short of 75% in thirty out of ninety-one countries with available data and were below 66% in half of the sub-Saharan African countries (see figure 3.2). Substantial declines in many countries reflected a deterioration in education quality.

**In many low-income countries, children are pushed out by costs, unfriendly classroom environments or the need to supplement family income**

## Secondary and tertiary education: a narrowing pyramid

While most countries (144) have committed themselves to some compulsory secondary education, primary school graduates often do not make the transition to this level, particularly in many developing countries. In 2001, the average secondary GER for developing countries was 57% – only about half that of developed ones. The gap is more pronounced at tertiary level, with the median GER at 55% among developed countries and 11% among developing ones. Between 1998 and 2001, GERs grew

2. Ratio of female-to-male value of a given indicator. A GPI between 0.97 and 1.03 indicates parity between the sexes.

3. The GER measures overall school system capacity in purely quantitative terms. It is the ratio of the number of children enrolled at a given level (e.g. primary school), regardless of age, to the number in the age range corresponding to that level (e.g. ages 6 to 12).



Figure 3.1 (continued)

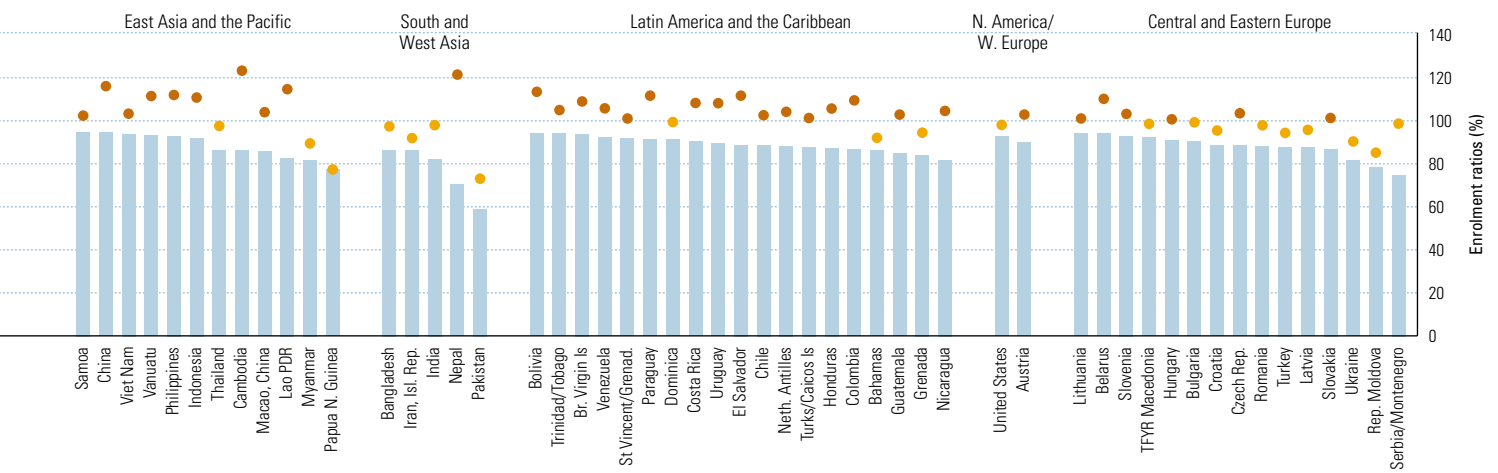
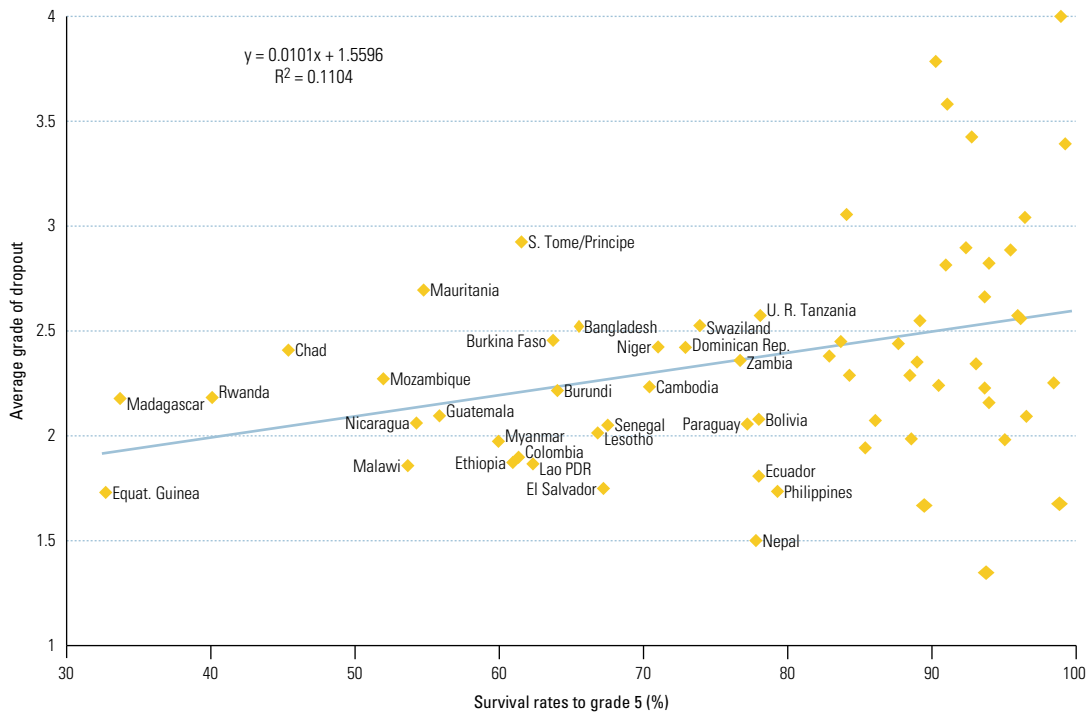


Figure 3.2: Survival rates to grade 5 and average number of grades reached when dropping out of primary school, 2001



Only countries with survival rates below 80% are shown.  
Source and notes: See Chapter 3 in the full EFA Report.

by more than two percentage points in eighty of the 131 countries for which data are available at secondary level, and in fifty-six out of ninety-five countries at

tertiary level. Gender disparity increases at each level of the cycle. Among the eighty-three developing countries with data available for all three levels, about half have

achieved gender parity in primary education but fewer than one-fifth in secondary and only four in higher education.

### **School life expectancy: fivefold gap between rich and poor countries**

Combining enrolments by age at all three levels of education, how long can individuals expect to stay in school? Caution is required because the school life expectancy measure includes grade repetition, which can add a year to the schooling cycle. The world's children gained a year of school life expectancy during the 1990s, reaching 9.2 years of primary plus secondary

education and 1.1 years of post secondary education – a total of 10.3 years. A child in sub-Saharan Africa can expect to receive, on average, five to six fewer years of primary and secondary schooling than a child in Western Europe or the Americas.

### **A child in sub-Saharan Africa can expect to receive, on average, five to six fewer years of primary and secondary schooling than a child in Western Europe or the Americas**

Severe educational deprivation also persists in South and West Asia, and some Arab States, which are still far from achieving UPE. The difference

between the countries with the highest and lowest school life expectancy is up to fivefold. Targeting specific groups that still lack access to primary education while expanding the secondary education supply is an increasingly urgent task in many developing countries of Latin America and the Caribbean and East Asia and the Pacific.

### **Teaching: a profession under stress**

Teachers, as this report repeatedly emphasizes, are the strongest influence on learning. Available data suggest that large proportions of primary school teachers lack adequate academic qualifications, training and mastery of content, especially in developing countries. National standards for qualification as a primary school teacher ranged from twelve to seventeen years of education in twenty-six sub-Saharan African countries surveyed in 2001. Less than 10% of the teaching force in a few countries met even the low minimum standard of a lower secondary school education and many countries fell short of standards set at upper secondary level. As regards teachers' mastery of the curriculum, a recent study in seven southern African countries found that some primary school mathematics teachers possessed only basic numeracy and actually scored lower than students on the same tests.

The proportion of new primary school teachers meeting national standards has been falling in several countries of sub-Saharan Africa. For example, only 30% of teachers in their first year of experience met the standards in the Gambia. The proportions were even lower in Botswana (10%), Lesotho (11%) and Chad (19%), where the standard was an upper secondary education, and in Togo (2%), Guinea-Bissau (15%) and Cameroon (15%), where it was lower secondary. This trend may reflect the increasingly common recruitment of teachers without the necessary qualifications in order to meet pressures caused by expanding levels of enrolment. Furthermore, the distribution of teachers is unequal within countries, with disadvantaged areas typically receiving less well-trained teachers. The situation is aggravated in difficult circumstances, such as those of countries in conflict or emerging from conflict.

Although data are not collected systematically, random surveys in many countries confirm that teacher absenteeism remains a persistent problem. The need to hold second jobs, lax professional standards and lack of support by education authorities are common causes.

The HIV/AIDS pandemic is severely undermining the provision of quality education and contributing to teacher absenteeism and attrition. Zambia estimated that 815 primary school teachers died from AIDS in 2001, corresponding to 45% of teachers trained that year. Kenya's Ministry of Health has stated that HIV/AIDS has impaired the effectiveness of the education sector by increasing the rate of teachers' deaths and attrition over the past decade. With the epidemic developing in many countries (especially in Eastern Europe and Asia), there is a strong risk of HIV/AIDS digging further deep inroads into education systems.

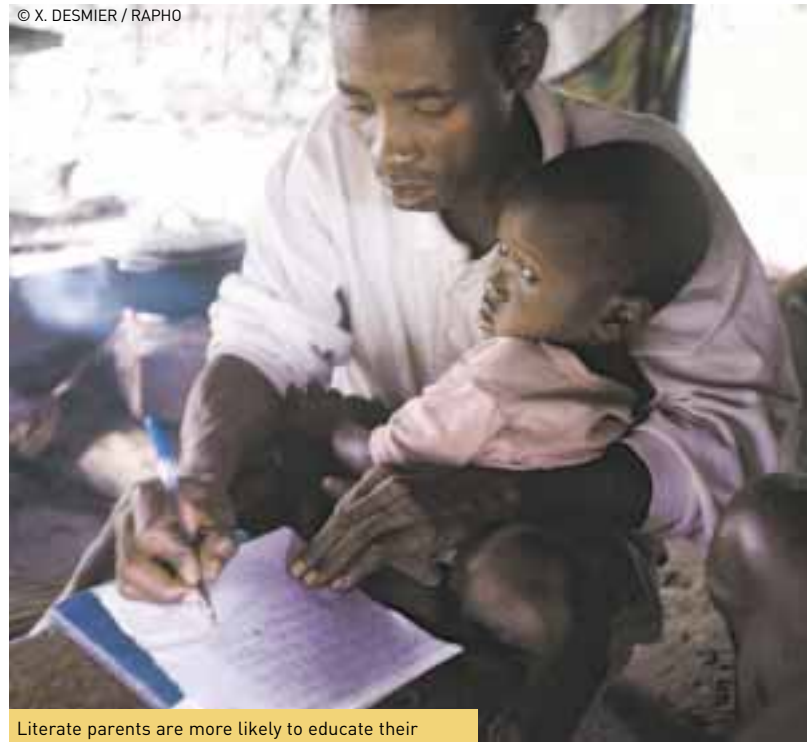
The number of students per teacher is a frequently used quality signal. Though their impact on learning outcomes remains a subject of debate, the very large class sizes observed in primary schools of many developing countries (e.g. one teacher for 60 pupils) are not conducive to adequate learning. In the countries with the highest pupil/teacher ratios, barely one-third of students who start primary reach grade 5. Pupil/teacher ratios have risen over the past decade in countries where net enrolments have expanded, particularly in sub-Saharan Africa and South and West Asia. Teacher numbers thus remain a problem in the very countries that most need to significantly increase their primary school systems' coverage. Quality will be at risk if entry requirements for teachers are further relaxed or teachers' workloads increase.

## Financing: how committed are governments?

Government spending on education is a good indicator of commitment to quality, despite the scarcity of detailed data on individual inputs such as school buildings and equipment and teaching/learning materials. Results from the Programme for International Student Assessment (PISA) show that students in countries that invest more resources in education tend to achieve better literacy skills. The relationship is clearest for the few developing countries in the study: countries of Central and Eastern Europe and those in Western European with relatively low expenditure levels. Other PISA results suggest that resources can have a strong impact on outcomes when initial spending is low, but that the impact levels off as spending increases.

Public spending on education represents a higher proportion of GDP in rich countries that have already achieved EFA goals (regional median: 5.2% in North America and Western Europe) than in poorer countries. These need to sharply expand already under-resourced school systems whose coverage is insufficient (regional medians: 3.3% in sub-Saharan Africa and 3.9% in East Asia and the Pacific; not available for South and West Asia and the Arab States).

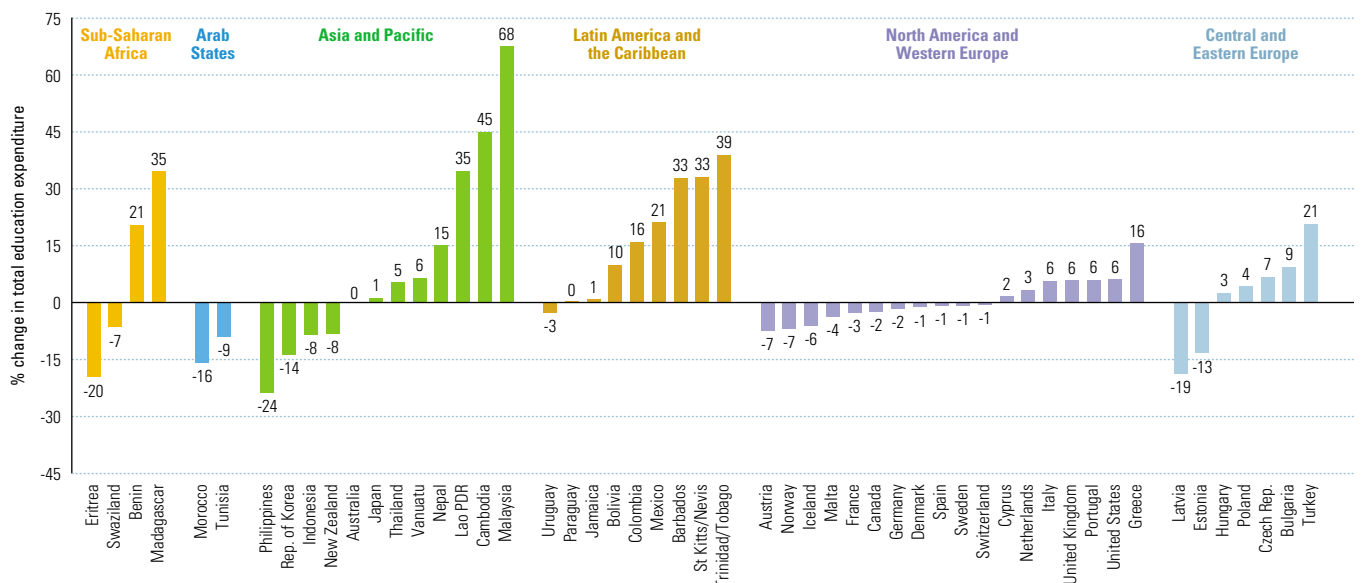
Figure 3.3 shows changes in real expenditure for the relatively few countries with data for both 1998 and 2001.



© X. DESMIER / RAPHO  
 Literate parents are more likely to educate their children: a father learning to read and write in Guinea

Expenditure was generally stable in developed countries over this period while quite a few developing countries increased spending considerably, notably in East Asia and Pacific, Latin America and the Caribbean. A few

Figure 3.3: Change in total education expenditure in real terms, for selected countries, 1998-2001



Source and notes: See Chapter 3 in the full EFA Report.

large countries, however, reduced expenditure significantly, including the Philippines (by 24%) and Indonesia (by 8%).

Debates continue to rage about the appropriate levels of teacher salary costs, which represent by far the greatest expenditure, especially in developing countries, often leaving a fraction (barely 1% in several cases)

for textbooks and other teaching materials. The need to save resources for other inputs has to be balanced against the need to pay teachers well enough to attract and retain qualified individuals.

Public/private partnerships are increasingly promoted as a way to offset the uncertainty and insufficiency of public expenditure.

They are controversial, raising quality and equity issues: communities differ in their ability to attract government expenditure and raise private funds.

### The need to save resources for other inputs has to be balanced against the need to pay teachers well enough to attract and retain qualified individuals

### How much are students learning?

Data from national and international assessments suggest that, in too many countries, children are not mastering basic skills. Low achievement is widespread. The countries most seriously affected tend to be those where school systems are weak in terms of enrolment and available resources, as the following examples illustrate.

**Latin America.** National assessments in four Latin American countries show low achievement levels for large proportions of students at the end of primary school. In Nicaragua (2002), 70% of students reached only the 'basic' level in language and more than 80% did the same in mathematics. In Uruguay (1999), the performance of 40% of sixth graders in language was considered 'unsatisfactory' or 'highly unsatisfactory'. In El Salvador (1999) 40% of sixth-graders reached only the 'basic' level in language, mathematics,

science and social studies. In Honduras (2002), the performance in language and mathematics was 'low' for 90% of sixth graders.

**Africa.** A study by the Southern Africa Consortium for Monitoring Educational Quality (1995-98) measured primary school students' reading literacy against standards established by national reading experts and sixth-grade teachers. In four out of seven countries, fewer than half of sixth-graders achieved minimum competence in reading. Low achievement is also evident in the PASEC study (1996-2001), conducted in six French-speaking African countries: 14% to 43% of grade 5 pupils had 'low' achievement in either French or mathematics. In Senegal, for example, over 40% of students had difficulty putting in order several numbers with two decimal points.

**Multi-region surveys.** According to the Progress in International Reading Literacy Study (PIRLS, 2001), large numbers of fourth graders in many countries have limited reading skills. In middle-income countries including Argentina, Belize, Colombia, the Islamic Republic of Iran and Morocco, more than half of students failed to reach the bottom quartile (the international benchmark). In a PISA study covering forty-three countries, 18% of 15-year-olds in OECD countries (mostly high-income) performed at the lowest of five reading literacy levels. The corresponding share in middle- and low-income countries was 40%.

Students from rural areas and socio-economically disadvantaged family backgrounds are particularly

Snack and homework time in Wuxi, China



© JIM CHARLES / RAPHO



vulnerable. The relationship between performance and socio-economic status, generally measured by parents' level of schooling, is instructive. A study conducted in twelve countries by the Latin American Educational Quality Laboratory (LLECE), for instance, showed that Cuba had the highest level of student achievement and the smallest variations in parents' educational attainment. Students in middle-income countries perform below the OECD average corresponding to their socio-economic status, and in several large countries (e.g. Indonesia) even students with the most favourable family background perform worse than OECD students with the least favourable background – suggesting unsatisfactory performance of the school system itself.

### Ensuring quality, expanding access

Can a relationship be drawn between NERs and test scores? There appears to be no trade-off between the two. The key question is how countries that combine high quantity and quality have achieved this. Areas where access to primary education is still restricted to a fraction of the population – sub-Saharan Africa, South and West Asia and some Arab States – need holistic policies to rebuild their school systems while other countries may focus on specific aspects of education policies, notably achievement or access by disadvantaged groups.

### Improving opportunities: early childhood care and education

Progress towards wider access to pre-primary programmes has been slow since 1998. Most countries in sub-Saharan Africa, the Arab States, Central Asia, and South and West Asia have low enrolment at this level and in some heavily indebted poor countries participation declined between 1998 and 2001. On average, a child in Africa can expect only 0.3 years of pre-primary schooling, compared to 1.6 years in Latin America and the Caribbean and 2.2 years in North America and Western Europe. Although gender disparity is less prevalent in early childhood care and education (ECCE) than in primary education, the gap between girls' and boys' participation is still large in some countries, including Morocco and Pakistan, where the GER for girls is three-quarters that of boys, or less. Children from the poorest backgrounds benefit most from ECCE provision in terms of care, health and education, yet the data show that they are also more likely to be excluded from it. Provision tends to be biased towards urban dwellers and richer households.

Assessing quality in ECCE provision is difficult both conceptually and empirically and has been insufficiently addressed at the global level. Most studies that aim to assess outcomes measure the impact of ECCE participation on primary school progression and achievement. Pupil/teacher ratios in ECCE are highest in sub-Saharan Africa (25:1 or more in almost half of countries) and lowest in Central and Eastern Europe and Central Asia (below 15:1 in three out of four countries). Evidence from middle- and high-income countries suggests that their pre-primary staff are considered on a par with primary teachers in terms of qualifications. By contrast, many teachers in lower-income countries are employed on a contract basis, receive low salaries and have limited or no professional training.

**Children from the poorest backgrounds benefit most from ECCE provision in terms of care, health and education, yet the data show that they are also more likely to be excluded from it**

### Literacy: an uphill battle in nine countries

The world counts nearly 800 million adult illiterates, representing 18.3% of the adult population.<sup>4</sup> Almost two-thirds of the world's illiterates (64%) are women. Severe illiteracy is concentrated in sub-Saharan Africa, the Arab States, and South and West Asia – regions where literacy rates are only about 60%. More than 70% of the world's adult illiterates (562 million) live in just nine countries – notably India (34%), China (11%), Bangladesh (6.5%) and Pakistan (6.4%). Realization of the EFA literacy goal crucially depends on policies implemented in these countries.

There has been significant progress in literacy levels over the 1990s in some countries. In Brazil, for example, the literacy rate increased from 80.1% to 88% in a decade, with the literacy rate for women standing at 88.3%.

Adult literacy skills can also be linked to progress toward UPE. A study covering the Niger, the Lao People's Democratic Republic and Bolivia showed that the risk of children being out of school is highest among

4. The UNESCO Institute for Statistics (UIS) has re-estimated the number of illiterates, using the latest data revisions. The present estimate is considerably lower than the 862 million for 2000 given in the *EFA Global Monitoring Report 2003/4*. This is a consequence of several factors, notably the release of literacy data from recent censuses and surveys in many countries. For instance, China's 2000 census has resulted in the UIS estimate of the number of adult illiterates in the country decreasing by over 50 million.

mothers with low literacy skills. In the Niger, 70% of primary-age children of illiterate mothers are not in school, compared with 30% among those whose mothers report being able to read easily.

The youth literacy rate (ages 15–24) is a significant indicator of progress towards EFA and the Millennium Development Goals, since it reflects how well the education system has delivered basic literacy skills during the previous decade. Youth literacy rates are above 70% in all regions and gender disparities are less pronounced than for adults.

## Life skills: assessment efforts

Goal 3 of the Dakar Framework concerns improving learning opportunities for youth and adults, particularly those who have never benefited from basic education or who have dropped out along the way.

The Lao People's Democratic Republic, Mali, Nepal and Senegal have jointly started to review their policies in this area, referred to as skills development. They began by estimating demand for such learning programmes on the basis of demographic and socio-economic factors, and concluded that existing non-formal programmes and secondary vocational education do not meet individual and societal needs. More generally, the diversity of learning programmes and providers reflects varied demand but renders monitoring difficult. Data are seldom available on the reach and effectiveness of programmes. A common monitoring framework could emerge if this four-country initiative were to be expanded.

## A global measure of progress: the EFA Development Index

Introduced in the 2003 report, the Education for All Development Index (EDI) incorporates indicators for four of the Dakar goals: UPE, adult literacy, gender parity and education quality. The data are insufficiently standardized to allow inclusion of ECCE (goal 1) and life skills (goal 3).

One indicator was chosen as a proxy for each goal: NER for UPE, the literacy rate among persons age 15 and over for adult literacy, the gender-specific EFA index

(arithmetical mean of GPIs for primary and secondary GER and the adult literacy rate) for gender and survival rate to grade 5 for education quality. The index covers 127 countries for 2001<sup>5</sup> (see box).

### Where countries stand on the EDI

- Forty-one countries (one-third of the total), almost all in North America and Western Europe and Central and Eastern Europe, have achieved or nearly achieved the four goals.
- Fifty-one countries have EDI values between 0.80 and 0.94. Almost half the countries in this category, most of them in Latin America, lag on the education quality goal, with many children who have access to school leaving prematurely, partly because of poor education quality.
- Thirty-five countries are very far from achieving the goals, with EDI values below 0.80. Of these, twenty-two are in sub-Saharan Africa. This category also includes three high-population countries: Bangladesh, India and Pakistan. Multiple challenges will have to be tackled simultaneously if EFA is to be assured for this category.

Trend analysis for the seventy-four countries with data for the four indicators in both 1998 and 2001 shows a clear – but not universal – movement towards achieving EFA. For about three-quarters of the countries, the EDI value rose. Low EDI countries, including Liberia, Mozambique, Togo and Yemen, saw increases of at least 15% (compared with a 2% average for the index as a whole) between 1998 and 2001. This demonstrates that rapid progress towards EFA can be made even in the poorest countries, given commitment and appropriate policies. Yemen achieved strong increases in all four EDI components. Twenty countries saw their EDI fall, partly on declines in survival rate to grade 5. ■

**Rapid progress towards EFA can be made even in the poorest countries, given commitment and appropriate policies**

2. EDI value can range from 0 to 1. The closer the value is to 1, the closer a country is to meeting its goals and the greater is its EFA achievement.

## Chapter 4

## Policies for better quality

© STEFAN BONESS / PANOS / EDITINGSERVER.COM



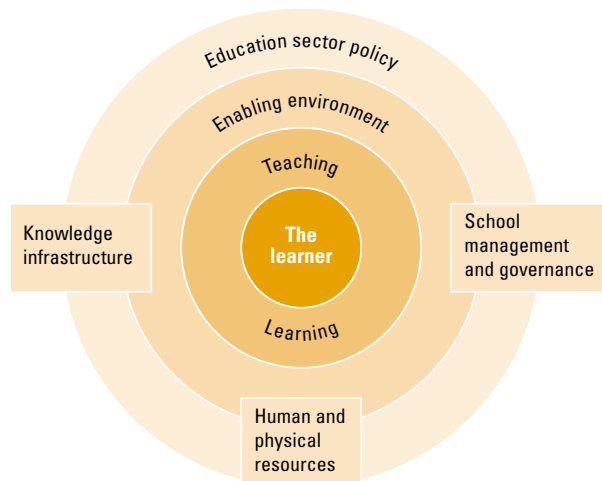
An enthusiastic student in Eritrea

- Diverse learners, inclusive responses
- Making a difference in the classroom: time, curriculum, books and language
- Teaching practices: structured and child-centred
- Decent facilities
- Cultivating leadership, managing schools
- Strengthening knowledge flows
- Teachers' earnings and professional development
- The politics of quality: combating corruption, building accountability, assuring ownership

Given the number of children who have not mastered basic skills by the end of primary school, there is every reason to invest in better learning. Most governments are under pressure from students, parents, employers and educators not only to expand opportunities for education but also to make institutions and programmes work better. However, governments of low-income countries and others with severe resource constraints face difficult choices.

It has been argued that governments should invest at least 6% of GNP in education, although this is not in itself a guarantee of quality. Even at existing investment levels, however, governments can make significant choices to influence learning conditions for the better.

The accompanying diagram provides a policy framework for improving the quality of teaching and learning by taking into account the various levels of and key actors in the education process.



## Include all learners

Learners are at the heart of the teaching and learning process. This may seem obvious but it is not always the reality. HIV/AIDS, disability, conflict and child labour practices put millions of children at an extreme disadvantage. In sub-Saharan Africa more than

11 million children under the age of 15 have lost at least one parent to HIV/AIDS. Their opportunities to learn are often curtailed by the need to care for sick family members or contribute to household income. Such situations call for inclusive policies that respond to diverse needs and circumstances.

Poor health and undernourishment affect a child's capacity to learn. In many countries, health and nutrition are successfully being addressed through school-based programmes that typically provide safe water, adequate sanitation, treatments such as deworming, school meals and teaching of basic health skills. In countries with high HIV/AIDS prevalence, the role of education in preventing further infection is paramount.

Large groups of potential learners are denied the benefits of education simply because they are different. Estimates suggest that there are 150 million children with disabilities worldwide and that fewer than 2% are enrolled in school. The debate between advocates of a strong inclusive approach and those arguing for special schools is unresolved. Either way, quality is an issue. In some countries, specially trained teachers are paid less than the standard rate because they attend to fewer children. Good inclusive education involves costs – for adapting curricula, training teachers, developing materials and making schools accessible. While inclusive education remains the overarching goal,

Students hard at work by candlelight in Guatemala



© Miguel Dewever-Plana / AGENCE VU



the two camps can be reconciled in a 'twin track' model giving learners a choice between these approaches within an inclusive policy context.

Children in countries affected by or emerging from conflict urgently require learning opportunities and emotional support. A recent survey of ten such countries found that more than 27 million children and youth lacked access to formal education. Curricula should ideally emphasize nutrition and sanitation, mine awareness, cultural activities, sport and values that promote peace. The Inter-Agency Network for Education

in Emergencies<sup>6</sup> is developing a set of minimum standards to help members of the international community and other actors ensure that learners in such situations receive education of sufficient quality.

Alternatives to formal schooling that offer more flexibility may be required to reach some

disadvantaged learners. The state of Andhra Pradesh in India, for example, operates a distance learning programme whose 100,000-plus participants include many dropouts, children from scheduled castes and children with disabilities. The programme provides equivalence with the formal primary system.

## Children in countries affected by or emerging from conflict urgently require learning opportunities and emotional support

## Improving teaching and learning

The teaching and learning process brings the curriculum to life. It determines what happens in the classroom and the quality of learning outcomes. Good practice requires attention to six key policy issues with direct impact on teaching and learning. It also requires attention to the resources that indirectly enable the process.

### Key policy areas

#### *Appropriate aims*

Policy dialogue must arrive at a relevant, balanced set of aims describing what learners should learn and why. The development of cognitive, creative and social skills is invariably included, but there is also concern for values, both global – respect for human rights, the environment, peace and tolerance – and more locally defined, such as cultural diversity. Many countries are working towards the right mix of universal and local by

linking curriculum with the social and economic life of local and national communities. Data on national curricula from 108 countries show a slight shift of emphasis over the past twenty years. While basic skills retain a prominent place, global values associated with citizenship and democracy, as well as human rights education, have come more to the fore.

#### *Subject balance*

As the goals and aims of curricula are reflected in the subjects taught in schools, there is a policy debate regarding how subjects are defined, how many are taught and the time allocated to each. In practice, the number of subjects or subject areas listed in official curricula around the world has changed relatively little over the last two decades. Their composition, however, does appear to be changing, especially with the incorporation of 'new' subjects relating, for example, to health, human rights, environment and technology, as opposed to the 'core' subjects relating directly to literacy and numeracy. Central to the core curriculum is the teaching and learning of reading. Literacy is a critical tool for the mastery of other subjects. It is also one of the best predictors of longer-term learning achievement. Reading must therefore be considered a priority area in efforts to improve the quality of basic education, particularly for learners from disadvantaged backgrounds.

#### *Good use of time*

Research shows consistent positive correlations between instruction time and student achievement, at both primary and secondary level. Significantly, this relationship appears stronger in developing countries. Yet, recent analysis suggests that, globally, annual intended instruction time has not increased. Indeed, many countries have reduced it, in part because of pressure to meet higher demand under tight resource constraints. Micro studies show that much time allocated for instruction is lost because of teacher and pupil absenteeism, shortage of classrooms, lack of learning materials and weak discipline. Although 1,000 'effective hours' of schooling per year is broadly agreed as a benchmark, few countries reach it. Better school management and more effective teaching strategies can help counter this trend.

#### *Pedagogic approaches for better learning*

In many countries, the commonly used styles and methods of teaching do not serve children well. Practitioners broadly agree that teacher-dominated pedagogy, placing students in a passive role is undesirable, yet such is the norm in the vast majority of classrooms in sub-Saharan Africa and elsewhere. Flagship programmes that can be found in all regions

6. <http://www.ineesite.org>

encourage child-centred, active pedagogy, cooperative learning and the development of critical thinking and problem-solving skills. Examples include Escuela Nueva in Colombia, Egypt's Community Schools, Mali's Convergent Pedagogy and schools run by the Bangladesh Rural Advancement Committee. Attempts to adopt such innovative methods have been a striking feature of pedagogical renewal in sub-Saharan Africa but results remain inconclusive and the costs are high.

On the spectrum running from traditional 'chalk-and-talk' teaching to 'open-ended' instruction, many educators advocate structured teaching – a combination of direct instruction, guided practice and independent learning. Typically, teachers present small amounts of material (pausing to make sure students understand) and encourage active participation. Much evidence suggests that structured teaching works far better than open-ended approaches for children from disadvantaged backgrounds, those with learning difficulties and those in large classes. It still allows for creating a child-centred environment with opportunities for individual discovery.

Geographically isolated areas may require special strategies such as distance learning, mobile classrooms and multigrade teaching. Curricula must be adapted accordingly and teachers trained to develop appropriate pedagogies, such as peer learning, group learning and self-study.

### **Language policy**

About 1.3 billion people – 20% of the world's population – have a 'local language' as their mother tongue. In such cases the choice of language(s) used in school is of utmost importance for the quality of teaching and learning. Evidence shows that starting instruction in the learner's first language improves learning outcomes cost-effectively, reducing grade repetition and dropout rates. In the most successful models, after the first few years of schooling, a gradual transition to the second language takes place. Zambia developed its own bilingual model, now firmly embedded in reforms to improve education quality. Papua New

Guinea, with its mosaic of 830-plus languages, uses over 434 for initial instruction in schools. The 1995 Education Reform Agenda made the vernacular the initial language of instruction, with oral English introduced at the end of the third year. Language instruction is a policy choice affecting curriculum, content and pedagogy. A balance

needs to be struck between enabling people to use local languages in learning and ensuring that they have access to global languages.

### **Learning from assessment**

Regular, reliable, timely assessment is a key to improving learning achievement. At classroom level, assessment may be classified as summative (evaluating achievement through externally devised tests) or formative (diagnosing how each pupil learns through observation). The goals are to give learners feedback and to improve learning and teaching practices. Some countries (e.g. Ghana, South Africa and Sri Lanka) have adopted formative assessment as a complement to formal exams. In many countries, local circumstances prevent the practice from being widely extended: adequate resources, teachers trained in assessment techniques and relatively small class sizes are required.

### **Enabling resources for better teaching and learning**

#### **National textbook policies**

While research is scarce on how teachers use textbooks in classrooms, such materials plainly make a difference to the quality of teaching and learning. A lack of textbooks can result from an inefficient distribution system, malpractice or corruption. A study in Zambia (2000) found that not even 10% of books procured had reached classrooms. Textbook market reform has contributed to higher availability and lower prices in many countries. In Uganda, textbook prices dropped by 50% as a result of liberalization. In other countries (e.g. Russian Federation), an open market has served some regions better than others. Equitable textbook development, including promotion of local publication, requires strong government coordination, preferably through a specialized national body, with involvement by relevant ministries, the private sector and civil society, along with elaboration of a national policy on textbooks. Strong political support made it possible for Brazil's government to supply nearly all its primary schools with library books, through its National School Library Programme.

#### **Safe and welcoming learning environments**

To achieve universal primary education, unprecedented refurbishing and building of classrooms is needed in many countries. Schools must be accessible for learners with disabilities and have facilities that assure a healthy learning environment. Clean water and adequate sanitation are vital. In sub-Saharan Africa, until recently, school construction projects rarely included latrines or water supply. In Mauritania and Chad, for instance,

**Evidence shows that starting instruction in the learner's first language improves learning outcomes cost-effectively, reducing grade repetition and dropout rates**

inclusion of latrines and water in primary school construction projects dates only from 2001-2002. Maintenance is a cost-effective measure that increases school building lifetime and quality, yet it is often overlooked in aid projects and government budgets; instead, the onus is on communities, which may lack resources for more than basic maintenance.

## Teachers: a critical investment

Teachers, critical to any reforms to improve quality, represent the most significant investment in the public sector budget. How to improve recruitment, training and conditions of service with limited means is a foremost policy issue.

### Rethinking training

To attract candidates, both developing and developed countries have been tempted to lower standards for entering teacher training. Though this option should be approached with care, room exists for increased flexibility in the various means of entering the teaching profession. Talent and motivation might be considered on a par with a certain amount of formal education, for example.

In the main models of initial training, formal instruction ranges from zero to five years, the practical training period may be short or long and the costs per student are often relatively high. Models involving long practical components require enough schools with capacity to coach the trainees. In Cuba, all pre-service training is school-based. In certain cases, school-based training can be combined with distance learning provided that trainees receive adequate materials and support. Training programmes tend to underestimate how long it will take trainees to master their subjects. Teacher trainers are frequently out of touch with the day-to-day realities of schools.

Policy makers in many countries may want to reconsider the balance between initial and in-service training. Newly qualified teachers require strong support, especially during their first year on the job. Directing investment towards practical training pays dividends. Best practice in ongoing professional support includes an incentive structure that lets teachers see the benefit of improving their practice and encourages schools to make better learning the heart of their educational vision.

### Earnings in decline

In many developing countries, teachers' earnings are too low to provide a reasonable standard of living (see box).

### Sierra Leone: primary school teachers take the strain

At the end of Sierra Leone's eleven-year civil war, in 2001, tuition fees were abolished and universal school meals introduced, spurring a dramatic expansion of primary school enrolment. Enrolments tripled in less than four years, leading to classes of over seventy. Around 20% of primary school teachers at government-funded schools are not on the public payroll. Many are volunteers with little or no professional training. Some are paid in kind by the community. The average monthly salary for government primary school teachers in late 2003 was US\$50. In real terms, teachers' pay has fallen by over half since the mid-1990s. Most teachers have to maintain a household of four to five people on less than US\$2 a day. Pay is often late as well. In urban areas, teachers earn additional income through private tuition. There are suggestions that some teachers deliberately do not teach the full syllabus, forcing students to attend private classes. In rural areas, teachers commonly sell cakes and sweets to their pupils during breaks. Despite growing demoralization, teacher absenteeism, which was around 20% in late 2001, appears to have fallen somewhat.

**In many developing countries, teachers' earnings are too low to provide a reasonable standard of living**

Over time, teacher earnings have tended to decline, relative to comparable groups. In developing countries, average primary school teachers' salaries in 1975 were more than six times as high as per capita GDP, but by 2000 the ratio had been nearly halved. The trend is particularly marked in French-speaking Africa, where the ratio fell to around one-third of its former level (see table 4.1).

In some high- and middle-income countries, teachers became better off in real terms over the 1990s, while in some low-income countries, real earnings dropped by more than 20%. In many countries of Africa, teacher earnings in 2000 were lower in real terms than in 1970.

**Table 4.1: Ratio of average primary teacher salary to per capita GDP, by region, 1975-2000 (countries with per capita GDP below US\$2 000 in 1993)**

	1975	1985	1992	2000
All countries with per capita GDP below US\$2 000	6.6	4.6	4.3	3.7
Africa	8.6	6.3	6.0	4.4
English-speaking	4.4	3.5	3.6	4.2
French-speaking	11.5	8.0	6.3	4.8
Sahel	17.6	11.8	8.2	6.4
Asia	3.7	2.7	2.5	2.9
Latin America	2.7	2.9	2.3	2.3
Middle East and North Africa	5.6	2.8	3.3	3.3

Source: Chapter 4 in the full EFA Report.

Moves to reduce the average level of teachers' earnings are fraught with difficulty and could seriously undermine quality. The burden of salary costs can be lightened through other measures, including larger classes (when possible), multigrade teaching and multi-shift schooling, given careful application in the right context.

### Attracting teachers

To achieve UPE, many additional teachers are needed. Pupil/teacher ratios of 60:1 or more have been recorded in countries where enrolments have recently surged. Several countries in Africa and Asia appoint parateachers on short-term contracts for lower wages and with fewer benefits than their career teacher counterparts. Governments face a challenge in supporting such teachers without further undermining regular teachers' conditions of service.

A well-defined national framework is required to ensure that all schools are staffed. Posting teachers to rural schools in areas where they are not

fluent in the language can harm quality. Incentives (e.g. opportunities for further study, housing subsidies) to work in remote rural environments may be required to ensure that all schools have qualified teachers.

**Incentives to work in remote rural environments may be required to ensure that all schools have qualified teachers**

### Better schools

The notion of improving a school in its totality, as distinct from strengthening individual inputs or processes, has gained ground worldwide. The view finds expression in many different but related frameworks, with names such as *school improvement*, *whole school development* and the *child-friendly school*. Such models often imply giving

schools greater autonomy. The arguments are compelling: greater freedom can empower teachers, trim bureaucracy and bring decision-making powers closer to where problems are. So far, however, there is not enough evidence about the impact of school autonomy on learning outcomes. Broad agreement exists that certain conditions are needed if quality is to be improved. These include a strong and supportive central government, strategies to strengthen capacity and provide professional support to schools and clearer accountability. Other key elements are a central monitoring structure and making sure schools receive performance-based information.

Head teachers are critically important to this endeavour: the nature of their leadership can strongly influence school quality. In many developed countries, specialized institutions exist for honing school leadership skills. This is seldom the case in low-income systems, where classroom teachers may simply be promoted without any further training. Yet, the trend to greater autonomy means administrators may be required to take on new, more complex managerial roles. South Africa is introducing a policy on strengthening school leadership and Kenya's Primary School Management Programme (PRISM) has provided skills development for 16,700 teachers. In any reform aimed at greater autonomy for schools, accountability must be clearly defined. Without an overarching national policy, there is a strong risk of increasing disparities in performance.

In many developing countries, the organization of schooling requires difficult decisions about how to make the most of scarce resources, especially where primary school enrolment has rapidly increased but new funding has not. Multi-shift schooling is one option that can increase the supply of school places through efficient use of existing resources – buildings, facilities, books and teachers. It puts enormous pressure on those charged with managing schools, however, entailing a potential loss of quality. It requires meticulous scheduling and appropriate management structures.

### Supporting schools, informing policy

Access to knowledge about what works in improving education quality can make a significant difference. The actors and institutions involved in generating and sharing such knowledge make up the national knowledge infrastructure. To enhance the relevance of education research, countries such as South Africa and the United Republic of Tanzania have set up bodies

Studying at an outdoor school in Pakistan





bringing together policy-makers, practitioners, academics and representatives of NGOs and funding agencies. Action research can also help bridge the gap between theory and practice and lead to wider application of local solutions. Many countries have put in place professional advisory bodies, to support schools. These include Teacher Resource Centres that provide teaching resources and enhance the sharing of ideas among teachers, educationists and policy-makers. Investment in networks and innovations designed to develop and share knowledge on education can yield significant returns, by enabling schools to learn from each other and make better use of limited resources. Moreover, it establishes a culture of quality improvement based on relevant knowledge and evidence.

## The politics of reform

Any policy change or reform entails costs, but before these can be addressed there must be a national consensus on quality. Once this primary political requirement is met, priorities can be framed within a broad approach. Successful education reforms have been achieved in very diverse political contexts and

in societies with greatly varying degrees of wealth. Among the issues having a direct impact on whether reforms designed to improve quality will make a difference, three deserve particular attention: forming partnerships with teachers and other stakeholders, strengthening accountability and combating corruption.

**Successful education reforms have been achieved in very diverse political contexts and in societies with greatly varying degrees of wealth**

### *Room for consultation*

Given the central importance of teachers in improving quality, their involvement as a profession, particularly through unions and professional associations, is vital. The extent to which teachers' unions engage in negotiations on conditions of service varies enormously by region and country. The advent of democratic governments in Latin America has considerably improved the situation there, while countries that are strengthening democracy (e.g. Eastern European countries and South Africa) face the additional challenge of building a culture of dialogue. The Arab States and some Asian countries have furthest to go. The capacity of teachers' organizations to do research also needs to be supported. At the international level, a fragile but promising dialogue involving donors, teachers'

organizations and NGOs is under way. A reflection of this is found in the World Bank's review of trade union participation in the Poverty Reduction Strategy Paper processes in twenty-three countries.

### *Accountability for all*

Codes of conduct can promote quality in education by setting ethical standards and spelling out mutual accountability principles. Codes usually cover issues such as admission to schools, service conditions of teachers and other staff, examinations, evaluation procedures and resource mobilization. Some encompass the whole system while others focus on teachers. Ministries of education are generally responsible for enforcing them. To be effective, codes must be designed in cooperation with the teaching profession and be widely disseminated and strong mechanisms for lodging complaints must exist. When codes are well understood they can improve the school environment and enhance teachers' commitment.

### *Combating corruption*

Several studies in the past decade have emphasized the negative influence of corruption on development. A distinction should be made between graft and corruption: graft is a relatively minor form of rule-breaking often stemming from need, as when a teacher sometimes misses classes to earn extra income because salaries are too low or irregular. Corruption is more severe. Decentralization, privatization and outsourcing have led to new opportunities for corruption. Corrupt practice may involve fraud and embezzlement in such areas as school construction and textbook supply, payroll padding, bribery for school places or good exam results and nepotism in teacher appointment. Measures and strategies that have proved effective in combating corruption include regulations (accompanied by strengthening of institutional capacities to enforce them) and increased ownership of the management process. Communities can be encouraged to exert pressure on authorities.

Many of the policy areas covered in this chapter reflect practice around the world. The key concepts are understanding the diverse needs of learners and supporting reforms that focus on better teaching and learning outcomes – relevant content, enough learning time, structured teaching in child-centred classrooms and assessment. It is critical to support teachers and ensure that schools are well managed. These strategies must fit into a sound, coherent, long-term vision of education, informed by a shared store of knowledge. They must also be backed up by strong political will and sufficient resources. ■

## Chapter 5

# Meeting our international commitments

© Ahmad Masood / REUTERS



Reconstructing education systems is a foundation on which to rebuild societies. Afghanistan, 2002

- The status of aid : far from enough
- Evaluating aid effectiveness
- Does aid target quality?
- The cost of dealing with multiple donors
- Efforts towards harmonization
- Fast-Track Initiative: year three

The dual challenge of improving quality and equitably expanding access requires a level of sustained investment beyond the reach of a large number of countries. This chapter takes stock of aid flows, analyses efforts to improve coordination between donors and with governments and reviews evidence on the effectiveness of aid for education.

## The big picture

Total development assistance showed some signs of recovery in 2002, with net disbursements reaching nearly US\$60 billion in 2002 – the highest level since 1992. This upturn reflects growth in bilateral aid and may partly be attributed to pledges made at the International Conference on Finance for Development in Monterrey, in 2002. If all pledges made at Monterrey are fulfilled, aid levels would rise by at least US\$16 billion, or some 30% in real terms, by 2006. Though encouraging, this falls far short of the estimated additional US\$50 billion a year required to achieve all the Millennium Development Goals (MDGs). Nor is there any guarantee that the extra funds will go to finance human development goals such as EFA.

### Bilateral aid: signs of recovery

Bilateral aid to education is inching up<sup>7</sup>: in 2002, commitments exceeded US\$4 billion for the first time since 1999 (see figure 5.1). This represents about 9% of total official development assistance (ODA) commitments and the share can be expected to increase, given the pledges to education made since Dakar. In 2001 and 2002, eight countries<sup>8</sup> each committed an annual average of at least US\$100 million to education, together accounting for 85% of bilateral education aid. Total bilateral education aid is concentrated in sub-Saharan Africa (30%), East Asia and the Pacific (27%) and the Arab States (18%).

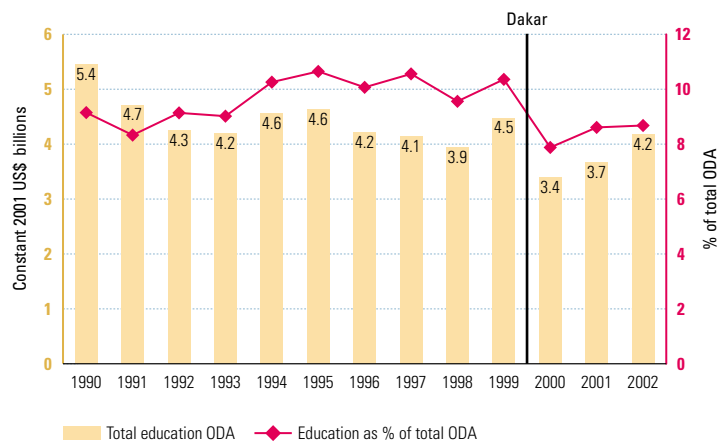
It is possible to analyze the relative priority that donors assign to education,<sup>9</sup> though it should be borne in mind that international reporting procedures may underestimate aid to education, because of a trend towards aid that supports general budgets and projects that target more than one sector. At the high end, New Zealand puts 3.5 times more priority on education than the average for all OECD-DAC countries. The United States, meanwhile, gives relatively low priority to education in its overall aid package. Among the eight major donors, France, Germany, Canada and Spain give particularly high priority to education, by this measure.

7. This calculation excludes funds that agencies provide through general programme assistance and multi-sector aid, some of which is allocated to education. The OECD-DAC reporting system does not count whatever part of general programme aid and multi-sector aid may be allocated to education.

8. Canada, France, Germany, Japan, the Netherlands, Spain, the United Kingdom, the United States.

9. The indicator measures the proportion of aid each donor allocates to education as a fraction of the OECD-DAC mean. A value above 1 means the donor gives more importance to education than the average for all agencies.

Figure 5.1: Bilateral aid commitments to education, 1999–2002



Notes and sources: See Chapter 5 in the full EFA Report.

**If all pledges made at Monterrey are fulfilled, aid levels would rise by at least US\$16 billion by 2006**

Bilateral aid to basic education reached US\$0.9 billion per year, or 29% of all bilateral education aid, in 2001–02. Among the eight big donors, the Netherlands, the United Kingdom and the United States allocate more than 70% of their education aid to basic education while the three largest contributors – France, Japan and Germany – tend to favour post-secondary education.

### Multilateral agencies: not much change

Multilateral agencies – excluding the World Bank – allocated US\$0.66 billion in 2001–2002 to education. This amounted to about 17% of the bilateral education aid total and was down from US\$0.8 billion of 1999–2000. Although the European Commission continued to dominate multilateral aid flows, EC aid to education fell one percentage point in 2001–2002, to reach 4% of total EC aid.

The World Bank remains the biggest single external supporter of education. The education sector's share of its total lending gradually increased from 3% in the 1960s to around 7% in the 1990s before declining slightly to 6% in the early years of the present decade. During the 1990s, the composition of World Bank education lending changed: basic education remained the most important sub-sector, but support to general education rose significantly.<sup>10</sup>

10. The World Bank defines basic education as pre-primary, primary, non-formal education and adult literacy programmes. General education includes projects covering more than one education sub-sector.

## Adding up the pledges

Total bilateral and multilateral aid to basic education amounted to US\$1.54 billion over 2001–02 – scarcely more than the 1999–2000 total. Clearly, a significant financing gap remains even if new pledges for increased aid are fulfilled. If donors do deliver an additional US\$16 billion of development aid by 2006, as pledged in Monterrey, that will mean an extra US\$0.4 billion of aid per year for basic education, assuming the sector allocation of funding does not change. An international Finance Facility (proposed by the United Kingdom) drawing on the world’s capital markets, to help meet the MDGs by 2015 would generate an additional US\$1.24 billion for basic education per year.<sup>11</sup> Total annual international resources going to basic education would then amount to US\$3.2 billion – a doubling of current assistance but short of the estimated US\$5.6 billion in annual additional resources required just to achieve UPE and gender parity in schooling.

## Improving the lives of the poor

The issue of aid effectiveness and the extent to which it contributes to better learning outcomes is crucial. Indeed, good use of education aid today could be an incentive for higher commitments in the future.

**With the advent of a global coalition committed to achieving the MDGs, there is a broadening consensus that sustainable improvement in poor people’s lives is the key indicator for assessing aid**

With the advent of a global coalition committed to achieving the MDGs, there is a broadening consensus that sustainable improvement in poor people’s lives is the key indicator for assessing aid. Three core principles

of international good practice are emerging: the importance of sound, nationally owned development policies, close alignment of donor support with national governments’ priorities and harmonization of donor practice. Growing evidence suggests that sound national policies to eliminate poverty are an increasingly important consideration for funding agencies when determining where their aid goes.

Education aid should be seen in this context. If good national policy is the starting point for effective use of aid, there is no apparent shortage of national education sector plans. Out of 138 countries surveyed, 76% have

an education sector or sub-sector plan and 83% are developing national EFA plans. Fifty-eight countries (40%) have full or interim Poverty Reduction Strategy Papers. These facts should, however, be treated with caution. Are sector plans and EFA plans the same thing? Evidence of how these plans are being implemented is patchy. Some are clearly broad statements of intent, written in some cases to meet international requirements.

## Evaluations of aid to education

Several evaluations on the quality of aid to education have recently been conducted. A study of the European Community’s assistance to education carried out in countries of Africa, the Caribbean and the Pacific between 1993 and 2000 found that donor coordination was at its best when ‘sector-wide approaches’ (as opposed to funding of discreet projects) were in place and that these were the ‘optimal’ approach for education programme aid.

*The Joint Evaluation of External Support to Basic Education in Developing Countries* was commissioned by thirteen bilateral and multilateral agencies in association with Bolivia, Burkina Faso, Uganda and Zambia. The study points to weakness in links between programme design and what works locally, especially in terms of teacher education, curriculum, materials and pedagogical approaches. Pilot studies are often not expanded to larger programmes. What is most lacking, says the evaluation, is ‘willingness and determination to improve basic education through locally developed solutions...which are built from the “ground-up” rather than through the application of blueprints and templates developed at a global level.’ The study concludes that sound partnerships lie at the heart of effective use of basic education aid. Factors affecting partnerships’ quality include how donors and ministries engage, investment in administrative and technical capacity, agreement on well-defined roles and responsibilities and the relevance of aid to context.

A third evaluation studied assistance provided to primary education in Bangladesh, Ghana, India, Indonesia, Kenya and Malawi by the United Kingdom’s Department for International Development from 1998 to 2001. The evaluation highlights tensions between efforts to maximize local ownership and increase donor involvement in policy and management, difficulties of involving several ministries and levels of government and the lack of comprehensive or accurate data.

All three evaluations conclude that while there is a welcome move towards a more coherent and

11. This set of assumptions is employed for illustrative purposes only. It is likely that not all donors would join the initiative and that proportionate contributions would vary.



coordinated approach to providing support to education, the actual choice of instrument must be sensitive and appropriate to context. Sector-wide approaches are helping strengthen national ownership of policy and strategies for education development and providing opportunities for donors to address the issue of quality holistically. On the other hand, the shift away from project approaches has increased the amount of policy dialogue and donors' imposition of conditions. Both approaches can challenge local ownership, increase the need for coordination and slow down implementation, particularly where government financial management is weak. In this context, capacity building becomes crucial.

## Aid and quality: building the links

Only a few studies have attempted to link aid and better learning outcomes. In Ghana, for instance, World Bank support to primary education through provision of textbooks and improved school infrastructure was shown to have contributed directly to educational attainment and achievement.

### Only a few studies have attempted to link aid and better learning outcomes

Some countries are establishing their own core indicators to measure progress. In Uganda, where over 50% of the primary education budget is externally funded, the ministry dealing with education uses indicators to examine the quality of primary education. These include teacher qualification, pupil/ teacher ratios and the percentage of pupils reaching grade 6 who can master a set of nationally defined basic learning skills. Progress is assessed in regular joint reviews undertaken with donors. Similarly, Ethiopia identified six quality indicators relating to teacher qualifications, pupil/textbook ratios and learning achievement.

These examples show that some funding agencies increasingly assess the extent to which their aid is having an impact on quality, by using the government's own core indicators as the basis for measuring progress, rather than targets specific to an individual donor programme.

While it remains difficult to systematically measure the impact of aid on quality, several important intermediate indicators can help. They include evidence of good education sector policies that are coherent and realistic. Such policies are likely to have clear objectives for access, equity and quality, with well-defined targets and indicators. These become important benchmarks for governments and milestones for agencies in assessing progress. In this regard, attention to regular monitoring and review takes on particular significance.

## Fragmented aid programmes

Insights can also be gained into the effectiveness of aid by analysing the extent to which a given donor spreads its resources across a small or large group of countries. Results from a study of twenty major bilateral donors and 149 recipient countries show that donor agencies distribute aid to an average of sixty-three countries. France, Germany and Japan made commitments to education in more than 100 countries while, at the other end of the spectrum, Greece supported eight. Three quarters of bilateral education commitments went to thirty-eight countries. This distribution of aid to a large number of recipient countries has significant implications for transaction costs. The quality of support would be strengthened if the average number of countries receiving education aid were to be reduced substantially. This issue extends well beyond the education sector.

Teaching geography to children from pastoral communities in Ladakh, India





In Angola, bullet holes tell of a civil war that has displaced around two million people

One consequence is that recipient countries deal, on average, with seven to twelve donors – a process that also involves high transaction costs unless the aid is well coordinated. The figure tends to be much higher in countries strongly dependent on aid. Zambia, where 43% of the education budget is externally funded, works with close to twenty donors. In the late 1990s, the country reached agreement on a Basic Sub-Sector Investment Programme. As it was conceived, aid funds would be pooled and managed by the education ministry, but in practice it had to accommodate agencies' different financing requirements. In Mozambique (28% of the education budget externally funded), an Education Sector Strategic Plan was approved in 1998, leading to a common planning and monitoring cycle, under strong government leadership.

### The Fast-Track Initiative: an international partnership

The Fast-Track Initiative (FTI) offers a distinctive international response to the challenge of donor harmonization and alignment in support of national policies. This international partnership was designed to accelerate progress towards the achievement of universal primary completion (UPC) by 2015. Launched by the Development Committee of the World Bank/International Monetary Fund in 2002, the partnership now includes over thirty multilateral and bilateral agencies and regional development banks.

In 2004, partner agencies agreed a framework to guide the FTI's development (see table). It is now defined as a global initiative open to all interested funding agencies and all low-income countries. The framework identifies six goals and five principles designed to guide the FTI's activities.

FTI goals	FTI principles
<ul style="list-style-type: none"> <li>■ More efficient aid for primary education</li> <li>■ Sustained increases in aid for primary education</li> <li>■ Sound sector policies in education</li> <li>■ Adequate and sustainable domestic financing for education</li> <li>■ Increased accountability for sector results</li> <li>■ Global mutual learning on what works</li> </ul>	<ul style="list-style-type: none"> <li>■ Country ownership</li> <li>■ Benchmarking</li> <li>■ Support linked to performance</li> <li>■ Lower transaction costs</li> <li>■ Transparency</li> </ul>

While agreement on the framework represents good progress, larger questions remain. The first concerns the extent to which FTI is a direct funding mechanism. As of April 2004, the EFA-FTI Catalytic Fund had attracted US\$236 million from four donors, which is not enough even for the immediate needs of the first countries invited to join the FTI.<sup>12</sup> A second question involves the extent to which FTI membership will require adherence to benchmarks included in the World Bank's Indicative Framework on Universal Primary Completion regarding policies on issues such as teacher salaries and system financing. In principle, when in-country donors are satisfied that an education sector plan addresses the key issues, it is considered endorsed for FTI support. Whether the World Bank and other donor agencies truly accept this concept is unclear. Third, as previous reports noted, membership linked to specific criteria could exclude countries where the EFA challenge is greatest. Fourth, a stronger focus is needed on embedding plans for primary education within wider sector and poverty reforms.

Although some progress has been made in improving co-ordination for EFA, it is not yet commensurate with the challenge of achieving the Dakar goals. Galvanizing international political will and commitment remains the most pressing need. The likely shortage of resources increases the importance of ensuring that aid is used as effectively as possible and that it is directed towards the countries that need it most. Better coordination between donors, the right choice of funding modalities and regular monitoring of education quality are all key to improving the performance of education systems. ■

12. For the first ten countries endorsed for FTI support, the financing gap has been estimated at US\$204.5 million in 2004 and US\$231.5 million in 2005.

## Chapter 6

# Towards EFA: the quality imperative

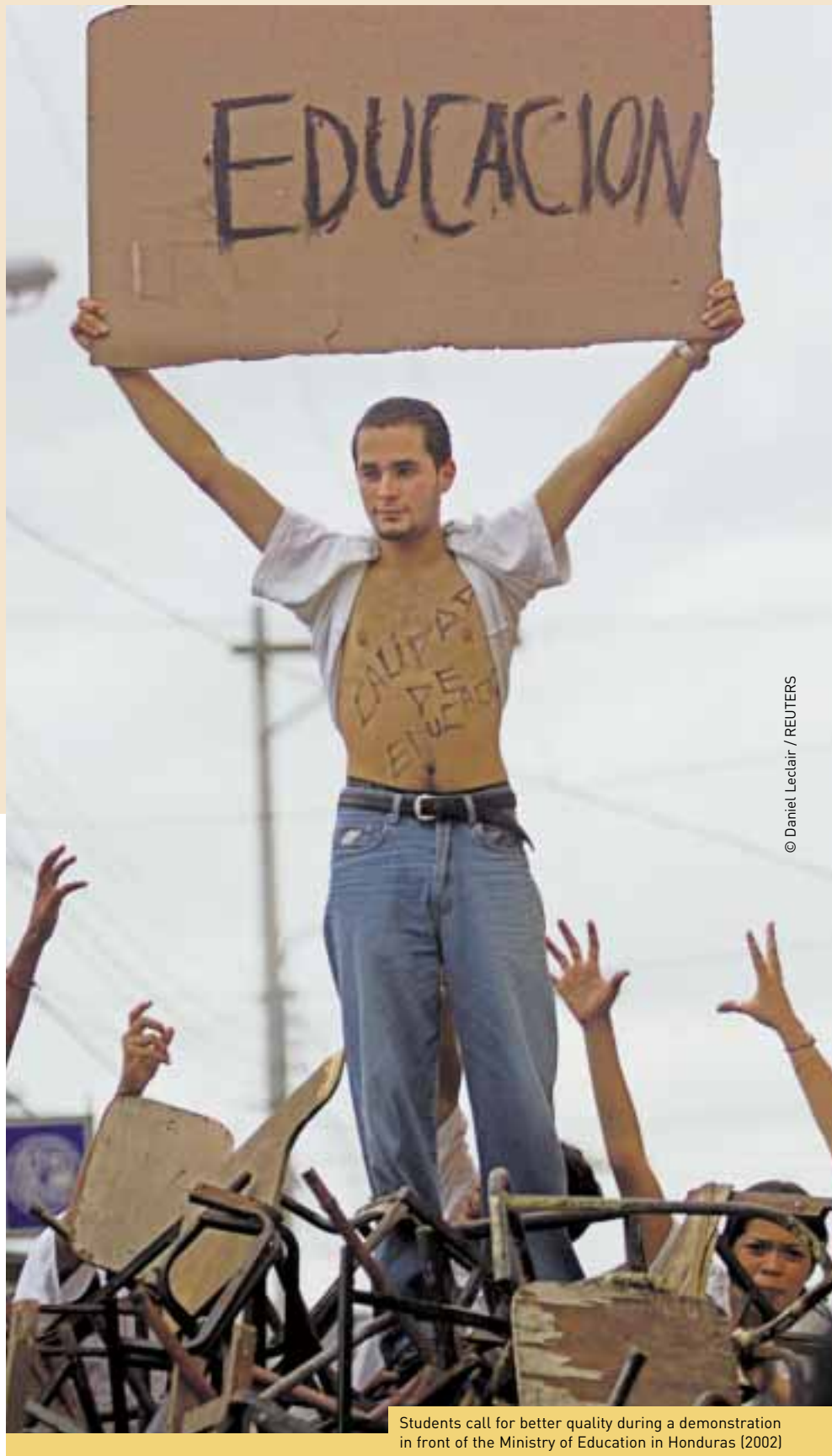
Whether a particular education system is of high or low quality can be judged only in terms of the extent to which its objectives are being met.

Governments, international and non-governmental organizations, teachers, families and learners may not see these in the same light. But for most of the above groups, the objectives of education include at least two elements: the improvement of cognitive skills and the promotion of attitudes and values that are judged necessary for good citizenship and effective life in the community.

Quality must also be judged in the mirror of equity. An education system characterized by gender inequality or discrimination against particular groups on ethnic or cultural grounds is not of high quality. A shift towards equity represents, in itself, an improvement in the quality of education.

As this report emphasizes, the quality of education makes a significant difference to prospects of achieving a wide range of individual and development goals – from better health to higher incomes and stronger economic potential.

Simply focusing on quantitative goals such as universal primary education will not deliver EFA. From a policy perspective, one fundamental reason this is so is that, in many parts of the world, an enormous gap prevails between the numbers who are graduating from schools and those among them who have managed to master a minimum set of cognitive skills.



Students call for better quality during a demonstration in front of the Ministry of Education in Honduras (2002)



**Table 6.1: Quantitative and qualitative indicators of primary school participation**

Study	Country	Cohort	% ever enrolled (ages 6-14)	% that survived to grade 5	% that achieved minimum mastery	NER in primary for the period before the test
<b>SACMEQ (1995)</b>						
Grade 6 reading test	Malawi	100	91	31	7	69
	Mauritius	100	99	98	52	99
	Namibia	100	97	74	19	84
	U. R. of Tanzania	100	87	70	18	54
<b>PIRLS (2001)</b>						
Grade 4 reading test	Colombia	100	98	60	27	87
	Morocco	100	99	77	59	81
<b>PASEC (mid-1990)</b>						
Grade 5 French test	Burkina Faso	100	35	25	21	28
	Cameroon	100	88	45	33	73
	Côte d'Ivoire	100	65	45	38	49
	Guinea	100	48	32	21	36
	Madagascar	100	78	31	20	63
	Senegal	100	48	42	25	51
	Togo	100	82	49	40	66

NER: net enrolment ratio.

Source and notes: See Chapter 6 in full EFA Report

Table 6.1 illustrates the scale of this problem for selected African and Latin American countries. It shows that, while NERs in many countries were high, only a small proportion of school leavers achieved nationally defined minimum mastery levels.

On average, for all countries shown, fewer than one third of children had achieved minimum mastery by grades 4 to 6, even though the average NER for the countries was 65%. A policy aimed exclusively at pushing net enrolments towards 100% in these countries would

ignore participants' learning needs, thus failing to realize some of the most important benefits of school attendance for a substantial majority of children.

Governments committed to improving learning outcomes face difficult choices, particularly in low-income countries where class sizes are large and where teachers often have scarcely more formal education than those they are teaching. One approach is to define a minimum package of essentials that every student and every school has the right to expect. But there is a risk that an emphasis on minimum standards could restrict more innovative activities.

This report describes policies that are not necessarily beyond the reach even of the countries with the most constraints on resources. They start with a focus on the

In India, a teacher chats informally with her students



© O. FOLLMI / RAPHO



learner and emphasize the dynamics of teaching and learning, supported by a growing body of research on what makes schools and teachers effective. Factors such as curriculum, learning time, pedagogical strategies and materials are stressed. Investment in teachers and their professional development is critical, as the experience of countries that have achieved high learning outcomes clearly shows. School leadership and opportunities for mutual learning and experience sharing are also vital to building a culture of quality.

Links among different elements of education can help improve quality. These are often hidden or ignored by the compartmentalized machinery of government. Early childhood care and education programmes promote subsequent scholastic achievement and lifelong learning. Literacy improves adults' commitment

to their children's education and is desirable in its own right. Gender-sensitive policies directly improve the quality of education and its outcomes.

**Gender-sensitive policies directly improve the quality of education and its outcomes**

Successful qualitative reform requires a strong leading role by government. Although external assistance can boost resource levels and help in managing school systems, it cannot make up for the absence of a societal project for educational improvement, nor can outsiders engineer such a project. The domestic political process is ultimately the guarantor of successful reform. If it favours change, the prospects for external assistance facilitating a move towards higher-quality universal education are profoundly improved. ■

**The domestic political process is ultimately the guarantor of successful reform**

### To order the EFA Global Monitoring Report 2005

The Report is for sale online at: <http://unesco.org/publishing>

Yes I wish to order  copies of the **Education for All – THE QUALITY IMPERATIVE**  
**EFA Global Monitoring Report 2005** (ISBN: 92-3-103976-8)  
 Price: €24  x  =   
 Plus flat postage rate for any order: €4.57  
 Total

#### Delivery address:

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ Postcode: \_\_\_\_\_ Country: \_\_\_\_\_

#### Payment enclosed

Cheque\*     Visa     Eurocard     Mastercard

Card number: \_\_\_\_\_ Expiry date: \_\_\_\_\_

\*Cheques to the order of UNESCO Publishing in Euros drawn on a bank established in France.

Please send this order form to:

**UNESCO Publishing**, 7 place de Fontenoy, 75352 Paris 07 SP, France

[www.unesco.org/publishing](http://www.unesco.org/publishing)

e-mail: [publishing.promotion@unesco.org](mailto:publishing.promotion@unesco.org)

fax: +33 1 45 68 57 37

# Summary

5

EFA Global Monitoring Report 2005

Quality is at the heart of education. It influences what students learn, how well they learn and what benefits they draw from their education. The quest to ensure that students achieve decent learning outcomes and acquire values and skills that help them play a positive role in their societies is an issue on the policy agenda of nearly every country. As many governments strive to expand basic education, they also face the challenge of ensuring that students stay in school long enough to acquire the knowledge they need to cope in a rapidly changing world. Assessments show that this is not happening in many countries. This Report reviews research evidence on the multiple factors that determine quality, and maps out key policies for improving the teaching and learning process, especially in low-income countries. It monitors international assistance to education and progress towards the six goals of Education for All, to which over 160 countries committed themselves in 2000, at the World Education Forum.

*Cover photo*

A child in the classroom of Tintihigrene school, Mali, where there is one teacher for 65 pupils.

© CRISPIN HUGHES / PANOS / EDITINGSERVER.COM

