

Education for All: beating poverty, unlocking prosperity

A review by Gordon Brown



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Background papers covering some of the new research on teachers, the links between education and economic growth, and inequalities in education are available on the Global Monitoring Report website: www.unesco.org/en/education/efareport

Comprehensive references will be provided with the final version of the report.

This report is available to download in full at www.gordonandsarahbrown.com

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Acknowledgements

Education holds the key to expanded opportunity. It gives people the power to escape poverty, to influence decisions that affect their livelihoods, and to lead more secure and fulfilled lives. And it equips countries to accelerate progress towards the Millennium Development Goals (MDGs) and share in global prosperity. Just over 10 years ago, governments across the world recognized this when they adopted an ambitious set of targets aimed at making decent quality education available to all of the world's children. Yet progress towards these targets has been uneven and slow, with damaging consequences for wider efforts to combat the poverty and extreme inequality that have emerged as hallmarks of globalization.

In January 2011, I was invited by the Global Campaign for Education (GCE) to join Graça Machel in convening GCE's high-level panel on Education for All – and I was delighted to accept that invitation. The full membership of the high-level panel will be announced ahead of its first meeting in July and current members are:

[Her Majesty Queen Rania Al-Abdullah of Jordan](#)

[Kofi Annan](#), Seventh Secretary-General of the United Nations, Chairman of the Africa Progress Panel and the Alliance for a Green Revolution in Africa

[Dr. Jan-Peter Balkenende](#), former Prime Minister of the Netherlands, Professor, Erasmus University and Partner, Ernst and Young

[Kevin Cahill](#), Chief Executive, Comic Relief

[Angélique Kidjo](#), Recording Artist and Advocate

[The Right Honourable Paul Martin](#), former Prime Minister of Canada

[Kailash Satyarthi](#), Chair of Global March on Child Labour and former President of GCE

[Prime Minister Jens Stoltenberg of Norway](#)

[Belinda Stronach](#), Business and Public Leader

[Kevin Wall](#), Founder of Live Earth, Founder and CEO of Control Room

From our different backgrounds and perspectives, we share a common concern not just with the prospect of the Education for All goals being missed in many of the world's poorest countries, but also with the increasingly peripheral position of education on the international development agenda. The remit of the high-level panel is to explore what has gone wrong and – more important – to identify strategies for international cooperation that could get the world back on track for delivering on the promise of Education for All.

This document is my initial contribution to the work of the high-level panel. I am grateful that this year's Chair of the G8 and G20 has expressed his interest in receiving the findings of this report in preparation for decisions to be made at the G20.

It should be stressed that this is an interim report based on my initial research and discussions with experts in the field. The final version will be submitted in October 2011 to President Sarkozy and the UN Secretary-General, Ban Ki-moon, in the light of further research and dialogue with the high-level panel.

I am particularly grateful to Kevin Watkins, the Director of UNESCO's Education for All Global Monitoring Report, and his team for leading the research, providing advice on data, and contributing editorial support.

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While I have benefited greatly from discussions with the Global Campaign for Education and other members of the high-level panel on Education for All, it should be emphasized that the views, analysis and recommendations set out in the report are mine alone.

Foreword: Holding to the promise



The Right Honourable Gordon Brown MP, former Prime Minister of the United Kingdom, Co-convenor of the Global Campaign for Education's High-Level Panel

You don't need to tell 12-year-old Grace Mwangi about the importance of education.

Grace is one of 50 students attending grade 4 of a primary school in Kibera, a sprawling slum on the southwestern periphery of Kenya's capital city, Nairobi. They have four textbooks between them. Most lack books and pencils. There's a blackboard, but no chalk. The class is chronically overcrowded. The teacher is untrained and paid not by government but by parents, most of whom live below the poverty line. When they finish their classes, Grace and most of the other students eke out a few pennies by selling charcoal in the local market. The money goes towards paying for school fees.

But Grace has no doubts about the value of her education. She sees school as a route to a better future and as a beacon of hope. "If I work hard and pass my school tests, I can be a doctor or have a business. People without education have no future except hardship," she says.

Her mother echoes those words. Elizabeth Mwangi has two other children, a son and daughter aged 5 and 10. She works as a washerwoman. For a 10-hour shift she earns about \$1.50 on a good day. "Of course it's hard. Sometimes I have to take the children out of school because we don't have money to eat, or because I have to buy medicines when they are sick with malaria or coughs. It hurts me to make that choice. I want all my children to get an education. How else can they make a better life?"

The dreams of Grace Mwangi and her mother find a powerful echo in the words of Nelson Mandela. "Education", he wrote in his autobiography, "is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor."

During my time in public life I have visited many developing countries and had a chance to speak with people whose lives were blighted by poverty – people often surviving on the very margins of existence. But my most abiding memory is not of squalor or desperation. It is of the courage, resolve and resilience of parents trying to get their children a decent start in life through education. The aspirations of parents in Africa's slums are the same as those of mums and dads in Europe and America: they want their children to have the chance to get on in life, and not just get by.

The purpose of this report is to make the case for a renewed global commitment to education in the poorest countries. That case rests on the twin foundations of ethics and economics.

A decent education is the birthright of every child in every country. Protecting that birthright is our shared responsibility. None of us should be willing to tolerate a situation in which millions of children across the world are denied even the most basic opportunities for an education that could lift them out of poverty.

And nobody should accept the vast waste of human potential and crushing economic inefficiency that comes with thwarted ambition in education. Too often, education in the poorest countries is viewed as an "aid issue" or as a matter of "social policy," as distinct from the harder-edged matters of economic growth and investment. That perspective is an anachronism. New research presented in this report demonstrates that accelerated progress towards the Education for All goals could increase per capita income growth in the poorest countries by 2% above baseline levels, providing an impetus for poverty reduction, employment, and broad-based prosperity.

So supporting the ambition of parents and children in the poorest countries is not simply a moral imperative – it is also an economic necessity if we are to create a globalization of jobs, justice and opportunity.

Holding to the promise of Education for All

This is the first of a two-part report addressed to political leaders of the Group of 8 (G8) and the Group of 20 (G20). It is prompted by a concern and a conviction. My concern is that the international community is failing to honour a promise made to the world's children – a promise that the G8 underwrote. And my conviction is that this is both unnecessary and counter-productive. It combines indefensible ethics with unsound economics.

Enshrined in the Millennium Development Goals and in the Education for All targets adopted in 2000, the promise was to provide decent quality basic Education for All the world's children by 2015.

We are now less than five years from the target date – and one primary school generation from a broken promise. There are currently 67 million primary school age children and an even greater number of adolescents who are not in school. Millions more are sitting in classrooms receiving an education of such abysmal quality that it will do little to enhance their life chances.

If we carry on as we are, the international development target on education will be missed by a wide margin. While the number of children not enrolled in school is falling, numbers are coming down far too slowly – and there is worrying evidence that the rate of progress is slipping. UNESCO has warned that on recent trends there could be more children out of school in 2015 than there are today. Getting all of Africa's children into lower secondary school is an even more distant prospect than universal primary education. Under a business-as-usual scenario, it would take another 75 years, pushing back the date for achieving universal basic education towards the last decade of the 21st century.

Changing this picture will require action at many levels. The poorest countries need another 1.8 million teachers by 2015 – 1 million of them in Africa. And because no education system is better than the quality of the teaching it provides, it is essential that teachers are properly trained, well motivated and equipped to ensure that children learn. Other aspects of the education infrastructure also have to be strengthened. The poorest countries need almost 4 million new classrooms by 2015, along with the textbooks, exercise books and other teaching materials needed to facilitate good quality education.

National policies and national political leadership are the real foundation for success in education – but they are not enough. Without strengthened international cooperation and new partnerships for education, even the strongest policies and the most committed leaders will fail to make the breakthrough. That is why this report calls for a strengthened multilateral architecture, including a Global Fund for Education, new sources of finance, and a campaign that mobilizes the public and galvanizes political action.

The summits of the G8 and G20 can make 2011 a turning point. Over the next few years there is a critical window of opportunity to put in place the policies, investments and partnerships that could set the world back on track to reach the 2015 target. We can get another 67 million children into school by 2015. And we can start to turn the corner on education quality, ensuring that no child leaves school with having gained basic literacy and numeracy.

Political leaders across the G8 and the G20 understand the value of education – and they are strongly committed to the Millennium Development Goals. Yet neither grouping has engaged in a credible fashion with the education crisis described in this report, with damaging consequences for their wider development strategies.

Achieving change will not be easy. The agendas for the 2011 G8 and G20 summits are crowded, political leaders face many pressing concerns, and time is short. Then again, it's not easy for kids in Kibera struggling to get an education. It's not easy for parents in South Sudan who are trying to seize the opportunities provided by peace to create opportunities for their children. And it's not easy for millions of young girls to overcome the disadvantages that restrict their opportunities for schooling. If we can reproduce through a global partnership for education the iron resolve, the ambition and sheer bloody-

-minded determination of millions of parents and children struggling every day against the odds to make education possible, we can succeed.

My hope is that this report will be read not just as a source of evidence to make the case for change, but as a call to action directed to the 2011 summits and the wider international community. There are five pillars upon which an expanded and more ambitious partnership should be constructed:

- **Creating a Global Fund for Education.** The global education partnership lacks a credible multilateral mechanism for mobilizing resources, channeling the support of the private sector and philanthropic foundations, galvanizing political leaders and building public support. There is nothing in education to compare with the global funds that have achieved so much in health. Building on an existing mechanism – the Education for All Fast Track Initiative supervised by the World Bank – we should create a Global Fund for Education, with financing of \$3 billion-\$4 billion annually to 2015. Much of the funding could be generated by redirecting education aid that is poorly targeted and out of step with a results-based approach to the 2015 commitments.
- **Closing the financing gap.** Money does not automatically build a good-quality education system that is open to all children. But chronic and sustained under-financing in basic education is an automatic barrier to learning opportunities for all. Governments in the poorest countries should aim at mobilizing another 0.7% of their national income for education. But donors also have to deliver on their long-standing commitment to ensure that no country committed to the 2015 goals is allowed to fail because they are too poor. That commitment translates into an annual development assistance requirement of around \$16 billion annually for 46 of the poorest countries. Current aid levels for these countries are running at \$2 billion-\$3 billion. This is a collective failure that aid donors must address as a matter of urgency.
- **Integrating education into an Africa Investment Fund for infrastructure development.** Weaknesses in infrastructure are holding back investment and economic growth. Those weaknesses extend beyond roads, ports and power to the education infrastructure. Building on the current efforts of African governments, the African Union, the World Bank and the African Development Bank, we need to create the financing, risk management systems and incentives that correct the market failures leading to under-investment in infrastructure, and harness the immense potential of private capital markets. Education should be at the centre of the infrastructure effort, with classroom construction a priority – under the right conditions \$2 billion could be mobilized annually. Currently, Africa's efforts are constrained by the region's small share of global capital investment and the concentration of investment flows into commodity-based funds.
- **Building a global ICT partnership to deliver quality teaching.** The poorest countries and their children need more teachers and more effective systems for training and supporting those teachers. Information and communication technologies have opened up exciting new opportunities to assist in the development of these systems. Innovative new programmes involving partnerships between private companies, governments and UN agencies have emerged. The Open Education Resources (OER) movement and the

leadership provided by philanthropic agencies – such as the Bill and Melinda Gates Foundation and the William and Flora Hewlett Foundation – and private companies are making a difference. Yet the overall effort is fragmented. And the cost of connecting to the global information highway limits the scope for more ambitious approaches. What is needed is a public-private-philanthropic partnership that aims at providing teachers across the poorest countries with access to relevant and appropriate material in areas such as learning assessment, subject competence and classroom delivery. Universities, ICT service providers and computer companies should come together to support an initiative that links networked teacher-training centres in poor countries through the internet to the global knowledge pool.

■ **Creating meaningful, global public engagement opportunities.** The education of children is a subject that raises passions. Almost every parent of every schoolchild understands the value of education. Children in rich countries have an inbuilt empathy towards their counterparts in the poorest countries. Teachers are drawn into their profession by a commitment to public service – and a belief that they can make a difference. All of this constitutes a vast potential for public mobilization in support of education in the poorest countries. We need to tap into that potential for public action. In other areas – from debt relief to aid and health – we have seen the extraordinary power of campaigns to achieve change. Yet when it comes to education, the public voice is not matched by opportunities for public action. That is one reason why education has slipped down the international development agenda. It is time to build a new type of mobilization in education. This should provide ordinary people with a chance to make a difference by linking their personal contributions to a call for global change. It should link thousands of schools in the richest countries to schools in the poorest countries. And it should link teachers across borders. “Train a million teachers for Africa” could become a rallying point, with non-government organizations, churches, teachers unions and schools playing their part in mobilizing resources, and demanding that aid donors match their efforts.

Some commentators will take the view that I am advocating for ambitions that are unrealistic. It is easy to see why they might reach that conclusion. Four years is a short time in which to achieve a breakthrough. Education systems are inherently complex. The international agenda is overcrowded. And in the aftermath of the financial crisis, the priorities of governments in the rich world and emerging markets are dominated by the global economic recovery, current account deficits and dialogue over exchange rates. Clearly, these are not entirely propitious circumstances for a meaningful global initiative on education.

Yet those who view my ambitions as implausible need to ask themselves some tough questions. Is it really unrealistic at the start of the 21st century to recruit the teachers, construct the classrooms and build the school systems needed to give all children a first step on the ladder of education opportunity? Is it realistic to tolerate an education crisis that is consigning millions of children to a life of diminished opportunity, fuelling youth unemployment, and reinforcing the extreme inequalities that are the hallmark of globalization today? And where is the realism in writing off the hope, talents and creativity of young people around the world, sacrificing opportunities for more dynamic and balanced growth in the global economy in the process?

To those who argue that there is no alternative but to accept that we have failed to deliver on the 2015, I have a simple response. It can be summarized in five words: “There must be an alternative.” Those words can be summarized in the acronym “Themba,” which also happens to be the Zulu word for hope. And none of us should be willing to tolerate a world in which millions of children are denied the hope that comes with the 2015 promise of Education for All.

The missing link on the 2011 summit agenda

This interim report is addressed to the political leaders of the G8 and G20. Issued on the occasion of my appointment as co-convenor of the Global Campaign for Education's High Level Panel, it is intended to stimulate debate and to set out what I see as an achievable agenda for change. The final version of the report will be submitted in November 2011 to President Nicolas Sarkozy of France, who will chair the 2011 summits of the G8 and the G20, and to the United Nations Secretary General, Ban Ki-moon.

As a former participant in G8 and G20 summits, I recognize that the space on the agenda is limited. Moreover, these meetings play a critical role in providing a forum in which to discuss issues of very immediate concern. The global economic recovery must remain centre-stage, and differences over current account imbalances and exchange rate alignments have to be debated. Yet I also know that every leader at these meetings understands the critical role that education plays in their own national strategies for economic recovery, jobs creation, and social justice. And I know that they share a concern to contribute to international poverty reduction efforts. My appeal to both summits is to recognize that imbalances in the human capital account must also be addressed if we are to build a more inclusive, sustainable and poverty-focused pattern of globalization. Inequalities in access to opportunities for good quality education are reinforcing disparities across and within countries, undermining shared prosperity, and holding back progress towards the Millennium Development Goals.

Both the G8 and the G20 summits have a critical role to play in achieving a more favorable balance in the human capital account. Although some people question the relevance of the G8, its summits have a strong track record in addressing a wide range of international development concerns. It is sometimes forgotten that meetings of the G8 paved the way for debt relief in Africa, for the creation of the Global Fund to Fight AIDS, Malaria and Tuberculosis, and for the 2005 commitment to mobilize an additional \$50 billion in international aid. The G8 also created the world's only multilateral financing mechanism for education, the Education for All Fast Track Initiative. These commitments have saved lives, put children in school, and helped to lift people out of poverty. They demonstrate that, far from being an anachronism, the G8 can make a difference to the lives of the world's poorest people. Indeed, this may be the area of its greatest comparative advantage.

The G20 has been in existence for just a few years. Yet in that time it has played a critical role in averting a fully fledged global depression, containing the financial crisis and creating the conditions for recovery. The summits in London and Pittsburgh demonstrated that, confronted by a common threat, political leaders could cooperate in protecting the shared interests of their citizens. Last year, at its Seoul summit, the G20 turned its attention to another common danger – the unbalanced and unsustainable pattern of globalization that is jeopardizing economic growth, poverty reduction and jobs creation.

In preparing this report I have been struck by the increasingly peripheral place of education on the international development agenda. To their credit, political leaders of the G8 have focused heavily on child survival and maternal health in recent years. The 2010 summit communiqué included far-reaching commitments aimed at cutting the death rate for children under 5 and reducing the risks of pregnancy. Yet there was no mention in the communiqué of education – and past commitments appear to have been quietly abandoned.

Similarly, the G20's international development agenda, set out in the 2010 Seoul Development Consensus, has placed a welcome – and long overdue – emphasis on economic growth in the poorest countries. Here too, though, education is conspicuous by its absence. Given the central role of education in fuelling the dynamism of successful globalizers in East Asia and elsewhere, the omission is surprising.

The purpose of this report is not to question what is on the agendas of the G8 and the G20, but to make the case for education to be added to the mix as a bridging issue across the agendas of the two groupings. During my time in government, and since leaving office, I have been a consistent advocate for international cooperation on child and maternal health. And I am convinced that we need a model of globalization that harnesses the power of properly-governed markets to break down the obscene inequalities between countries and within them. But the G8 and G20 will compromise their efforts to address these issues if they neglect education.

Consider first the G8's work to strengthen maternal and child health systems. Cutting the annual toll of 9 million under-5 fatalities and lowering the risks faced by women in pregnancy are issues that I championed when I was Chancellor of the Exchequer and when I was Prime Minister. Yet education – especially of girls and women – is one of the most powerful weapons for achieving these objectives. When women are educated, they are more likely to seek ante-natal care – and their children are more likely to survive. Universal basic education up to lower secondary level for women in sub-Saharan Africa could save 1.8 million lives annually.

The G20, for its part, takes up in its emerging development agenda what I see as the defining challenge of our generation: charting a course towards an inclusive and sustainable globalization. For the past quarter of a century, global market integration has generated spectacular increases in wealth and prosperity for some, including the successful emerging market economies. But many of the poorest countries and poorest people have been left behind, cut adrift from the rising tide of global prosperity. We need to replace this twin-track model of globalization that offers wealth and opportunity for some with misery and marginalization for others with a more sustainable model. As former President Lula of Brazil has put it "a new and more balanced distribution of wealth is needed, both internationally and within each country."

Education should be at the heart of the G20's strategy for accelerated growth in the world's poorest countries. Today, more than ever, the real wealth of nations is to be found in human capital – in the skills, knowledge and education of their people. In our increasingly knowledge-based global economy, the economic growth curves of countries will follow the education learning curves of their citizens. It is no coincidence that the economic powerhouses of East Asia invested heavily in education before their growth took off, or that they have continued to strengthen their human capital over time.

The evidence provided here underlines the potential for an education growth premium. Improved access to school and increased learning achievement could add 2% per capita to economic growth, halving the period over which incomes double. Moreover, every \$1 invested in education would generate \$10-\$15 in returns through higher growth.

Can the world afford to make the investment in education needed to unlock these gains? The more relevant question might be whether or not any country can afford not to make the investment.

Increased aid will have to underwrite part of the investment. Around \$16 billion is needed annually in the very poorest countries, compared with current disbursements of just \$2 billion. But aid donors should view support for education as an investment in more dynamic and self-reliant growth, a more balanced pattern of globalization, and a catalyst for accelerated progress towards the MDGs.

"Our progress as a nation", President John F. Kennedy once remarked, "can be no swifter than our progress in education. The human mind is our fundamental resource." That observation retains a powerful resonance for the 21st century. More than at any time in history, the destiny of nations and well-being of people will be shaped by opportunities for education – and we have a shared interest in working together to broaden those opportunities.

Gordon Brown

The Right Honourable **Gordon Brown MP**, former Prime Minister of the United Kingdom, Co-convenor of the Global Campaign for Education's High-Level Panel



Kakuma: School children in Kakuma refugee camp, Kenya. ©UNESCO/D. Willetts

Executive summary

The international community is on the verge of breaking a promise made to the world's children. Just over ten years ago, governments pledged to ensure that every child would have the chance of a decent quality basic education by 2015. We are now five years from that deadline – and less than one primary school generation from a broken promise. Many of the poorest countries are far off track for achieving the education goals. There is still time to change this picture. We have the resources and we know which policies work. What is lacking is the spark of political leadership and international cooperation.

This interim report is addressed to the leaders of the Group of 8 (G8) and the Group of 20 (G20). It is prompted by a concern that education has been allowed to drift to the periphery of the international development agenda. The 2011 summits, which will be hosted by President Nicolas Sarkozy of France, provide an opportunity to change this picture and chart a new course in international cooperation on education.

Delivering on the promise of Education for All will not be easy. The starting point is to put in place the human, institutional and physical infrastructure needed to achieve universal access to school and deliver good quality teaching for all children.

No education system anywhere in the world is better than its teachers. And the world's poorest countries need another 1.8 million teachers by 2015 – 1 million of them in sub-Saharan Africa alone. They also need another 4 million classrooms, along with the books, pencils and other materials that facilitate learning. The problem goes beyond these headline numbers. Governments also have to ensure that teachers are trained, supported and motivated – and they have to remove the barriers to education that keep disadvantaged children out of school.

While national policies and national political leadership are paramount, strengthened international cooperation holds the key to a breakthrough in education. The world's poorest countries lack the financial, human and technical resources to succeed on their own. This report identifies some of the priorities for a global partnership in education, including:

- A Global Fund for Education that mobilizes resources, galvanizes political action, and provides a multilateral window for philanthropic support.
- Increased aid and innovative finance to remove the financial barriers holding back the development of education systems, with donors providing \$16 billion annually to 2015.
- The integration of education into an Africa Infrastructure Fund that mobilizes private capital market support for investment in classroom construction.
- The development of a public-private partnership that brings together governments, aid donors, telecom and computer companies, and universities to link Africa's teacher training systems to the global information highway.
- The mobilization of a global campaign that harnesses the creativity, energy and commitment of people across the world.

Political leaders of the G8 and the G20 have an opportunity to make a difference. The 2011 summits cannot resolve the crisis in

education, but they can draw a line in the sand and put education back where it belongs – at the centre of the wider agenda for achieving the Millennium Development Goals (MDGs).

While the summit agendas may be crowded, there are also compelling grounds for action. The G20 has identified accelerated economic growth in the poorest countries as a priority – and rightly so. More rapid economic growth in Africa and elsewhere is vital for reducing poverty, and for developing a pattern of globalization that narrows inequalities, and creates opportunities for balanced recovery and shared prosperity. But in today's knowledge-based global economy, accelerated growth in poor countries depends critically on education and human capital. You can't build dynamic economies, broad-based growth and more equitable globalization on the foundation of failing education systems. That is why the G20 should consider teachers and schools as part of its wider growth strategy. Holding to the promise of Education for All would help to underpin the economics of market integration with the ethics of fairness, social justice and shared prosperity.

The same logic holds for the G8. In recent years, political leaders' MDG commitments have prioritized child survival and maternal health. That is a welcome development, not least because insufficient progress has been made in both areas. However, education – especially maternal education – is one of the most powerful catalysts for cutting child deaths and empowering women to utilize health facilities. No results-based approach to the MDGs on child survival or maternal health can afford to neglect education. That is why the 2011 summit should reintegrate education into the wider MDG agenda.

Continued neglect of education will carry a high price. Without accelerated progress towards Education for All, national and internationally agreed targets for poverty reduction will be missed, inequalities between countries and within societies will widen, and efforts to build a new, more inclusive and more sustainable, pattern of globalization will fail.

The education emergency

The world is today facing an education emergency. That emergency does not make media headlines. But it has disastrous human, social and economic consequences. It is consigning millions of children to lives of poverty and diminished opportunity, holding back progress in health, reinforcing disparities linked to wealth and gender, and undermining prospects for economic growth. And it is destroying on an epic scale the most valuable asset of the world's poorest nations – the creativity, talent and potential of the young generation.

The crisis in education is also reinforcing an unsustainable pattern of globalization. Education has the potential to act as a great leveller, extending opportunities across societies and countries. By the same token, disparities in education restrict opportunity and reinforce wider social and economic disparities. Today's extreme inequalities in education are tomorrow's inequalities in opportunities for economic growth, trade, investment and employment. The education divide is consigning many of the poorest countries, and the poorest people within countries, to a future of marginalization in an increasingly

knowledge-based global economy – and it is undermining prospects for the emergence of new economic growth poles in Africa and other regions.

Progress reports on the 2015 education targets graphically illustrate the scale of the challenge. At the start of the 21st century, 67 million children of primary school age are not even enrolled in school. To put that figure in context, it exceeds the combined primary school age population of the G8 countries. Conflict-affected countries account for about 40% of the out-of-school population, highlighting the devastating consequences of armed violence. Another 74 million children of lower secondary school age are out of school, most of them having failed to complete primary education. These children face the imminent prospect of entering employment markets without even the most basic numeracy, literacy and problem-solving skills that they need to succeed.

Projections to the 2015 target date reinforce the case for urgent action. If the overall trend of the past decade is continued, there will still be 48 million primary school age children out of school in five years. This may be a “good case” scenario. Trend analysis suggests that the rate of advance towards the universal primary education goals has slowed – and that there could be more children out of school in 2015 than there are today. Prospects for achieving universal education for adolescent children are even bleaker. On current trends it will take sub-Saharan Africa another 75 years to achieve universal education to lower secondary level.

Data on enrolment tell only part of the story. For every child out of school, many more are in school but receiving an education of abysmal quality. Sitting in overcrowded and dilapidated classrooms, lacking textbooks and taught by badly trained, weakly motivated and poorly supported teachers, millions of children are locked into an education that will leave them without the knowledge, skills and competencies that they need to realize their potential. The shocking state of education experienced by many children demands a strengthened focus not just of access but on learning.

The progress report on education has to be read against the backdrop of demographic change. Education is what provides young people with hope and opportunity – and young people account for a large share of the population of the poorest countries. In sub-Saharan Africa, 42% of people are under 15 – three times the level for Europe. Each year around 2.2 million of the region’s young people enter labour markets for the first time. Good quality education could turn the youth bulge into an opportunity, enabling countries to tap into the talent, energy and creativity of their young people. Conversely, failure to provide education will create a lost generation of youth trapped in insecure, low-wage employment or long-term unemployment, with attendant consequence for political and social stability.

Inequality is at the heart of the global education emergency. Rich countries face their own challenges in education. Yet viewed from a global perspective, the playing field for education opportunities is very uneven. Today, a 5-year-old in countries such as France, the United Kingdom or the United States has more chance of progressing into higher education than a child in many African countries has of making it through primary school. Whereas most young adults in rich countries will accumulate at least 13 years in full-time education, over half of their counterparts in countries like Burkina Faso, Mali and Mozambique have received less than two years in school. In an increasingly interdependent world, where flows of trade, investment and technology are closely tied to human capital, the

distribution of opportunities for education will powerfully influence the future course of globalization.

Disparities in education within countries mirror those at the global level – and they are holding back progress towards the 2015 goals. Inequalities linked to gender remain deeply entrenched. There are 3.6 million girls missing from primary school for no other reason than the fact that they are girls. Alongside gender, inequalities linked to poverty, ethnicity, the rural-urban divide and other markers for disadvantage also limit opportunities for education. In Pakistan, there is a seven-year gap in education separating young adults in the richest 20% and poorest 20% of the population; and in northern Nigeria, poor girls from rural backgrounds average less than one year in school. Extreme inequalities of this type are both a source and a symptom of wider social disparities. They undermine human development and act as a brake on economic growth.

Barriers to progress

There are no blueprints for getting the poorest countries on track for the Education for All goals. National political leadership is critical – and many governments have stepped up to the plate. Countries such as Bangladesh, India, Ethiopia, Mozambique, Senegal and Tanzania have made extraordinary progress. Yet in the absence of strengthened international cooperation, even the best strategies will deliver results that fall short of the 2015 promise. The three priority areas for cooperation are teachers and teaching; school infrastructure; and finance.

More teachers and better teaching is the springboard for progress in education. The shortage of 1 million teachers in Africa means that many children are denied opportunities for learning. But the problem goes beyond headcount numbers. Effective teaching, the key to learning achievement, requires that teachers have the right skills, that they are motivated, properly supported and present in classrooms when they are supposed to be.

These conditions are often lacking. All too often, pre-service and in-service training systems are chronically underfinanced and provide poorly designed courses that do little to improve classroom practices. There is a crisis in teacher motivation in many countries. Linked to low pay, the steady erosion in status of the teaching profession, a lack of support, overcrowded classrooms and insufficient access to textbooks, that crisis is sapping education systems of energy and commitment. The high levels of teacher absenteeism revealed in a number of surveys are symptomatic of problems in motivation and accountability.

The challenge is to simultaneously overcome the deficit in quantity by recruiting 1 million more teachers in Africa, while putting in place the reforms needed to raise the quality of teaching.

Information and communications technology (ICT) opens up new opportunities for training and supporting teachers. The Open Educational Resource (OER) movement, which provides free access to educational material, has seen a tremendous growth in recent years, led by the Massachusetts Institute of Technology, New York University and the Open University in the United Kingdom. The internet offers access to virtual training courses, instructional material, assessment exercises and online support. However, the global digital divide is undermining the transformative power of ICT in education for the poorest countries. Sub-Saharan Africa accounts for just 1% of global broadband access – and a typical university in Africa has the broadband connectivity equivalent of a residential home in Europe. Cost is a major barrier to an expanded share. On

average, a high-speed internet connection represents 500% of average monthly income in Africa, compared with 2% in Europe.

School infrastructure remains a bottleneck. New classrooms are needed to provide places for primary school age children not in school, for over-age children who lost out on an education in their early years, and to reduce overcrowding. UNESCO estimates that around 4 million additional classrooms are needed in the poorest countries.

Money does not buy guaranteed success in education – but chronic and sustained under-financing is a guaranteed route to failure. Developing countries that have made rapid progress have typically combined increased spending with wider reforms aimed at strengthening efficiency and equity in the education system. The poorest countries themselves could do far more to mobilize resources for education by increasing revenue collection, attaching more weight to education in public spending, and transferring spending from other areas. But even with a strengthened domestic financing effort, many of the poorest countries will be unable to mobilize resources on the scale required – and these countries need support from the international aid community.

Global estimates provide a rule-of-thumb insight into the dimensions of the Education for All financing gap. In a survey covering 46 of the poorest countries, UNESCO estimates that around \$16 billion is required annually to 2015. These resources are needed to recruit, train and support teachers, to build classrooms, pay for textbooks, and provide targeted support for children from marginalized households.

The key role of aid

When governments met at the World Education Forum in Dakar, Senegal, in 2000, aid donors made an unequivocal commitment on aid. “No countries seriously committed to Education for All”, they pledged, “will be thwarted in their achievement of this goal by a lack of resources.” That pledge has not been honoured.

While overall levels of aid to basic education have risen, for the 46 poorest countries covered in the UNESCO survey they average just \$2 billion to \$3 billion annually. Governments in many of these countries have improved policies and, with the support of the World Bank, UN agencies and bilateral donors, strengthened their national planning capacity in education. But the aid financing gap is holding back the development and implementation of more ambitious national strategies.

The starting point is for donors to meet the overall aid commitments made at the G8 Gleneagles summit in 2000. While all donors face real fiscal constraints, it is not acceptable that they have collectively fallen short of the 2005 commitment by \$18 billion to \$19 billion – or that the bulk of the shortfall is accounted for by the poorest countries in Africa. Ending the practice of counting as aid the cost of educating developing-country students in rich-country universities and making an equivalent commitment to basic education in poor countries would generate very significant resources. Taken together, meeting the Gleneagles pledge and targeting aid more effectively could generate \$4.1 billion in additional development assistance for basic education.

Other resource mobilization strategies must also be considered. Economic growth in sub-Saharan Africa is held back by deficits in economic infrastructure. Governments in the region, the African Union, regional development banks and the World Bank are exploring strategies for the development of public-private

partnerships aimed at closing these deficits. Classrooms should be brought into the dialogue and financing framework. They are part of any country's productive infrastructure – and many of the poorest countries need large up-front capital investments to unlock long-run growth potential. An Africa Infrastructure Fund could provide the mix of concessional finance and risk guarantees needed to create the conditions for private capital investment in classrooms.

Given the scale of the overall financing challenge for the MDGs, the G8 and the G20 should give serious consideration to implementing a small levy on financial transactions to support the global poverty reduction effort. Modest revenues transferred from the banking systems of rich countries to the schools of the poorest countries would help create conditions for more balanced growth in the global economy.

Looking beyond these measures, the international community needs an effective multilateral mechanism that galvanizes international support, mobilizes and pools resources, and facilitates the development of new public-private partnerships. In contrast to the health sector, where the Global Fund to Fight AIDS, Malaria and Tuberculosis and the Global Alliance for Vaccines and Immunization (GAVI) have provided a focal point for international cooperation, the education sector lacks multilateral mechanisms commensurate with the scale of ambition required. The Education for All Fast Track Initiative (FTI), of which the World Bank is a significant partner, is now delivering more effective support to a growing number of countries, but current levels of financing through the FTI – around \$300 million in 2009 – reflect low levels of donor backing.

The summits of the G8 and the G20 provide an opportunity to set a new course. In October 2011, donors and other stakeholders will attend an important FTI replenishment event that will shape the financing envelope for the period through to 2014 – the decisive period for delivering on the Education for All promise.

This report proposes the transformation of the FTI into a Global Fund for Education that provides \$3 billion to \$4 billion annually to countries with plans that reflect a commitment to the 2015 goals, including practical strategies for greater equity and improved learning outcomes. The G8 summit should set the scene for an ambitious replenishment event by signaling intent to commit resources and political support. Along with the G20, it should also call on UN agencies and the World Bank to prepare an institutional strategy for transforming the FTI into a Global Fund, building on the FTI's work to become more results-based and drawing on the lessons of the health sector.

Unlocking the potential – education as a catalyst for change

Renewing the international commitment on education would strengthen the current strategies of the G8 and the G20. Under the Seoul Development Consensus, the G20 has placed a long-overdue emphasis on international cooperation to support accelerated economic growth in the poorest countries. Human capital investments in education that raise learning achievement are every bit as important to this task as investment in economic infrastructure. Yet education has so far been neglected. Through its Muskoka Initiative, the G8 has set ambitious goals for reducing child mortality and improving maternal health. Education – especially the education of girls – is one of the most effective investments for improving child and maternal health. Unfortunately, the G8 has allowed education to drift to the periphery of its MDG agenda.

New research commissioned for this report demonstrates the potential for education to act as a catalyst for accelerated growth in the poorest countries. Drawing on economic modelling work, the research analyzed scenarios for long-run growth in the poorest countries at higher levels of learning achievement. In effect, the modeling tracks the effects of raised average levels of skills and knowledge acquired in the education system and carried into employment in the form of higher productivity. The exercise covers 46 of the world's poorest countries. Among the results:

- Improved learning achievement levels could increase long-run economic growth by 2% per capita above trend levels. The growth premium cuts the period over which income doubles from 47 years to 33 years.
- The investments required to unlock the growth premium (around 2.8% of GDP) would pay for themselves after 22 years. Viewed over the lifetime of a young person coming through education, entering the labour market, and progressing through their working life, every \$1 spent on education would generate \$10-\$15 through the education growth premium.

These preliminary results merit serious consideration by political leaders of the G20. Broad-based accelerated growth on the scale indicated would give a powerful new impetus to poverty eradication efforts. It would also help to reduce the deep wealth disparities in the global economy. These disparities leave the 40% of the world's population earning less than \$2 with just 5% of world income, while the richest 10% accounts for 53% of total income. Moreover, the creation of new, more dynamic growth poles in the global economy would create new opportunities for trade, investment and shared prosperity.

Evidence of the human returns to education reinforces the case for strengthened international cooperation. Maternal education is one of the strongest predictors for child survival. Having a mother with some secondary education more than halves the risk of child mortality in many countries. The reason: education empowers mothers to seek ante-natal care, demand skilled birth attendance, utilize health services and acquire knowledge about treatment for childhood illness. If all of sub-Saharan Africa's girls made the transition to adulthood having gained some secondary education, it could prevent 1.8 million child deaths annually. More educated mothers are also better informed about the prevention of mother-to-child transmission of HIV/AIDS, which claims over a quarter of a million lives annually.

The evidence on maternal education and health should be carefully considered. While the G8 is providing real leadership on child and maternal health, failure to provide equivalent leadership on education will undermine its own efforts – and it will cost lives.

Looking ahead – renewing the Education for All contract

Business as usual is no longer an option. Continuing on our current trajectory would leave many of the poorest countries far short of the 2015 targets, with damaging consequences for poverty reduction and efforts to forge a more inclusive pattern of globalization. It is time to put education where it belongs – at the centre of the international development agenda. The G8 and G20 summits in 2011 provide an opportunity for renewing the Education for All contract.

There are two parties to this contract. Governments in developing countries have to do far more to mobilize resources,

improve governance and break down the inequalities linked to gender, poverty, ethnicity and other markers for disadvantage that are holding back progress. Integrating into national strategies targets for reducing disparities would be a step in the right direction. But donors must also hold to their side of the bargain struck in 2000 to get all children into decent quality education.

While two summits in 2011 will not resolve the education emergency, they could signal a new direction. Among the key recommendations in this report:

- **Close the aid financing gap – and front-load support.** The G8 summit provides an opportunity to mobilize the \$16 billion in aid needed to recruit, train and support teachers, construct classrooms and build the systems needed to deliver decent quality education.
- **Transform the Fast Track Initiative into a Global Fund for Education.** The G8 and the G20 should enter into dialogue with the World Bank and other FTI stakeholders to expand financing, strengthen delivery and develop innovative public-private partnerships. The 2011 FTI replenishment event should aim at annual funding of \$3 billion to \$4 billion to 2014.
- **Integrate classrooms into an Africa Infrastructure Fund.** Market failures are leading to sub-optimal levels of investment in productive infrastructure across Africa. There is an ongoing dialogue over strategies for correcting this failure through the participation of aid donors in providing future streams of finance, the World Bank in providing risk guarantees, and private capital markets. Within the parameters of an Africa Infrastructure Fund, the G20 should explore the scope for mobilising \$2 billion annually in financing for classroom construction to 2015.
- **Harness the power of ICT – link Africa's children and teachers to the global information highway.** Building on current initiatives, the G20 is uniquely well placed to develop a public-private partnership on ICT. Within that partnership, governments and aid donors could create conditions for mobilizing \$17 billion in backbone infrastructure through an Africa Fund. With support from aid donors, service providers and computer companies could reduce connectivity and networking costs for teacher training institutions, universities and schools. And universities in developed and developing countries could forge new partnerships aimed at improving the availability of relevant and appropriate teaching materials. There is already a great deal of innovation in this area – but the effort is fragmented and lacking in ambition. The ICT partnership, which could channel support partly through the proposed Global Fund for Education, should be part of a wider movement dedicated to far-reaching change. 'Train a million teachers for Africa' could serve as a mission statement.
- **Strengthen support to countries affected by conflict.** As UNESCO's 2011 Education for All Global Monitoring Report notes, no strategy for international cooperation on Education for All will succeed without a strong commitment to countries affected by conflict. More effective use should be made of pooled funding in the humanitarian aid system to support communities struggling to maintain education in the midst of armed conflict. Countries emerging from armed conflict also need a commitment to long-term financial support for reconstruction. Too often, education is neglected in the reconstruction effort, undermining prospects for a durable and lasting peace. South Sudan is a test case. It is vital that donors get behind the newly independent country with pledges and delivery of support, drawing on the experience of countries such as Sierra Leone and Afghanistan.

I. Education for All – holding to the promise, making it happen

When governments met at the World Forum on Education for All in Dakar, Senegal, in 2000, they pledged to help people realize their rights to basic education and lifelong learning. The goals they established hold the promise of a future where the world's children and young people can, by securing the right skills, raise both their standard of living and quality of life by seizing the opportunities created by global trade. It is a vision of the world that encompasses not just universal enrolment in primary school by 2015, but also a Framework for Action for achieving progress in child health, the quality of education, gender parity, skills development, lifelong learning and adult literacy.

This promise is being betrayed, however. On current trends, the Education for All goals will not be met and millions of young people will be trapped in lifelong poverty and unemployment. It doesn't have to be this way. This report is designed to show how the goals can still be met and a new kind of progressive globalization achieved. Not only has the debate about the global economy been separated from discussion about development for far too long, but it has also become so polarized that both sides have stopped considering the evidence. Enthusiasts for globalization present macroeconomic stability, liberalization and openness to trade and financial flows as an automatic pathway to higher growth. Critics maintain that global market integration has an in-built tendency to marginalize poor countries and poor people – and that withdrawal from globalization would promote human development.

While important issues have been raised on both sides of the divide, this is an argument with the ghost of the Washington Consensus. It has failed to address some issues of vital importance. Whatever the aspirations of the anti-globalization camp, globalization is here to stay – and it has the potential to act as a powerful force for reducing poverty. Contrary to the views of many advocates for globalization, unlocking that potential requires something more than the application of the familiar tool-kit of fiscal stability, openness to trade and investment, a business-friendly economic environment, and good governance. Other enabling conditions for successful integration into global markets and broad-based economic growth must be met – and the human capital created through education is one of the most critical.

However sound their macroeconomic policies, countries that provide limited access to education and deliver low levels of learning achievement are unlikely either to sustain dynamic, broad-based economic growth over time, or to succeed in global markets. As we show in this report, education has incomparable power to promote growth in the poorest countries and, with it, create new markets for exported goods. It is no coincidence that the most successful globalizers – from South Korea to China – have invested heavily in developing their human capital base. Moreover, broad-based education is the condition for inclusive economic growth. Education can also act as a great equalizer of opportunity, breaking down disparities linked to gender, poverty and ethnicity, and giving people the

power to increase the prosperity of their countries, share more equitably in growth and influence decisions that affect their lives.

The Education for All agenda has a powerful bearing on some of the most pressing challenges facing governments around the world, from economic growth and job creation, to climate change, food security, peace-building and youth unemployment.

Consider the changing demographic context for international development. Many of the poorest countries in the world have a “youth bulge” in their population profiles. In Europe, 15% of the population is under 15. In sub-Saharan Africa, the 50 million children under 15 represent 42% of the population. Demographic pressures in the region, which has the world's highest poverty rates, are adding relentlessly to pressures on labour markets. Another 2.2 million young people are expected to enter the labour market every year between now and 2015.

Equipping young people with education could change the development trajectory of the world's poorest countries, putting them on a path to accelerated human development and more dynamic growth. Young people bring energy, talent and creativity to their societies; the “youth bulge” is an opportunity to tap into these qualities. Failure to provide opportunities for education, however, will turn this opportunity into a threat. Denying a large section of an expanding younger generation access to basic education will increase the flow of low-skilled youth into the informal sectors of urban slums – and into lives marked by poverty and insecurity. It will also undermine prospects for economic growth and create the conditions for instability and discontent. Take away education and you are left with a disillusioned youth trapped in a cycle of working poverty or in danger of leaving the labour market altogether.

The Education for All goals are intimately connected with the policies needed to combat the linked scourges of youth unemployment and low-wage employment. Even before the recession struck, global economic growth was creating jobs too slowly to keep up with the flow of new entrants to the labour market. Since the recession, youth unemployment has spiraled, reaching 81 million in 2009. But unemployment is simply the most visible manifestation of a much wider problem. According to the International Labour Organisation, over 70% of young people in South Asia and sub-Saharan Africa are in “vulnerable employment,” receiving poverty-level wages and working on insecure contracts. This is part of a wider cycle of low productivity and low pay that leaves so many working people across the world living below the poverty line – and quality education is one of the most effective tools for breaking that cycle.

This section draws on UNESCO's Education for All Global Monitoring Report to provide a brief overview of progress towards the goals and targets adopted in 2000.

There are many positive elements in the picture that emerges. The past decade has witnessed some major advances. In stark

contrast to the “lost decade” of the 1990s, when progress stalled and the number of children out of school increased, there has been a surge in enrolments in primary school. More children are progressing through to secondary school. The gender disparities in education that blight so many countries are narrowing. These real achievements have been driven by policies in developing countries, supported by aid donors, and sustained by the Education for All movement.

Such gains, however, should not be allowed to obscure the scale of the challenge ahead. On current trends, the goal of universal primary education by 2015 will be missed by a wide margin, and far too many children are emerging from basic education with very low levels of learning achievement. As the World Bank has observed in its new education strategy, “growth, development and poverty reduction depend on the knowledge and skills that people acquire, not the number of years that they sit in a classroom.”

Against this backdrop, the overarching goal is to achieve universal access to basic **and** good quality learning. Wider developments powerfully reinforce the case for a renewal of international cooperation to achieve that goal.

In this report, we concentrate principally on basic education – broadly defined as the period from pre-school through to lower secondary education. Clearly, however, no country will succeed in today’s world through primary education alone – and education systems should not be viewed in a compartmentalized fashion. As more children enter and complete primary school, demand for secondary education inevitably grows. Failure to meet that demand will compromise efforts to achieve universal primary education. Moreover, no country will generate the skills needed to sustain high growth, generate employment, and produce the teachers, doctors and

nurses needed to strengthen human development by relying solely on basic education. And no country can afford to ignore the immediate needs of marginalized youth for skills development and second-chance opportunities.

For all of these reasons, universal primary education should be seen as a stepping-stone rather than an end point. Yet countries neglect the base of their education systems at their peril. High-performing secondary and tertiary systems that offer the prospect of dynamic and inclusive economic growth cannot be built on the foundation of malfunctioning primary school systems that combine limited access with poor quality teaching.

Considerable caution has to be exercised in drawing conclusions from the Education for All progress report for the past decade. There are huge variations across and within regions. Within countries, progress across the various goals has often been uneven: many countries have increased enrolment, for example, but failed to make progress in providing qualifications and skills as well as in such areas as child nutrition. Yet standing back from the detail, it is clear that there is a very large gap between the ambition reflected in the international development goals and what has been achieved. That gap represents an education emergency. There are three recurrent themes:

- A crisis in **access** to basic education that is leaving millions of children out of school.
- A crisis in **learning** that is denying children an opportunity to gain the skills, knowledge and competencies they need to realize their potential in a global economy.
- A crisis in **equity** that strips children of their right to education on the basis of parental poverty, gender, language, ethnicity and other markers for disadvantage.



Liberia: At Paynesville Community School in Monrovia, Liberia, students sit three or four to a desk. There are over 300 students in this morning class. ©UNESCO / G. Gordon

Access to basic education

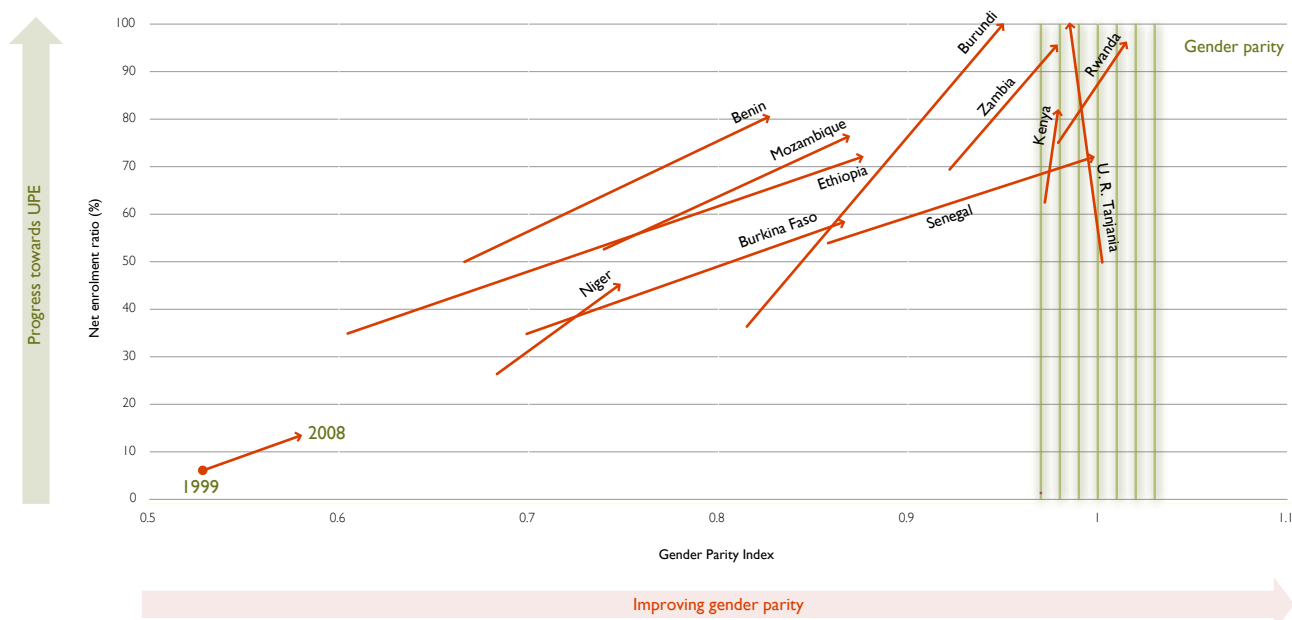
Primary school enrolment and out-of-school numbers are important indicators of how the world is measuring up against the 2015 promise of Education for All.

Some impressive advances have been registered. At the end of the 1990s, 106 million children of primary school age were not enrolled in school. That figure has now fallen to 67 million. South and West Asia has halved its out-of-school population, led by a sharp decline in India. The launch of India's Sarva Shiksha Abhiyaan campaign has been the single biggest driver of the reduction in out of school numbers, though there are still around 7 million out of school.

Sub-Saharan Africa has also registered some extraordinary gains. Since 1999, the region has increased net enrolment from 58% to 76%. That is five times the rate of progress achieved in the 1990s – a remarkable achievement given a demographic trend that has increased the size of the primary school age population by almost one-quarter. Out-of-school numbers in the region have fallen by 13 million.

Gender disparities have also been narrowing across the world (Figure 1). The share of girls in the out-of-school population fell from 57% at the end of the 1990s to 53% in 2008. In the space of a decade, South and West Asia has increased the ratio of girls to boys in primary school – a ratio measured by the Gender Parity Index (GPI) – from 0.84 to 0.96.

Figure 1: The gender gap is narrowing; Concurrent changes in net enrolment ratios and GPI of GERs in primary education between 1999 and 2008, selected countries



Note: Gender parity in primary education is measured by the gender parity index of gross enrolment ratios.

Source: UNESCO Education for All Global Monitoring Report, 2011

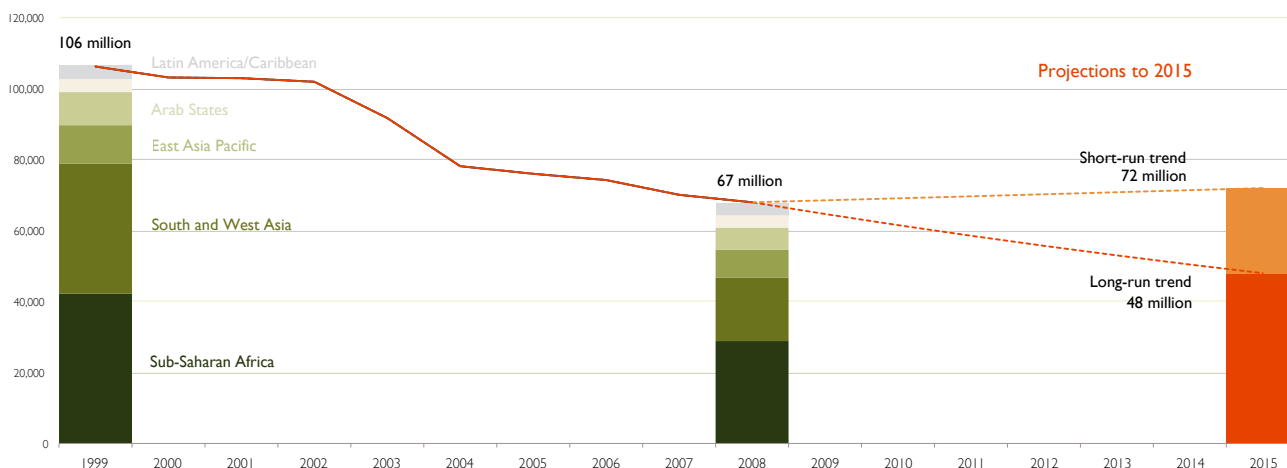
These achievements should not be underestimated. Some of the poorest countries in Africa and elsewhere have achieved historically unprecedented progress towards universal enrolment in basic education. At the end of the 1990s, Tanzania had 3 million children out of school. In 2008, the country was on the brink of achieving universal primary school enrolment. Over the same period, Mozambique and Ethiopia more than halved out of school numbers. Countries such as Senegal and Niger have combined increased enrolment with reduced gender disparities, and Bangladesh has eliminated gender disparities in primary education entirely. Progression through school has also improved: enrolments in secondary school in sub-Saharan Africa, for instance, have almost doubled since 1999, reaching 36 million in 2008. What each of these cases demonstrates is that, even in the face of deeply entrenched poverty, it is possible to make rapid advances.

Despite the gains, there is still a long way to go to the 2015 goal. On the current global trajectory, many countries will fall

short of it, many of them by a wide margin. The headline numbers tell their own story:

- **There are still 67 million primary school age children out of school.** This figure is equivalent to the combined primary school age population of the G8 countries. In sub-Saharan Africa, about a third of primary school age children – 28 million in total – are out of school.
- **Progress towards the 2015 target may be slowing.** Progress towards universal primary education was stronger in the first half of the last decade than in more recent years. In a “good case scenario” assuming linear progress to 2015, there would still be 48 million children out of school. **If the slower progress of more recent years is projected into the future, there will be 72 million out of school in 2015 – more than at present (Figure 2).** Any linear projection over a short time-period has to be treated with caution – and trend is not destiny. But developments since 2004 should be treated as a source of concern to the whole international community.

Figure 2: Out-of-school children by region, 1999-2008 and projection to 2015



Source: UNESCO Education for All Global Monitoring Report, 2011

■ **Sub-Saharan Africa faces the greatest regional challenge.**

For all that has been achieved, Africa faces a particularly daunting challenge. Even if governments succeed in sustaining the rate of progress registered over the past decade, sub-Saharan Africa will not achieve universal primary enrolment until after 2020 – in effect, missing the target by two primary school generations. Based on current enrolment trends, demography and transition rates from primary into secondary school, it will take sub-Saharan Africa another seven decades to get all 12-14 year olds into lower secondary school. To put this prospect into perspective, it would leave the region behind where countries like South Korea and Taiwan stood more than 50 years ago.

■ **Many children start school but drop out early.** In sub-Saharan Africa alone, around 10 million children drop out of primary school every year; many of them in the early grades. In Mali, fewer than half the children entering school are expected to complete primary education, and in Malawi one-quarter of children drop out in the first grade. Dropout rates are also high in South and West Asia, where 13% of the children who start school drop out in the first grade. Even in India, one-quarter of children still drop out in grades 1-5, and half of those enrolled in upper primary school drop out before completing the full cycle of education.

■ **Gender disparities continue to weigh heavily.** Gender inequalities in primary education are narrowing, but slowly – and from a high starting point. Girls still account for 54% of the out-of-school population, implying that there are some 3.6 million “missing girls” in the primary school systems of developing countries. Moreover, out-of-school girls are far less likely than out-of-school boys ever to enter primary education. In sub-Saharan Africa there are 13 countries with 9 or fewer girls in school for every 10 boys.

■ **Many adolescents are out of school.** International organizations have tended to chart progress towards universal primary education principally by reference to the primary school age population. This has deflected attention from the plight of children in the early adolescent years. There are 74 million children of lower secondary school age who are out of school. Many of these children did not complete primary education and have little prospect of gaining the basic literacy and numeracy skills they need to continue their education or to succeed in competitive

employment markets. Gender disadvantages are deeply entrenched at the secondary school level. In South and West Asia and sub-Saharan Africa, girls account for 55% and 57% respectively of the out-of-school adolescent population

What is keeping so many children out of school? The problems vary across countries. Poverty and affordability are major factors. While many governments have withdrawn formal fees for basic education, informal or indirect charges – covering areas such as teachers’ salaries, school maintenance and textbooks – continue to create a financial obstacle. Household survey evidence from countries with “free education” consistently points to inability to afford costs as one of the main factors cited by parents with children out of school. For households living with poverty, external shocks such as drought, natural disaster, unemployment, or rising food costs may result in children being pulled out of school and pushed into paid employment.

More generally, there is a deadly interaction between poverty and child labour, with children being forced to sacrifice learning in order to survive through work. In Mali, around half of children aged 7-14 are working and the average time spent in work is around 37 hours a week.

Gender inequalities in basic education are symptomatic of wider disparities in society. Household tasks such as collecting firewood and water often fall disproportionately on girls. In some countries, early marriage is another barrier to education. Distance to school is also a problem, especially in rural areas. But perhaps the greatest barrier to gender equity in education is the persistence of attitudes that play down the value of educating girls.

Developments in countries affected by conflict will also have an important bearing on progress towards the 2015 target. According to UNESCO, 30 of the world’s poorest countries are either experiencing or emerging from violent conflict. These countries account for 47% of the out-of-school population, with 28 million children affected. The extreme educational disadvantages faced by children in these countries emerge before and continue after primary school. Their child mortality rates are double the global average and enrolment ratios in secondary school are far below the average. They also have among the worst gender disparities and poverty-related inequalities. In many cases, this reflects the deliberate targeting

of civilian populations by armed groups and the high levels of sexual violence against young girls.

Unless more can be done to protect and rebuild education in these conflict-affected countries there is little prospect of the education targets being reached. The twin challenge for the international community is to provide greater support through the humanitarian aid system, along with support for the reconstruction of education systems. South Sudan is an immediate priority (Box 1). The country should be at the centre of a concerted international reconstruction effort backed by long-term political and financial commitment.

Countries with ongoing conflicts also merit urgent attention. In the Democratic Republic of Congo, armed violence in the eastern part of the country has left a devastating mark on education. Conflict-affected areas are marked by extreme inequalities. In North Kivu, one of the worst affected provinces, almost half of females aged 17-22 years old from poor households have fewer than two years in school. The lethal effects of poverty, under-financing of education, high levels of family displacement, targeted attacks on schools and an epidemic of gender-based violence targeting schoolgirls are destroying opportunities for education on an epic scale.

Box 1 Education and reconstruction in South Sudan

In July 2011, South Sudan will emerge from decades of civil war to become an independent nation. The transition will be a moment of pride for the people of southern Sudan. Yet the new government faces daunting reconstruction challenges – and nowhere more so than in education.

South Sudan has some of the worst education indicators in the world, reflecting a combination of neglect, displacement of families and the systematic targeting of schools – and schoolchildren – during the conflict. Health risks and education problems are mutually reinforcing. The country's immense challenges can be summarized in one distressing comparison. Today, a young southern Sudanese girl is more likely to die in childbirth than she is to reach the third grade of primary school. It is estimated that just 13% of boys and 5% of girls complete primary school. And in a country of 10-14 million people, the total secondary school population is just 34,000. There are fewer than 2000 children – and just 395 girls – in the last grade of secondary school.

Peace has raised expectations. Displaced people returning to their homes want their children to reap the benefits of education. Primary school enrolment quadrupled between

2006 and 2009, rising from 400,000 to 1.3 million. Classroom construction has also increased. Even so, the deficits are immense:

- Over half of the population falls below a nationally determined poverty line, and other human development indicators are poor, including nutrition, maternal health and child survival.
- Fewer than half of all the teachers have any qualification and the qualified-teacher-to-student ratio is 1:117.
- Government estimates suggest that another 23,000 teachers are needed by 2013 to bring the teacher-pupil ratio down to 50:1.
- 4,000 classrooms are needed by 2015 to reach universal primary enrolment – a 20% increase over current levels.

In a country with limited resources, weak institutions and limited capacity, the scale of the reconstruction challenge in education can hardly be exaggerated. The danger for South Sudan is that a delayed and fragmented approach will undermine prospects for recovery, fuel social tensions and undermine economic recovery, with potentially dangerous implications for peace in the country and the

The global education divide

Monitoring progress towards universal primary education serves to highlight the sheer scale of global inequalities in education. Even before taking into account the quality of learning, children born today in the world's poorest countries live in a different universe of educational opportunity.

Using household survey data, UNESCO's Deprivation and Marginalization in Education measure (DME) makes it possible to capture the share of a population aged 17-22 years old falling below various thresholds. The DME sets fewer than four years in school as a threshold for "education poverty", the minimum required to secure even the most basic literacy and numeracy skills, and sets a lower two-year threshold for "extreme education poverty". In countries like Pakistan, Liberia and Rwanda, over 30% of those aged 17-22 had fewer than four years in school. In the cases of Burkina Faso, Chad, Mali,

Mozambique, Senegal and Niger, over 40% suffered from extreme education poverty.

Shocking as these figures are, they tell only part of the story. That's because many children emerge from more than four years in school lacking even basic literacy and numeracy – an issue that we return to below.

The sheer scale of global inequality in education is not widely recognized. National data for countries such as France, the United Kingdom or the United States, show that around 40% of the last generation of young adults graduated from secondary school and attended tertiary education (Figure 3). Compare this with countries such as Senegal, Mali or Niger; where fewer than half of children complete primary school. The profile of education attainment for the OECD countries and sub-Saharan Africa tells its own story (Figure 4).

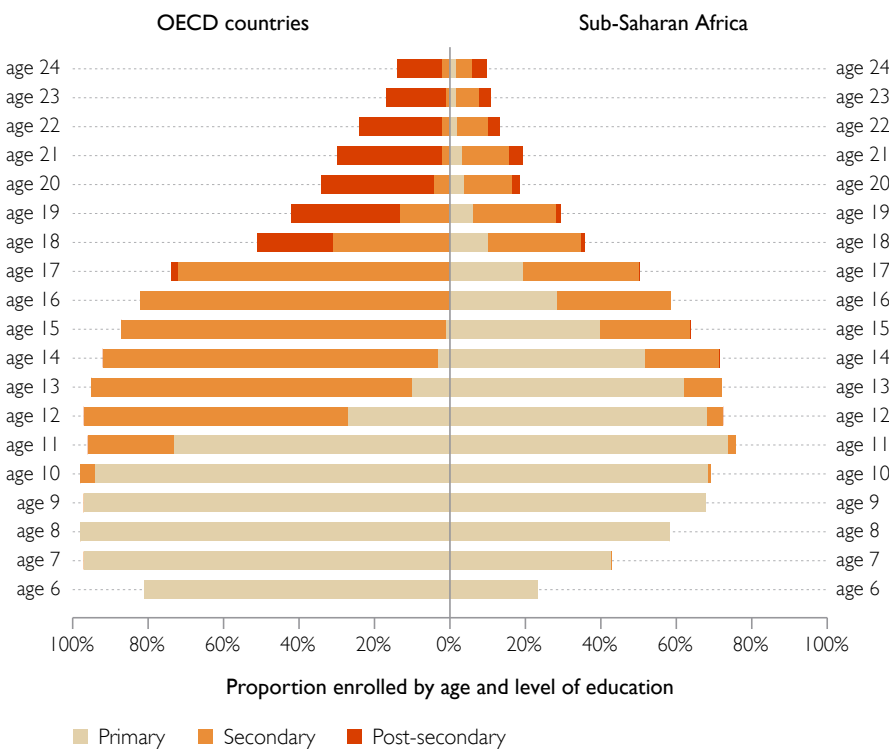
Figure 3: Grade attainment in sub-Saharan Africa and the United Kingdom, recent years



Note: These figures under-estimate the real gap, as data for the United Kingdom only applies to university, while data for sub-Saharan Africa covers all tertiary enrolment.

Source: UNESCO Education for All Global Monitoring Report, 2011

Figure 4: Age-specific attendance rates by level in OECD countries and sub-Saharan Africa, 2000-2006



1. Weighted averages. Data are for the most recent year available during the period.
Sources: Calculations based on OECD (2008b); World bank (2008b).

Source: UNESCO Education for All Global Monitoring Report, 2009

The vast deficits in education opportunity captured by the DME measure are at the heart of some of the great development challenges facing the international community in areas ranging from health to poverty reduction and youth unemployment.

The crisis in learning*

Getting into school is just a first step on what should be a journey into the joy and discovery of learning, and towards lifelong learning. Education plays many roles in society, but one of the most important is to progressively equip children with the competencies they need to become literate and numerate, and to acquire higher-order problem-solving skills.

Parents across the world's poorest countries make enormous sacrifices to get their children into school systems charged with achieving these goals. All too often those sacrifices are rewarded with poor quality education.

That is bad for the children affected, for their parents and – a widely neglected point – for their national economies. There is compelling evidence that it is learning levels – not just years in school – that determine the social and economic returns to investment in education. The skills and knowledge of workers influence their productivity and their ability to adapt to new technologies and respond to changing labour market conditions. For countries, long-run growth prospects are strongly influenced by cognitive development, as reflected in learning achievement assessments such as the Programme for International Student Assessment (PISA). In the light of this evidence, the Center for Universal Education at the Brookings Institution has set out a compelling argument for making “learning for all the new goal driving the global education agenda.”

The early years of primary school provide a foundation for future learning. Children who do not learn to read in the first few grades carry a handicap as they progress through school. Poor readers struggle to develop writing skills and to build up knowledge in other subject areas.

It follows that all children should learn to read within the first four years of schooling, moving from phonemic awareness to phonics (linking letters to sounds) and the development of vocabulary and comprehension. The journey to comprehension has been likened to the transition from learning to read to reading to learn. There is a similar transition to be made in relation to numeracy, as children gradually learn to link objects and numbers.

Many children do not make the transition. Only a small number of the very poorest countries participate in international learning assessment exercises familiar to the public in OECD countries. That may have contributed to a lack of awareness about the learning levels of children in school. However, recent years have witnessed the emergence of a range of learning assessments, many carried out by independent civil society organizations, aimed at measuring what children learn (Box 2). The evidence suggests that many are learning far too little:

- In Uganda, over one quarter of children in grade 7 could not read and understand a simple story of grade 2 level difficulty.
- In Malawi, more than half of children tested in English at the beginning of grade 4 were unable to read a single word.
- In Kenya, one in ten children in class 8 cannot do class 2 level division.
- In early 2007, the World Bank and the government of the Gambia conducted a learning assessment that found that only 5% of grade 3 students met the reading fluency benchmark of 50 words a minute.
- In Pakistan, tests of grade 3 children found that only half could answer very basic multiplication questions and 69% were unable to add a word to complete a sentence.
- In rural India, just 38% of grade 4 students tested in one assessment could read a text designed for grade 2 students, and even after eight years of school, 18% were still unable to meet the grade 2 standard.

Box 2 A partnership that counts – Quality Education in Developing Countries

Awareness of the poor quality of education delivered through the school systems of many countries has pushed learning to the top of the Education for All agenda. In no small measure, that development can be traced to a strategic partnership between philanthropic foundations and civil society organizations.

The Hewlett Foundation's Quality Education in Developing Countries (QEDC), working with the Bill and Melinda Gates Foundation, was created with the objective of ensuring that, by fourth grade, children have learnt to read, write and develop basic numeracy skills. Working in countries such as India, Kenya, Uganda, Tanzania and Mali, QEDC has supported the development of non-government organizations to carry out assessments and communicate the results to parents,

school authorities and policymakers. Without information backed by advocacy from civil society, governments, teachers and donors cannot easily be held to account – and QEDC has actively used information to achieve change.

Through its strategic grant programme, QEDC has also actively promoted approaches to teaching aimed at delivering results. These approaches encompass curriculum development, teacher training and the development of early grade reading skills, with a strong focus on external evaluation and the development of baseline data.

The QEDC model has already achieved a great deal – but there is scope for a scaled-up initiative with a broader partnership aimed at delivering the teacher training programmes needed to provide quality Education for All.

These outcomes are profoundly disturbing. Governments are making large investments in education. So are parents. In Pakistan, the average rural family dedicates 13% of its income to public education. Yet the learning assessment evidence suggests that these investments are delivering low returns for societies and for individuals. The problem is not just that millions of

children are not getting enough years in school to gain the basic literacy and numeracy skills they need. It is also that many children are leaving education without these skills after receiving over four years in school.

Disparities in learning achievement are a significant part of the global learning divide. The major international learning

* I am grateful to the Center for Universal Education at the Brookings Institution for sharing their forthcoming report 'A renewed education agenda: Towards a Global Compact on Learning for All' (Brookings Institution, June 2011), on which this section draws.

assessments show that the median student in many low-income countries is performing far below the average levels of the world's worst-performing 5% of students – and below the lowest performance benchmark.

Just as there is no single factor behind children being out of school, so the crisis in learning achievement has several causes that vary across countries. Many children are being taught in overcrowded classrooms often lacking basic teaching materials; one review of countries in southern Africa found that almost three-quarters of children in school did not have a basic textbook for mathematics or reading. And there are often inequalities within countries. In south-west Malawi, only one in three students in grade 6 in the south-west had their own math textbook, compared with 83% in the Shire Highlands.

Language of instruction is another crucial factor in explaining low learning achievement levels. In her autobiography, Wangari Mathai, the African environmental campaigner and Nobel Prize winner, recalls how, in her primary school, children speaking their native language were punished and derided. She writes: "Now, as then, this ... lays the foundation for a deeper sense of self-doubt

and an inferiority complex (...). The reality is that mother tongues are extremely important as vehicles of communication and carriers of culture, knowledge, wisdom and history."

That assessment is backed by evidence on learning outcomes. The language of classroom instruction strongly influences the ability of children to read, learn and comprehend. Yet an estimated 221 million children around the world are being taught in a language other than their mother tongue in the formal school system, creating obstacles to improved learning. As a consequence, many students are forced to repeat grades, making drop out more likely, and those who remain in school are disadvantaged. There is extensive evidence that teaching children in their home language during the early grades and progressing slowly towards bilingual or multi-lingual education can strengthen learning achievement, as highlighted by experience over the past decade in countries such as Ethiopia and Mali.

The greatest influence on learning achievement is teaching. Education systems are enormously complex and involve many different actors. Ultimately, however, learning is about a classroom relationship between teachers and pupils. That relationship is fractured in many countries by problems related to the

The crisis in equity

What children are able to achieve through education should reflect their efforts and abilities, not the wealth of their parents, their gender, their ethnicity, or where they happen to live. Restricting opportunities for education on the basis of inherited markers for disadvantage is a source of injustice. It is also a source of waste and inefficiency. Working to equalize opportunity in education is a critical requirement for unlocking

social mobility, raising productivity and strengthening innovation. Of course, no country in the world, rich or poor, can claim to have equalized education opportunity. But failure to tackle deeply entrenched inequality is holding back progress towards the Education for All goals – and it is reinforcing wider national and international inequalities.

Early childhood – the formative years

Disparities in opportunities for education start long before children enter school. The first five years of life – and especially the first two – are critical for early brain development as children acquire language, memory and motor skills.

Growing up in a supportive environment that includes good maternal health during pregnancy, proper nutrition and psychological stimulation is vital to cognitive development and the early learning that prepares children for school. Failure to provide effective support in the early years can lock children from disadvantaged homes into a trajectory that extends from reduced educational attainment to diminished prospects in employment markets.

Far too many children are reaching school age having been damaged by malnutrition. Around 195 million children in developing countries reach the age of 5 having been stunted by hunger. For many of these children, the threat posed by under-nutrition began in the womb. Some 19 million children in developing countries are born underweight each year, reflecting acute maternal health problems. Maternal iodine deficiency in pregnancy causes an estimated 38 million children to be born each year facing risks of mental impairment. While sub-Saharan Africa has very high levels of childhood malnutrition, some of the highest rates in the world are found in South Asia, where 42% of children under the age of 5 have experienced moderate or severe stunting.

Malnutrition is perhaps the most savage of all destroyers of human potential. According to UNICEF, it is the main underlying factor in up to half of all child deaths. Yet that tragic figure tells

only part of the story. The impact of hunger on education systems is gravely underreported. Children experiencing malnutrition, especially in the first few years of life, are more likely to start school late, and less likely to complete primary education. They are also more likely to underperform when it comes to learning achievement. One recent study, drawing on evidence from Guatemala, found that being stunted at the age of 6 was equivalent in its overall education effects to losing four grades of schooling. Micronutrient deficiency – as indicated by anaemia, iodine deficiency and Vitamin A deficiency – is also strongly associated with lower test scores.

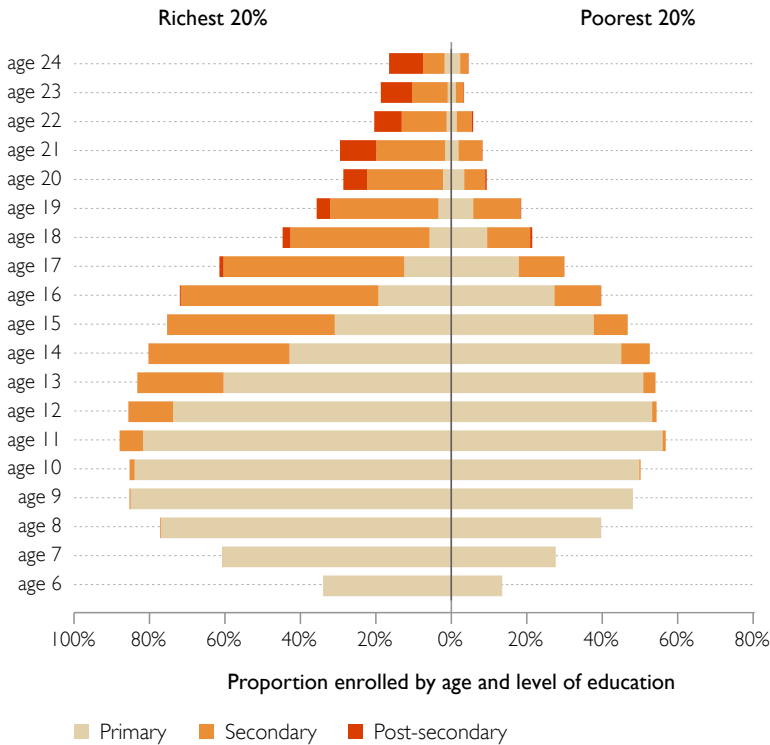
If there is one area of public policy in which the adage about prevention being better than cure has a particular resonance, that area is nutrition. Cognitive damage in the early years is often irreversible – and waiting for economic growth to resolve the problem is not a credible option. After two decades of rapid growth, India has achieved limited success in reducing child hunger. The proportion of underweight children is almost twice as high as the average for sub-Saharan Africa. Almost one in three of the world's stunted children lives in India.

What is required is the development of comprehensive national strategies, supported through development assistance and aimed at strengthening maternal and child health care. No child in the world should enter school carrying the immense disadvantages associated with hunger in their early years. And no government with a genuine commitment to equal opportunity in education should understate the critical importance of early childhood development.

National inequalities mirror global disparities

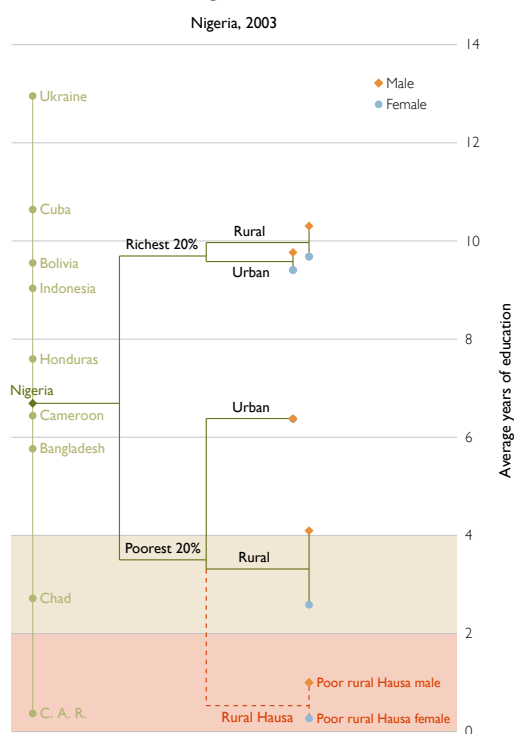
Social inequalities in national access to education mirror global inequalities. Children from the poorest households are less likely to be in school – and more likely to drop out early. The school attendance gap between rich and poor in Africa mirrors the gap between Africa and rich countries (Figure 5).

Figure 5: Enrolment by age and grade in sub-Saharan Africa, richest 20% and poorest 20%



Source: UNESCO Education for All Global Monitoring Report, 2011

Figure 6: Average number of years of education in Nigeria by wealth, location and gender, 2004



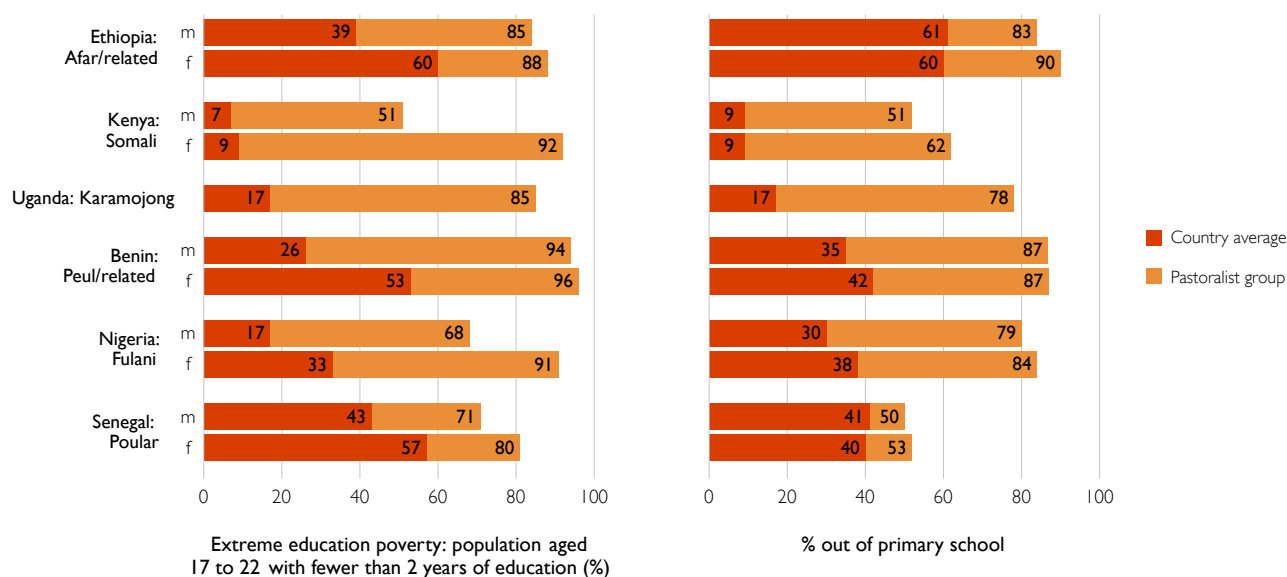
Source: UNESCO Education for All Global Monitoring Report, 2010

Inequalities in education do not operate in isolation. Factors such as poverty, gender and the rural-urban divide interact to produce mutually reinforcing layers of disadvantage, with one factor magnifying the effects of the other.

UNESCO's Deprivation and Marginalization in Education data illustrates these effects. Looking behind national averages, the data makes it possible to trace the overlapping disadvantages that restrict opportunities for education. Being poor, rural and female carries a triple disadvantage, reinforced in many cases by regional disparities and disadvantages linked to ethnicity or language:

- In Nigeria, rich urban males average around 10 years in education, but poor, rural female Hausa average less than one year (Figure 6).
- In Kenya, just 9% of women aged 17-22 years have acquired fewer than two years in school, but that figure rises to over 90% for rural, ethnic Somali girls (Figure 7).
- In Pakistan, over 60% of poor, rural girls aged 7-16 are not attending school, compared with fewer than 5% among urban males.

Figure 7: Percentage of the population aged 17 to 22 with fewer than two years of education and % of primary school age children not attending primary school, by gender and membership of selected pastoralist groups, latest available year



Source: UNESCO Education for All Global Monitoring Report, 2010

Notes: Gender-disaggregated data are not available for Uganda.
 % out of primary school: proportion of children of primary school age not attending primary school.

Inequalities associated with learning achievement reinforce the disparities linked to years of education. It is invariably children from the poorest regions, the poorest homes and the most disadvantaged social groups that register the lowest learning achievement scores. For example, in Kenya the proportion of children in grade 3 able to read a grade 2 story is three times higher in the Central region than in the North East, which has the highest levels of poverty. National inequalities in learning achievement can be traced to many factors, including socio-economic composition of different schools and regions, disparities in public spending, and the fact that better qualified teachers tend not to be found in isolated rural areas or urban slums, where they are most needed.

Strategies for breaking down the interlocking disadvantages that destroy opportunity have to be tailored to specific circumstances. This is another area in which one-size fits all blueprints for change are best left on the shelf. Even so, some approaches merit broad application. One such approach is the adoption of equity-based targets. Currently, the MDGs and the Education for All framework set national targets for achievement. These could be supplemented by equity targets that look beyond national averages to disparities within countries. For example, countries could adopt time-bound targets aimed at, say, halving disparities in school attendance between children from the wealthiest and the poorest households, between regions and ethnic groups, or between

boys and girls in primary school and the transition to secondary school. Similar targets could be applied to learning achievement, with governments targeting a reduction in disparities between the best-performing and worst-performing schools, socio-economic groups, or boys and girls.

There are at least three reasons to consider a strengthened focus on equity in the MDG framework. First, making progress towards equal opportunity in education is an ethical imperative and an economic necessity. No country can afford to allow inherited disadvantage to undermine the creativity, talents and hopes of young children. Second, setting equity-based targets can help to focus the attention of policy makers on those who are being left behind. Third, overcoming inequality is an effective strategy for accelerating overall progress towards the Education for All goals. Brazil and the Western Cape region of South Africa have improved learning achievement levels in part by identifying the worst performing schools and adopting strategies aimed at narrowing the achievement gap.

An OECD review of the best-performing education systems shows that most attach considerable weight to equity. They provide incentives and more resources to schools with the greatest need, pair high-performing teachers with low-performing schools, and target disadvantaged children for special support.

2. Teachers, classrooms and finance – the pillars for strengthened international cooperation

The education crisis has many related dimensions; crises of access, quality and equity cannot readily be separated from one another. Far-reaching reforms will be required in many areas. Governments need to remove poverty-related financial barriers to access and provide incentives for marginalized groups to enter and complete basic education. They also need to strengthen education systems to deliver better quality provision.

The aim of this report is not to explore the various strategies for achieving these goals but to identify areas where international cooperation can make a difference. There are three core priorities that a strengthened Education for All partnership must address, with leadership from the G8 and the G20:

- The recruitment, training and motivation of teachers;
- The construction of classrooms and provision of teaching material;
- Financing the 2015 commitment.

Each of these priorities is related. Even in the most difficult environment, good teachers can make an immense difference – but the chronic overcrowding of classrooms is an impediment to good teaching. And while money is not a guaranteed route to the development of a good quality education system that delivers learning opportunities for all, chronic financing deficits can prevent governments from recruiting the teachers and building the classrooms needed to make a breakthrough.

Recruiting and supporting teachers – a first-order priority

Teachers are the backbone of any education system. Ultimately, learning is the product of what happens in classrooms through a relationship between pupils and teachers. That is why no education system is better than the availability, accessibility and quality of its teachers it provides, and the level of support that it delivers to those on the front line of education in the classroom.

Parents understand the importance of teachers. One survey in Pakistan questioned rural parents over their understanding of what constituted a “good school.” In a country where just one-third of schools are judged to be in a satisfactory condition, 30,000 need major repairs, and over 30% have no drinking water or latrines, it might have been expected that infrastructural needs would dominate. In fact, almost four parents in five said that they would rate a school as “good” or “very good” even if it had: “A roof that leaks, a broken boundary wall and desks, no free textbooks or school supplies, but teachers who were always present and highly motivated.”

There is no substitute for good teachers. Yet across the world's poorest countries education systems are imploding under the combined weight of teacher shortages, inadequate training and support, and inequitable patterns of deployment. The symptoms are reflected in the slow progress towards the international education goals and the poor quality of provision.

There is a vicious circle in operation. Expansion of primary school enrolment has put enormous pressure on the supply of teachers. In many countries, pupil-teacher ratios are on the rise and over-stretched, inefficient systems of pre-service training and in-service support are failing to strengthen, or even maintain, standards. Many countries have actively sought to increase supply by resorting to the recruitment of poorly qualified, uncertified teachers with limited education themselves. Moreover, the best-qualified teachers are often deployed in more prosperous areas with better-performing schools, rather than in the urban slums and isolated rural areas where they are most needed.

Overcoming the teacher crisis is a pre-condition for achieving universal access to basic education and raising learning achievement levels. More teachers have to be recruited as a matter of urgency – but the crisis is about more than teacher numbers. Governments also need to raise the standard of teaching, which will require improved training and support. The tensions between quantity and quality have to be carefully managed to deliver results in the classroom.

There are five key areas for national reform and international cooperation.

Teacher recruitment: The next five years will need to see a step-increase in the recruitment of teachers, especially in sub-Saharan Africa. Estimates from the UNESCO Institute for Statistics suggest that the region will need an additional 1 million teachers by 2015 if it is to achieve the goal of universal primary education. Globally, there are 19 countries for which data is available that will have to increase recruitment by more than 3% annually.

Pre-service training: Newly recruited teachers need to be trained – and training systems in many countries are underfinanced, overstretched and delivering sub-standard services. Acute shortages of pre-service training places could jeopardize prospects for achieving universal basic education by 2015. For example, it is estimated that Ethiopia needs 141,000 additional trained teachers between 2008 and 2015. This compares with a graduation level of 10,000 in 2008. South Sudan will need another 20,000 trained teacher posts by 2015. Pre-service training enrolments in 2009 amounted to just 1,200. For countries such as Tanzania and Zambia, trained teacher recruitment will have to increase by at least 50% over 2008 levels by 2015, rising to more than 100% for Malawi and Burkina Faso. The problems go beyond quantity: the quality and relevance of pre-service training in many of the poorest countries is weak. The transmission mode of lecturing to large groups of passive learners

dominates, and is subsequently carried into the classroom. Teaching practice is far too short and not adequately supported. Insufficient attention is paid to the vital task of equipping teachers to deliver effective early grade reading and numeracy. All of these problems are compounded by chronic underfunding and limited access to good quality teaching material.

Teacher quality: Many teachers in the poorest countries are not equipped to deliver good quality teaching. Only fragmentary evidence exists on teacher competency levels – but the evidence that does exist is cause for concern. Fewer than half of grade 6 teachers in Mozambique, Uganda, Malawi and Lesotho were able to score at the top level of a reading test designed for their students. The outcomes were even worse for math scores. In Kwara and Lagos states in Nigeria, almost one-third of teachers tested on subject knowledge in four areas achieved a score below a threshold identified as a “long way short” of the minimum proficiency level. These are indicators of a problem in the education levels of recruits. Over one-quarter of entrants to pre-service programmes in Malawi, Mozambique and Zambia had only primary or lower secondary education. Minimum entry qualifications for courses at teacher training colleges are typically low and have been lowered further in some countries in a bid to keep up with enrolment demand. The recruitment of large numbers of contract, volunteer and community teachers has left its mark on the profile of the teacher workforce. Much of the restructuring has been driven by a concern to lower the costs of recruitment. But the mass employment of low-cost and poorly trained teachers has created widespread concern over teacher quality.

Professional development: In-service training is a cost-effective strategy for raising the quality of teaching. But it is in short supply. Once teachers are in school, they often receive limited

support. One survey revealed that 40% of teachers in southern Africa had not visited a teacher resource centre during 2007 – and surveys reveal that teachers often rate the quality of in-service support as very poor. One exception is Malawi, where a new primary school curriculum was introduced in 2007 and teachers received training every two weeks for four months at teacher development centres.

Pay and motivation: It is sometimes said that the central dilemma in education in the poorest countries is that teachers cost too much, but earn too little. There is some truth in that assessment. Teacher salaries typically represent over 80% of the education budget, yet many teachers struggle to make ends meet and are forced to take on multiple jobs. The issue of teachers' pay tends to attract sweeping generalizations. Some commentators maintain that teachers are overpaid relative to some norm, even in countries where many live below the official poverty line. One side to the debate argues that reducing teacher salary costs would help to increase the number of teachers that can be employed. The other points out that, at current salary levels, education authorities in many countries struggle to attract and retain well-qualified teachers, especially in mathematics and science. What appears clear is that there is a crisis of teacher motivation in many countries, linked to a perception that the status and living standards of the profession have declined over time. Part of that crisis can be traced to the demands of teaching in overcrowded classrooms. Even the most dedicated teachers struggle to maintain their commitment when faced with classes of over 60 children with few textbooks and other teaching materials. Moreover, the low-level of teacher pay in many countries is linked to the widespread practice of salary supplementation by parents, which in turn creates cost barriers to education.

The school infrastructure

While teachers are the most important factor in determining education quality, the environment in which they teach also has an influence.

Far too many children are already sitting in overcrowded classrooms and dilapidated schools lacking textbooks. Countries such as Zambia report pupil-to-classroom ratios in excess of 80, rising to over 90 in Ethiopia and 130 in South Sudan. Getting all children into school by 2015 without initiating a major programme of investment in classroom construction and school rehabilitation will stretch an already stressed system to breaking point.

In its survey of 46 of the poorest countries, UNESCO estimates that an almost 4 million additional classrooms are needed by 2015, over and above the replacement of existing stock. This would make it possible to reduce the number of children per classroom to an international norm of around 40. Countries affected by, or emerging from, armed conflict face particularly pressing infrastructure deficits. In the case of South Sudan, around half of the country's schools are open-air learning spaces – and 40% lack access to safe drinking water.

The financing gap

When governments met at the World Education Forum in Dakar in 2000 they made a contract. The poorest countries agreed to put in place the budget strategies needed to progress towards the 2015 targets. For their part, aid donors memorably pledged that “no countries seriously committed to Education for All will be thwarted in their achievement of this goal by a lack of resources.” With five years to go to the 2015 deadline, the time to honour that commitment is now.

Many of the poorest countries have increased spending on education. As a group, they raised the share of national income allocated to education from 2.9% to 3.8% between 1999 and 2008. With strong economic growth, this has increased per capita education spending – by around 2% a year in sub-Saharan Africa.

Inevitably, the global picture obscures regional and sub-regional variations. Many countries in South Asia are chronically under-investing in their education systems: Bangladesh and Pakistan, for example, invest less than 3% of GDP in education. In sub-Saharan Africa, countries such as Zambia and the Central African Republic allocate less than 2% of national income to education.

Yet the overall picture is a positive one. Across sub-Saharan Africa in particular, political leaders have backed the commitment that they made in Dakar with real budget resources. Countries such as Burundi, Ghana, Mozambique, Tanzania, Rwanda, Ethiopia and Kenya have all significantly scaled up spending on basic education. Indeed, Tanzania has increased the share of GDP allocated to education to 7% from 2% in 1999.

Achieving the 2015 targets will require sustained increases in financing for basic education.

UNESCO has prepared detailed estimates for this report aimed at identifying the costs of achieving universal basic education in 46 of the poorest countries. As summarized in Table 1, these estimates suggest that:

- An annual average expenditure of around \$36 billion will be required to achieve universal primary education and other basic education goals by 2015.
- The cost of recruiting new primary school teachers amounts to around \$2 billion annually, or one-fifth of the teacher salary bill to 2015.
- The cost of raising the quality of education through teacher training, assessment systems, and the delivery of textbooks is around \$5.5 billion annually.
- Primary school classroom construction will require around \$7.4 billion annually to create just under 4 million new classrooms and replace existing stock, with a steep increase in spending to 2015.
- Around \$3.7 billion annually is required in targeted support for children from marginalized households through incentives for school attendance, social protection and other programmes.

Table 1 Financing basic education in the poorest countries

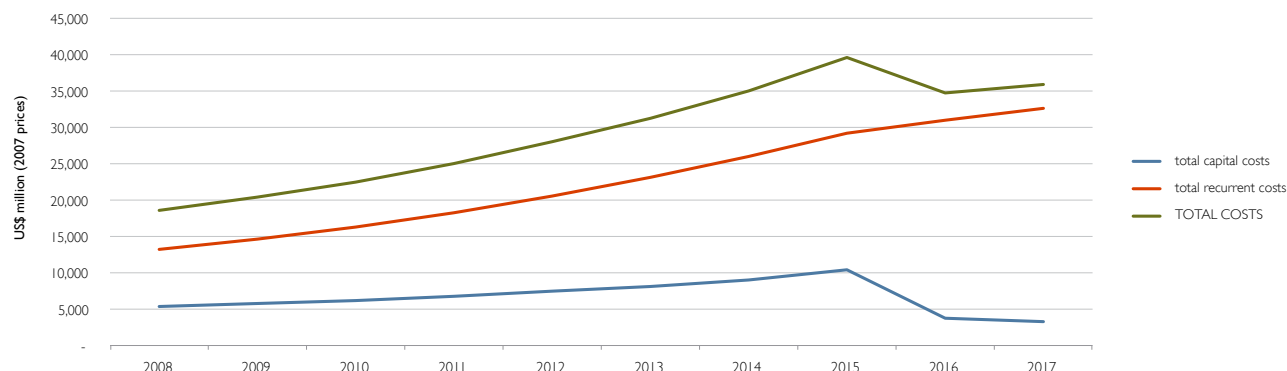
Investment required to reach basic education goals by 2015 (US\$ billions)

	2008-2015 Annual average
I. Total Basic Education Costs (US \$ billions)	35.7
Universal Primary Education	27.5
Teachers	10.9
<i>new teachers</i>	(2.1)
Quality inputs	5.5
Classroom construction and rehabilitation	7.4
Provision for the hard to reach	3.7
Other Basic Education	8.1
Early childhood and pre-primary education	7.5
Adult literacy	0.6
2. Total Domestic Resources (US\$ billions)	19.5
3. External Financing Gap (US\$ billions)	16.2
Primary education	9.8

Figure 8 provides an overview of the cost profile averaged out across the 46 countries. It highlights the sharp increase required in capital spending on classrooms. The timing of that investment is critical. Failure to front-load spending on classrooms will have implications for both access and the quality of education,

undermining efforts to achieve the 2015 targets. Recurrent spending on teacher salaries is inflated in the initial period by the additional financing requirements for recruiting new teachers, with additional spending on training and support to enhance quality.

Figure 8: The cost of universal primary education: estimates for 46 countries for recurrent and capital spending, 2008-2017



Source: UNESCO Education for All Global Monitoring Report estimates (based on EPDC data)

How much of the additional financing burden can the poorest countries themselves be expected to carry? As indicated in Table 1, with an increased revenue collection effort and more equitable public spending, the UNESCO exercise suggests that governments in these countries could mobilize around one third of the additional financing required. This implies that around \$16.2 billion annually will be needed in development assistance to achieve universal primary education and other basic education goals.

Current development assistance flows fall far short of this level. The poorest 46 countries covered in the UNESCO analysis received average aid flows to basic education of around \$2 billion for 2008-2009. This implies that development assistance will have to increase by between \$13 billion and \$14 billion annually to 2015. That figure is the price of keeping the promise made to the world's children in 2000.

Support for education is obviously determined in part by the size of the overall aid envelope. That envelope has been expanding. The \$129 billion in aid provided in 2010 marked an increase of \$35 billion over the level in 2004 and represented 0.32% of combined donor GNI. However, delivery has to be judged against commitments. The commitment made at the 2005 Gleneagles summit, hosted by the United Kingdom, was to increase aid by \$50 billion (2004 prices), with half of the increase earmarked for sub-Saharan Africa. Recent estimates by the OECD suggest that donors have fallen short of that commitment by around \$19 billion. Sub-Saharan Africa accounts for the vast majority of the shortfall. Analysis of planned expenditure to 2013 indicates that aid to the region will now increase at just 1% a year, which is below population growth – and far below the 2005 commitment level.

Within the global development envelope, the future of aid to basic education is also a matter for concern. Several major donors have taken a strategic decision to reduce the number of countries covered by their aid programmes, and to downgrade the weight attached to education relative to other areas such as climate change, health, nutrition and conflict. Both Canada and the Netherlands, which have played a leadership role in education, fit into this category. Whatever the wider rationale for streamlining aid and balancing different priorities, many countries in sub-Saharan Africa and other regions face the prospect of a reduction of support in education from one or more key donors. At the time of writing it appears likely that the US aid budget for education will contract in 2011 as a consequence of congressional legislation. Meanwhile, fiscal pressures on aid spending are mounting, with potentially damaging consequences for development assistance pledges.

Not all aid to education reduces the financing gap for achieving the 2015 targets. Some major donors skew their aid to education towards higher levels of education. Moreover, a number of G8 countries count as aid financial transfers to domestic education institutions in the form of 'imputed costs'. These transfers cover the imputed costs of teaching students from developing countries.

There is considerable scope for increasing aid to basic education in the poorest countries. Acting on the Gleneagles commitments and allocating 60% of education aid to basic education in the poorest countries would mobilize around \$4.1 billion annually (Table 2).

Additional resources	US\$ billions, annual
Acting on the Gleneagles commitment	1.9
If all donors spent at least 60% of their current education aid on basic education	2.2
Total	4.1

Many conflict-affected states are short-changed by the aid system

Armed conflict destroys lives, displaces people and damages infrastructure. Less visible are the impacts on education. Across many of the world's poorest countries, ongoing conflicts are diverting resources from education and putting children and schools on the front line of violence. Countries emerging from conflict also face formidable challenges. Peace creates opportunities for an education peace premium. Getting children into school and delivering a decent quality education can help to demonstrate that peace works, creating hope and opportunity – and making a return to violence less likely. But many countries emerge from conflict lacking the financial resources, institutions and capacity to rapidly reconstruct education. Effective aid can make a difference both in protecting the right to education during conflict, and in supporting reconstruction.

Current development assistance practices fall far short of a credible response to the challenges posed by armed conflict. Humanitarian aid plays a vital role in rebuilding the lives of people affected by conflict. Yet education is neglected. It accounts for just 2% of humanitarian aid – and no sector has a bigger gap between the amount requested in appeals and the finance delivered. Moreover, humanitarian aid flows are highly volatile and uncertain, not least because they are driven by short-term appeals processes.

Far more could be done to protect the right to education during armed conflicts. Communities living with conflict make great sacrifices to maintain schooling, whether in camps for displaced people, in “bush schools” or in zones experiencing violence. Parents in these communities see education as a way of restoring normality to the lives of their children. The efforts of the humanitarian aid community are not commensurate with the efforts of these parents – and they are not consistent with their aspirations. Moreover, the volatility of humanitarian aid flows weakens the efforts of nongovernmental agencies to provide education. In eastern Democratic Republic of Congo, Save the Children reports that it has sometimes been forced to cut successful education projects because of the vagaries of humanitarian appeals processes.

Countries emerging from armed conflict need long-term commitments of financial support to embark on education reconstruction. Donors need to start providing support early and stay for the long haul. Where this happens, extraordinary progress is possible. The rapid recovery of education systems in Sierra Leone, Rwanda and, more recently, Cambodia, highlight the positive role that aid can play. In Afghanistan, donors have pooled their resources through the Afghanistan Reconstruction

Trust fund, to support the development of the education system with a strong emphasis on building national capacity. In 2008 there were 2.3 million Afghan girls in school, compared to an estimated 64,000 in 1999.

Unfortunately, many countries have received far less consistent and effective support. All too often, countries emerge from armed conflict to be placed on a drip-feed of short-term aid, making it difficult to build an education system that provides a peace premium. South Sudan will provide a test case of the readiness of donors to back a peace agreement with a strategy for supporting reconstruction. And there are concerns that current financing commitments fall far short of requirements.

South Sudan also illustrates the wider case for a new type of public engagement with education. There is a tendency in current campaigning and advocacy work in education to focus on the big aid financing gap numbers and on high-level meetings. Both matter a great deal. Yet there is a sense in which this style of campaigning can disempower people, dehumanize the problem, and demotivate campaigners. In the case of South Sudan, it is imperative that donors step up to the plate and that non-government organizations make their voices heard at donor meetings. Yet education reconstruction in the country involves activities that people in the rich world can support, whether through their schools, churches, unions, companies or other associations. Looking beneath the headline figures, this is what money can buy for South Sudan's children:

- Just \$4 is enough for a textbook for a primary school child, which means that \$160 would provide books for a whole class.
- At current salary levels, it takes around \$3,178 to hire a qualified teacher.
- Raising the quality of teaching through pre-service and in-service training takes around \$2,500 per teacher.
- It costs \$30,000 to build one of the 4,000 classrooms that South Sudan needs to construct each year for the next three years.

Effective mass campaigning is about creating opportunities for ordinary people to express their solidarity – and to make a difference. What these figures illustrate is that resource mobilization in rich countries could make a great deal of difference to the lives of millions of children in South Sudan. More than that, it would create a point of engagement, mobilizing a public constituency that is well informed and well-placed to hold donors to account.

The Fast Track Initiative

In marked contrast to the health sector, education lacks a strong focal point for international cooperation. The Fast Track Initiative (FTI), of which the World Bank is a significant partner and fund manager, has played an important role in supporting education planning in a number of countries. Yet it has struggled since its inception to mobilize resources on a scale commensurate with the task to be addressed.

In 2009, the FTI disbursed just \$220 million to about 37 partner countries. In the past, G8 members have consistently failed to meet modest requests for replenishments. The current

replenishment round appears likely to mobilize no more than \$1.5 billion for a three-year funding cycle. In the current aid climate, even this figure may prove unduly optimistic.

Current FTI financing is inadequate not just in the light of the overall aid financing gap, but also in relation to requests from developing countries that have been encouraged to participate in the FTI. In 2011, 16 countries may be requesting support totaling over \$1.2 billion. In addition, the FTI is committed to increasing support for conflict-affected states, with up to 15 new countries becoming eligible for support by 2012. Moreover, the FTI is likely

to face an increase in requests for aid as several donors scale down their bilateral support for education.

The contrast with the health sector could hardly be more marked. Mechanisms such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and the GAVI Alliance, which supports immunization programmes, have provided a focal point for international partnerships and resource mobilization. The Global Fund, which disbursed some \$10 billion between 2002 and 2009, has galvanized support from the G8 in particular; but has also built a diversified funding base. This has not happened under the FTI.

Both of these global health funds provide financing windows for philanthropic foundations – such as the Bill and Melinda Gates Foundation – and have drawn on innovative financing. For example, the GAVI Alliance is partly financed through International Finance Facility for Immunization (IFFIm) bonds. Backed by eight governments, IFFIm raises finance by issuing bonds in capital markets against government pledges. From 2006 to 2010, IFFIm raised \$2.6 billion from institutional investors at an average interest rate of 1.6%. This public-private partnership has harnessed the power of capital markets to deliver up-front investments that have saved lives and improved child health, enabling GAVI to double spending on immunization and health services.¹¹ There is no comparison with the FTI. While several major philanthropic foundations are doing excellent work in education, there are no public-private partnerships or innovative financing windows operating under the FTI.

Why has the FTI failed to galvanize support, mobilize resource and support innovative financing on a scale comparable with the global funds in health? That question has been widely debated. Some commentators take the view that the FTI's primary role is not to fill financing gaps, but to build capacity and strengthen planning processes. Others have drawn attention to concerns over the slow pace of disbursement and a range of governance issues related to the management of FTI funds.

This debate has raised important points. But whatever the record to date, it is hard to escape the conclusion that political neglect of the FTI represents a wasted opportunity. The framework provides a mechanism for linking aid through national plans and policies explicitly linked to the shared international development goals in education. Like the global funds in health, it provides donors with an opportunity to pool resources, thereby lowering transaction costs, and harmonizing their efforts to support national plans. The leadership of the FTI has improved and the governance system has been reformed to give developing countries a greater voice and reduce dependence on the World Bank. There is evidence that disbursement rates have increased over time. Most important of all, the FTI is demonstrating a capacity to support programmes that are delivering results:

- In Yemen, which has some of the world's largest gender disparities in education, support from the FTI has been directed towards a programme that has constructed an additional 3,866 classrooms, recruited 1,000 new female teachers and improved the primary school completion rate.
- In Cambodia, an FTI-supported programme has contributed to financing efforts and policies that have trained over 6,000 teachers and reduced dropout rates.
- In Sierra Leone, where around one quarter of children are still out of school, 40% of teachers are unqualified, and many classrooms lack basic teaching materials, an FTI grant is supporting programmes aimed at training 1,500 teachers and distributing 25,000 textbooks.
- In Mali, where just 70% of primary school age boys and 56% of girls are in school, the education strategy aims at increasing

access and improving learning achievement. An FTI grant supports the education sector strategy, which since its inception in 2007 has constructed 1,200 classrooms and two new teacher training institutes, trained 1,800 new teachers and provided in-service training to 4,000, and distributed over 2 million textbooks.

It should be emphasized that none of these results is in any sense solely attributable to the FTI. They are the outcome of a wider partnership involving government, donors and in some cases non-government organizations. Nor should the FTI's current level of performance deflect attention from the importance of continuing with the reform process. It is particularly important that the initiative becomes a more effective source of support for conflict-affected countries, many of which are starved of aid resources. But with political leadership, engagement and – critically – increased financial support from the G8, the FTI has the potential to become a multilateral focal point for an international effort aimed at achieving the 2015 goals. Realizing that potential is not just about winning technical arguments or providing new evidence on the importance of education. It is also about mobilizing public opinion through a compelling global campaign backed by innovative political leadership (Box 3).

Here too the global health provides a powerful demonstration of what is possible. GAVI's innovative financing facility, the IFFIm, has garnered such widespread support from governments for a simple reason: it is seen as a cost-effective way of saving lives. The Global Fund has been actively used as a vehicle for converting public concern into financial support. (Product)Red, to take one example, supports the Global Fund through a small levy on the sale of brand-name products, with partners including American Express, Apple, Dell and Nike. Under another initiative – the Affordable Medicines Facility for malaria (AMFm) – the Global Fund has mobilized a public-private partnership aimed at reducing drug prices through negotiations with pharmaceutical companies. Similar public-private partnerships have emerged under GAVI to support the development and disbursement of new vaccines.

There are surely important lessons here for the education sector: Under the auspices of a Global Fund for Education, it would be possible to open up new financing windows aimed at achieving tangible goals with real human benefits. Few goals are more tangible than recruiting, training and supporting the 1.8 million teachers that are needed in the poorest countries. And effective teaching requires classrooms and books. The Global Fund for Education could provide a reference point for a broad array of new financing options. It could provide a multilateral vehicle for public-private partnerships under which ICT providers and governments negotiate affordable access to internet learning for teacher-training facilities. It could be used to mobilize new up-front investment resources through private capital markets, including infrastructure funds (see below). Above all, though, a Global Fund for Education would harness the combined energies of campaigners, governments, and the private sector in delivering results where they most count – in the classrooms of the world's poorest countries.

There is an early opportunity to set a new course. In October 2011, donors and other stakeholders will meet at an FTI financial replenishment event. That event should be used to galvanize additional funding for the period 2011-2014. It is important that the level of ambition reflects the financing requirements needed to deliver on the 2015 promise – an additional \$13 billion annually for the poorest countries. The FTI itself should be scaled up and strengthened to play the role of a Global Fund for Education, with donors pledging (and subsequently delivering) around \$3 billion to \$4 billion annually. Much of this could come from the Gleneagles commitment and reallocation within the current aid financing envelope.

Box 3 Building a global partnership for change

Expanding opportunities for education in the poorest countries should be one of the great global campaigning issues of our day. Whether the motivation for action is grounded in a commitment to human rights, democracy, social justice, ethics or economics, education is one of the most powerful vehicles for change. Few issues merit more urgent attention, have a more compelling appeal, or a wider potential constituency. Every parent understands the importance of education. Schoolchildren have an extraordinary capacity for empathy. Teachers are drawn into their profession by a commitment to children and education. Moreover, the belief that all children should have an equal right to develop their talents regardless of their circumstances is one that transcends traditional political divides.

Yet despite these huge constituencies of interest, education has failed to capture the public imagination as a burning development issue. Public mobilization is limited. And the weakness of the campaigning voice weakens the pressure on governments to deliver. The consequences include the progressive marginalization of Education for All on the political agendas of the G8, the G20 and wider international summits.

Why the apparent paradox? Some people point to the immediacy of the issues at stake. At first glance, education does not appear to be a life-and-death concern in the manner of HIV/AIDS or malaria, so it registers as a less urgent cause. Others maintain that education is intrinsically complex and does not offer a 'quick-fix' focal point to rival the health campaigns for vaccines, anti-retrovirals for HIV/AIDS, and bed-nets for malaria.

Without playing down any of these considerations, there is also a wider failure – a failure on the part of political leaders, NGO campaigners, United Nations agencies and others to capture and communicate what is at stake. There is a profound disconnect between the innovation, ambition and drive for education that you find in every slum or poor rural village in the developing world, and the global campaign effort in education. How do we change this picture?

The starting point is to dispel the myth that education is a lower-order priority. As the Global Campaign for Education has pointed out, for millions of young children today, education is – in a very literal sense – a life-and-death issue. Depriving a girl of an education does not just deny her basic human rights, but also jeopardizes her prospects of a safe pregnancy in adulthood, and the survival prospects of any children she might have. Across the world, many people who are hungry, vulnerable, unemployed or trapped in insecure employment have had their lives blighted by restricted opportunities in education. And depriving people of literacy is to weaken the fabric of democracy, political accountability and responsive government.

So the first part of our challenge is to get better at communicating the damage inflicted by the education emergency in the poorest countries. The second part is to set ambitious goals, build partnerships for achieving them, and mobilize a campaign that provides ordinary people with a chance to make a difference.

The broad goals for a global breakthrough on education could not be clearer: We need to see all children in school by 2015 – and we need to ensure that schooling delivers real learning. If we are to meet this ambition, we need another 1 million teachers in Africa alone and another 4 million classrooms. More aid is vital. The Global Campaign for Education has rightly called on donors to mobilize the \$16 billion needed to deliver on the 2015 promise – and there is scope for innovative finance to make a difference. But we need to look beyond the headline numbers and the high-level summits.

This is a campaign that should be carried to a wide public audience. Every school and every teaching union should be given opportunities to make a difference. My own conviction is that the focal point for the campaign should be teachers. We should set the ambition of 'Training a million teachers for Africa', while at the same time creating the conditions for effective teaching – that means not just good quality training and support systems and fair pay for teachers, but also classrooms, books, and programmes that diminish the impact of poverty on children. Among the organizing themes for the new global campaign:

- Every child needs a teacher. Teachers in the developed world are already engaged through their unions in supporting their counterparts in the developed world. But the disparate programmes of support could be brought together into a global effort through which those involved in education in the developed world further increase the status and training of teachers in areas marked by extreme disadvantage.
- Partnerships in higher education. Universities and higher education institutions in rich countries could come together to develop and deliver teacher training material through new partnerships with institutions in developing countries, with telecom and computer companies facilitating improved access to the global information highway.
- Working with school-to-school support. Working with parents and local education authorities, we should set the ambition each year of linking thousands of schools in the rich world with schools in Africa. Some schools participate in this but a more dynamic partnership could be used to mobilize charitable donations and books.

Many innovative and interesting efforts are already being made in each of these areas, but they suffer from fragmentation and limited scale. Over the next few months I will work with others to develop a coordinated plan to secure a breakthrough on universal education.

Above all, transforming the Fast Track Initiative into a Global Fund for Education could play a decisive role in pushing education up the international development agenda and providing a focus for campaigners to rally around. As noted in this report, the education sector currently lacks a multilateral mechanism providing channels for philanthropic support and innovative financing, weakening the wider Education for All partnership.

3. Unlocking the potential – education as a force for change

There are many reasons to value education. Literacy, numeracy and learning have an intrinsic importance in shaping the quality of life. Education is a fundamental human right – and the birthright of every child. It is a key element in what Amartya Sen describes as “human freedoms” – the capabilities that empower people to make choices that they value.

Education is the springboard for human development in many areas, creating the conditions for progress in health, gender equity and democracy. In some cases the links between education and wider benefits are difficult to establish in a direct causal sense, but intuitively obvious. As Thomas Jefferson put it in a comment on governance “a nation that expects to be ignorant and free, in a state of civilization, wants what never was and never will be.” In other areas, the research evidence is more direct. That evidence confirms that education is a strategic investment in economic growth, innovation and job creation, with social returns that outweigh private returns. And whatever the past relationship between learning and economic growth, the future is guaranteed to look different. Increasingly, education is the fuel driving the knowledge-based global economies of the 21st century.

There is broad agreement that education enhances people’s ability to lead happier, healthier and more productive lives. Yet the vital importance of education to the wider international development agenda is not sufficiently recognized. Failure to achieve the goal of universal basic education by 2015 will not just violate the right to education. It will derail progress across all of the MDGs, slowing progress in poverty reduction, child survival, maternal health, nutrition and other areas. This will have consequences for the development agendas of the G20 and the G8:

- **Undermining the Seoul Development Consensus for Shared Growth.** Building on discussions that started at the 2009 Pittsburgh summit, the G20 has put at the centre of its wider growth agenda actions to support accelerated and more inclusive economic growth in low-income countries. It has rightly emphasized the importance of physical infrastructure and investment, and is developing a broad skills agenda. However, insufficient weight has been attached to basic education and human capital. Failure to put in place today the policies needed to broaden opportunities for access to good quality education will undermine prospects for dynamic and inclusive economic growth, and weaken the skills base of the economy. Integrating education into the Seoul Development Consensus would provide a powerful catalyst for sustained and inclusive growth, with wide-ranging benefits for poverty reduction and job creation.
- **Weakening the G8 Muskoka agenda.** The G8 has demonstrated a capacity to rise to important development challenges in areas from debt reduction to aid and food security. At their summit in 2010, political leaders adopted an ambitious policy framework – the Muskoka Initiative – aimed at cutting infant deaths, improving maternal health, and combating HIV/AIDS. Planned measures and financial support will focus on health sector interventions. Education is absent from the agenda. The omission will damage the Muskoka Initiative because accelerated progress in education – especially the education of girls and women – would powerfully supplement health sector interventions, empowering people to utilize health services and saving lives.

Quality Education for All – an investment in accelerated and inclusive growth

The Seoul Development Consensus addresses one of the greatest challenges facing political leaders today: forging a new, more inclusive pattern of globalization. The Education for All agenda is a vital part of meeting that challenge.

Over the past quarter-century, global market integration has registered some extraordinary achievements. It has expanded opportunities for wealth creation through flows of trade, investment and information. New growth poles have emerged: with the rise of emerging markets, the locus of economic power is shifting from North to South, and from West to East. Today, it is the emerging markets that are fuelling recovery from global recession. Yet too many countries and too many people have been left behind. We have thus far failed to harness the potential of global markets as a game-changing force for reducing poverty and sharing prosperity.

The G20’s Seoul Development Consensus sets out, for the first time in a forum of political leaders, a shared strategy for changing this picture. Its framework for action includes measures to remove what it describes as “bottlenecks to growth” in low-income countries, including constraints on investment and on infrastructure development. The aim is to achieve consistently high levels of inclusive growth in low-income countries, creating the conditions for the eradication of poverty and a more equitable pattern of globalization. This is part of a broader rebalancing strategy aimed at finding new drivers of demand in the global economy to support recovery and establish more stable conditions for sustained global economic growth. The ambition: to make low-income countries a new pole of global economic growth.

Shared growth – a pathway to inclusive globalization

The importance of the G20's agenda can hardly be overstated. Growth is not an end in itself. But it makes it possible to achieve other objectives. Dynamic growth may not be a sufficient condition for achieving the MDGs, but it is a necessary one. Growth is the only effective and lasting antidote to mass poverty, and protracted stagnation is a condition for failure. With 1.2 billion people living on less than \$1.25 a day and twice that number perilously close to the poverty line on less than \$2 a day, shared growth in the global economy should be viewed as a central element in the MDG agenda. Growth also generates the resources needed to invest in health, schools, water, sanitation and other priority areas.

There has been a great deal of debate over the benefits of global market integration for the world's poorest countries and people. That debate will continue. But whatever the precise trends and the detail, the level of inequality in the global economy represents an affront to social justice. Research carried out for this report by staff at the World Bank used household survey evidence to provide an overview of global income distribution at the end of the first decade of the 21st century. Among the findings:

- The poorest 20% of the world's population (approximating to those living on less than \$1.25 a day) accounts for only 1.6% of world income, and the poorest 40% for only 5.3% (Figure 9).
- The richest 10% of the world's population accounts for 53% of income – or five times the share of the bottom 40%.
- Just over half of sub-Saharan Africa's population is in the bottom 20% of the world income distribution, while 90% of the OECD's population is in the richest 20%.
- The median annual income in Africa is \$735 (in 2009 dollars), compared with \$18,363 in the OECD.
- Global inequality in income distribution is higher on numerous measures than for almost any country in the world. The Gini-coefficient for the world economy, for instance, is 0.67 – a higher level of inequality than for any individual country.
- Around 70% of global inequality is accounted for by disparities between countries, with the residual element traceable to within-country disparities.

Figure 9: Global income by quintile, 2009



The G20 commitment to shared growth and inclusive globalization reflects a broader concern to address these inequalities. It reflects also the recognition that the current pattern of globalization is delivering too little for the poorest countries, and that waiting for the "trickle down" effect to deliver more is not the answer. While sub-Saharan Africa has increased economic growth over the past decade, it still accounts for just 2% of world GDP and a similar share of exports and foreign investment. Similarly, while export growth has increased, sub-Saharan Africa is still locked out of many of the most dynamic sectors of world trade and locked into activities characterized by low added value. For example, the region accounts for just 1% of world value-added in manufacturing.

Source: World Bank, World Income Distribution provisional dataset, 2009

Education – a human capital growth constraint

In addressing the growth constraints facing Africa and poor countries in other regions, the G20 has emphasized the importance of economic infrastructure – and rightly so.

Infrastructure deficits limit the scope for many countries to tap into the benefits of global market integration, with adverse consequences for growth and poverty reduction. Just one rural African in three has access to an all-season road. Transport costs are high and port facilities are in urgent need of upgrading. Power shortages are endemic, with 30 countries facing regular shortages – and power is very costly to produce by global standards.ⁱⁱⁱ These deficits create a formidable barrier to dynamic and inclusive economic growth. They limit the scope for small farmers to benefit from local markets, undermine export competitiveness and increase the costs of imported goods. According to the World Bank, the financing required to overcome Africa's infrastructure deficit is around \$93 billion annually.^{iv}

International cooperation to remove the physical infrastructure bottleneck to growth is of vital importance. This is an area in which public-private partnerships can make a difference. Improving the state of power generation, roads, ports and other infrastructure would give a strong boost to economic growth – around 2% a year according to the World Bank. Because much of the investment needed to unlock that growth potential is “lumpy” and needs to happen up-front, institutional mechanisms have to be put in place to create the right pattern of incentives and risk-sharing through cooperation between private investors, governments and the international aid community.

Much of the same logic applies to investment in human capital infrastructure – the systems that equip people with the knowledge, skills and competencies that they, and their countries, need to participate in global markets.

Human capital is every bit as important to economic growth as investment in physical capital. In a review of developing countries that have succeeded in sustaining high growth over a period of 25 years or more since 1950, the Commission on Growth and Development concluded that: “Every country that sustained high growth for long periods put substantial effort into schooling its citizens and deepening its human capital.”

That conclusion is backed by extensive evidence. Analysis of the links between education and economic growth can be traced back to the 1960s and the work of human capital school. Since then it has been developed by economists such as Paul Romer and Robert Lucas, and explored by a wave of empirical research. Some of the most compelling evidence, though, of the role that human capital plays comes from history. The precise weight of human capital in explaining the economic take-off and sustained growth of the first generation of Asian tiger economies is still debated. But education was critical in laying the foundation for the development of a more skilled work-force equipped to absorb new technologies, develop new industries, penetrate higher value-added areas of world trade, and create employment (Box 4). Less widely noted is the role that education played in the rise of the United States as the pre-eminent economic power in the 20th Century. As Harvard economist Claudia Goldin has shown, America pulled ahead of Europe in education before it pulled ahead in economic growth, with schooling driving up the skills level of the work force (Box 5).

These historical experiences have a very contemporary relevance to debates on globalization and the deliberations of G8 and G20 summits. Successful globalizers have recognized that capital embodied in people – human capital – is the real wealth of nations. But far more than the 20th century, the 21st century is set to become the century of human capital led growth.

Box 4 Human capital as a source of growth in East Asia

Education was an area in which countries like South Korea and Taiwan had a head start. By 1960, they had already achieved near universal primary schooling and had started to expand enrolment of secondary and vocational education. Both countries had labour forces that were better educated than would have been predicted on the basis of their income levels, largely as a result of the weight attached to education in public spending. By giving priority to primary and secondary education at the base of the economic period, governments created a basis for rising productivity, broad-based opportunity and growth with equity. After half a century of high growth, and with many East Asian countries heading the international learning achievement league tables, it is easy to forget the key role of education in the region's economic miracle.

Much of the growth differential between East Asia and sub-Saharan Africa over recent decades can be traced back not to macroeconomic policy and increases in financial inputs, but to education.^v In 1960, countries like South Korea and Taiwan were no wealthier than countries such as Pakistan and Ghana. However, they were far ahead in education – and they drew progressively further ahead as the benefits of economic growth were ploughed back into education and skills development. Indeed, in 1960 the two Asian countries had achieved levels of primary and lower secondary school enrolment in advance of where Pakistan and much of sub-Saharan Africa stand today.

Box 5 Lessons from early 20th-century globalization – human capital in America

A little-known demonstration of the power of human capital comes from an earlier era of globalization. At the start of the 20th century, the great European powers of the day – Britain, France and Germany – closely monitored the rise of manufacturing in the United States. Their aim was to maintain supremacy in fiercely competitive global markets by discovering the secret of American success in the application of new technologies, industrial policy and investment.

European governments should have spent less time analyzing physical capital and more time examining America's schools. In 1900, the United States was the only country with more than a small fraction of its youth in full-time upper secondary schooling. By the 1930s, the United States was three to four decades ahead in post-elementary education and education gaps remained large up until the 1950s. The GI Bill of Rights, signed into law by Franklin Roosevelt in 1944, enabled the average GI who had graduated from high school to attend college, with tuition and stipends paid. By contrast, the 1944 Education Act in Britain did no more than guarantee all youth a publicly funded secondary education.

As in East Asia, the rise of America as an economic power was preceded by the expansion of the education system. The United States pulled ahead in human capital before and during the period that it was pulling ahead in economic growth. Progress in education produced the workforce that supported the rise of the new, more knowledge-based industries – including petroleum refining, rubber, canning, paper, steel and ceramics – that fuelled growth and increased demand for skills.

Wider lessons from the American experience are also relevant to contemporary policy debates on education. In the early 20th century, citizens and communities across the United States were organizing and advocating for a modern form of secondary schooling open to all. The High School Movement, as it was called, demanded schools that would train America's youth for life, providing them with flexible and relevant skills that could be transported across companies, sectors and states. The great virtue of the American school system was that it was built on democratic and inclusive principles, including public funding, gender neutrality and an academic general curriculum. By contrast, European rigorously separated small elites from students tracked into technical fields and trained in a narrow range of skills.

Reaping the education growth premium

Understanding how education influences growth is not straightforward. One stream of research has focused on the influence of years in school in explaining wage returns to education and growth differences between countries. However, it is evident from the analysis of education quality presented earlier in this report that time spent in school is often a poor proxy for what children learn. Of greater relevance is learning achievement which is a stronger indicator of quality education.

Modeling work carried out by Eric Hanushek and Ludger Woessman has examined the role that increased human capital, as measured by cognitive skills, plays in explaining long-run differences in economic growth between countries. Controlling for other factors that influence growth, they find that the skill level of the workforce, as measured by international learning achievement test scores for math and science, are an important part of the growth story.^{vi}

One of the advantages of the Hanushek and Woessman model is that it looks beyond simple headcount measures of education performance. Unfortunately, few of the poorest countries participate in the type of international learning assessments used in this model. This may help to explain why the role of education as a potential motor for economic growth and poverty reduction in these countries continues to receive insufficient attention. It may also explain why many governments and aid donors continue to view education as a "social policy" issue, rather than as part of a growth strategy.

To what extent does the wider evidence on education and growth remain true for the poorest developing countries? Research carried out for this report applies the Hanushek and Woessman model to the poorest developing countries covered in the UNESCO cost-estimates for achieving universal primary education. With an average per capita income of \$500, these countries have some of the highest poverty rates and worst social indicators. And they are home to 43 million out-of-school children – two-thirds of the world total.

Our application of the Hanushek and Woessman model considers several scenarios. One compares a baseline growth trajectory with a trajectory based on an additional 75% of 15-year-olds reaching the lowest level benchmark on the PISA test score for math at the end of a 10-year period. That benchmark is set at the lowest achievement threshold.^{vii} Another considers a less ambitious outcome in which countries registered a moderately strong improvement in learning, as indicated by a 50 point gain in the PISA score.^{viii}

Three caveats are necessary. First, in the context of the countries covered in the sample, achieving the threshold would require improved access, greater equity and dramatic improvements in quality. In other words, governments would have to address all three of the elements of the education crisis outlined in section 1. Second, data constraints relating to learning achievement in low-income countries make the results less robust than modelling for OECD countries – and more work is needed to overcome the evidence gaps. Third, the threshold target implies a high level of ambition, though there is strong evidence that strengthened national policies backed by international cooperation could deliver the required learning achievement levels.

Bearing these points in mind, the results of the modelling powerfully demonstrate the role that education could play in creating the conditions for more dynamic and inclusive growth in the global economy. Raising the learning achievement levels to the threshold implied by the more ambitious scenario would have the effect of:

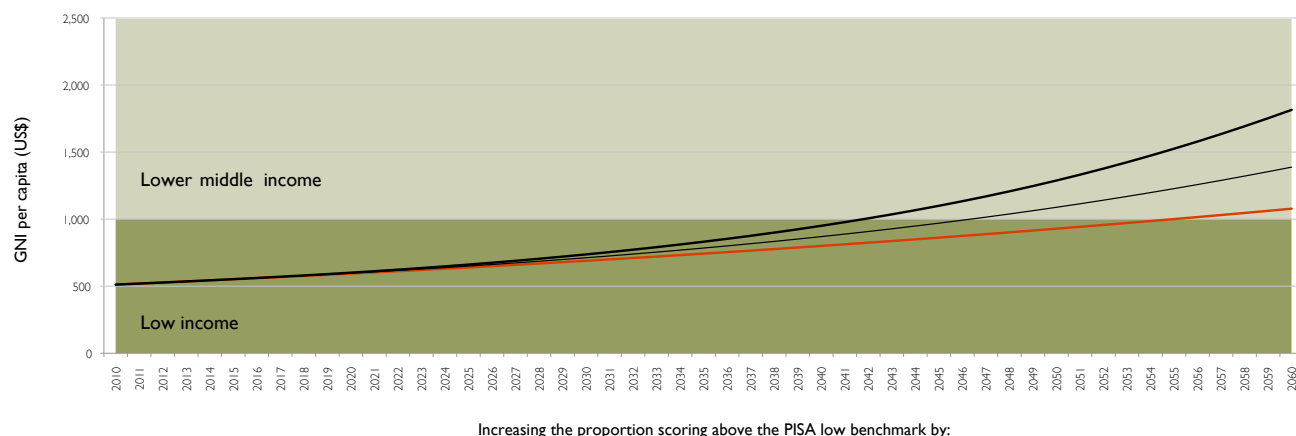
- **Increasing long-run economic growth** – the education growth premium. Over a 50-year period, the higher levels of skills and competencies generated through education would raise the average long-run growth rate by 2.1 per cent above the baseline trend level (Figure 10).

- Raising incomes** – the magic of compound growth. The impact of the difference in growth is very large. The growth premium would cut from 47 years to 33 years the period over which income doubles. For the low-income countries in our sample, this means that average incomes would reach \$1,000 per capita (PPP dollars) 14 years earlier than in the baseline scenario.
- Lifting people out of poverty.** If all countries in sub-Saharan Africa and South Asia had achieved by 2005 the thresholds identified in our scenario, 104 million people would have been lifted out extreme poverty (\$1.25 per day). By increasing long-run growth, higher levels of learning achievement would give a strong impetus to poverty reduction efforts. The difference between a growth scenario of 3.5% per capita and the baseline scenario of 1.5% per capita can be illustrated by a simple calculation. Taking into account the average income of a person living below the poverty line in sub-Saharan Africa and factoring in the rate at which economic growth converts into poverty reduction for the region, the higher growth trajectory would cut the time it takes to cross the poverty line from 16 years to 7 years, lifting a decade of poverty.

- Making a good investment.** For the 46 countries covered in UNESCO's global costing exercise mentioned earlier, the additional costs of achieving the threshold target average between 1.8% and 2.8% of GDP a year. But the investments and reform measures would pay for themselves through increased growth after 18-22 years.^{ix} Measured over the working lifetime of a young person coming through education, entering the labour market, and progressing through their working life, every \$1 spent on education would generate \$10-15 through the economic growth premium.^x The real question is not so much whether countries and aid donors can afford these investments – it is whether they can afford not to make them.
- Supporting a balanced global recovery.** After around 31 years, the growth premium associated with improved performance in education would be equivalent in economic scale to the GDP of Spain. While the boost to aggregate demand is clearly not immediate, over time the growth effect would establish the poorest countries as a stronger growth pole in the global economy.

The less ambitious scenario for improved learning achievement produces more modest, but still significant, results. Long-run economic growth would increase by 1% above the baseline level.

Figure 10: The education growth premium: long-term growth scenarios with improved learning achievement in 46 poor countries, 2010-2060



Source: Hanushek and Woensman, forthcoming

Note:

- *Scenario 1: Under this scenario the national learning achievement level rises by 50 points on the PISA scale.
- **Scenario 2: Under this more ambitious scenario, the share of the population registering a PISA threshold score of 400 rises by 75 per cent over time. For example, if 5 % of the current population scores at this level, the share would rise to 80% as the proportion of children emerging from school with improved performance rises.

How plausible are the scenarios considered in our exercise? Measured from the starting point of most poor countries, the absolute learning achievement gains exceed those explored in the growth modeling for OECD countries. By the same token, the thresholds are set at a very low level of competency. There are strong grounds for arguing that countries that start from a very low base can move rapidly towards the acquisition of basic learning skills if the right teaching infrastructure is put in place.

Several countries, or major regions within countries, have demonstrated that rapid advances in learning achievement are feasible, even with rapid increases in enrolment. One particularly striking example is Brazil. Since 2000, the country has markedly increased its PISA scores for math and science.^{xi} Since 2003 Ghana has been one of the fastest improvers in the Trends in International Mathematics and Science Study (TIMSS).^{xii} Meanwhile, Madhya Pradesh in India has registered strong gains in literacy over a very short period. While the factors behind each of these cases varies, common ingredients include a strengthened commitment to assessment, early reading programmes, teacher support, and the establishment of targets that are monitored and linked to well-defined policies.

The results of the modeling exercise presented above raises important questions about how governments and political leaders in the G8 and G20 view education. To the extent that Education for All figures in international summit agendas, it is typically viewed as an 'aid issue' and a matter of social policy. Without discounting the importance of aid or the social dimensions of education policy, that perspective is an anachronism. Supporting the drive for quality education is an investment in economic growth and, over the long run, reduced aid dependence.

As with other areas of infrastructure – ports, power and roads, for example – unlocking the growth potential of education requires initial spending that is beyond the means of governments in the poorest countries. The limited availability of investment resources represents a bottleneck that is constraining growth. Several governments in sub-Saharan Africa, along with the African Development Bank and the World Bank, are working to remove that bottleneck through the development of a multilateral public-private partnership that taps into private capital markets under the auspices of an African Infrastructure Fund.

Box 6 Education as part of an Africa Investment Fund

Even with increased aid, many of the world's poorest countries will be unable to finance the public spending needed to make a breakthrough in education. Bringing education into a wider multilateral effort to broaden and deepen productive investment in infrastructure could help to change this picture.

Low levels of investment in infrastructure are a major barrier to economic growth. This is especially true in sub-Saharan Africa, where transport, power and wider constraints dampen investment activity, push up prices and limit the development of markets.

Regional governments are themselves taking the initiative in tackling the infrastructure bottleneck. Under the Africa Action Plan (AAP), the African Union (AU) and the New Economic Partnership for African Development (NEPAD) are exploring conditions for attracting private capital investment into infrastructure sectors.

Education should figure on the menu of priorities for two reasons. First, deficits in education infrastructure are a major constraint on growth. Schools are every bit as much a productive investment as ports, roads and power. Firm-based surveys in Africa reveal that shortages of skilled labour are limiting investment and employment.

Second, the profile of financing deficits in education bears some of the hallmarks of wider infrastructure deficits. One of the reasons that countries, and the private sector, under-invest in sectors such as power is that development requires large up-front investments that yield social and economic returns over a long period. In the case of education, UNESCO's costing scenario points to the need for significant increases in classroom infrastructure to 2015, with spending requirements

amounting to around \$7 billion annually.

Elsewhere, I have argued that the global investment community should reconsider its current assessment of opportunities in Africa, with governments, aid donors, and multilateral agencies should cooperate to strengthen incentives for long-term infrastructure investment. Currently, far too much investment flows into over-heated parts of the global economy – such as global commodity funds – and far too little flows into productive infrastructure in the poorest countries.

In principle, a global public-private partnership on infrastructure could mobilize \$2 billion to \$4 billion annually through an Africa Investment Fund and analogous mechanisms in other regions. Various arrangements could be considered. Private investment could provide finance through bonds for school construction, as part of a wider issue, with multilateral agencies providing risk guarantees, and international institutions and donors making advance commitments to finance interest payments. The African Development Bank has the potential to play a key role in guaranteeing risk and leveraging resources.

Of course, there are institutional problems that have to be addressed – and the framework developed by the AU and NEPAD is developing innovative thinking in this area. The bottom line, though, is that under-investment in the infrastructure of poor countries is one of the major market failures characterizing globalization.

Nowhere is that more evident than in education. Diverting a very small share of the flow of private capital into schools and education would help to build an infrastructure that boosts growth, creates jobs, tackles the crisis in youth

The case for strengthened international cooperation in education does not rest on the results of economic modelling exercises. Even so, these outcomes strongly suggest that the G20 should reinforce its current strategy for shared growth by providing leadership on education.

Looking beneath the global aggregates revealed in our modelling exercise, education yields benefits at the household level. There is an inverse association between education and poverty: more of one is associated with less of the other.

Cross-country research evidence shows that one additional year of education adds around 10% to a person's earnings in developing countries. Even in the informal sector, there is evidence that people with education are better placed to secure higher wages and employment. Moreover, the skills that come with education enable households affected by economic downturns to make less painful adjustments – by finding new employment, for example.

Whatever the past relationship between education and economic growth, productivity and income, the future will inevitably look different. We live in an increasingly knowledge-based global economy. The high-growth economies of the future will be those equipped to generate and absorb knowhow, technology, innovations and ideas from the rest of the world. Global markets create a conduit for the development of knowledge-based economies. They offer access to new technologies, to foreign investment and to broader and deeper

markets. The Microsoft Laboratory in Beijing is one of its most advanced in the world. In India, Infosys designs engines for General Motors and wings for Airbus. These are just two examples of what some people characterize as the "flat world" global economy – a world in which flows of technology, trade, information and investment are eroding national borders and extending opportunity.

Governments all around the world recognize the importance of responding to the emerging opportunities – and threats – posed by our increasingly interdependent, connected and knowledge-based global economy. They understand that education is changing the rules of the game on economic growth. Emerging markets such as China, India and Brazil are investing heavily in skills development. In the United States, where the share of jobs in the economy requiring post-secondary education has risen from 28% to 63% in the last 35 years, President Obama has called for a renewed effort to strengthen the national skills base through education. And in the European Union, where an estimated 40% of jobs are now located in knowledge-based industries, governments are setting ambitious goals for higher education.

Shutting the world's poorest countries out of the knowledge-based global economy would have grave consequences for globalization. Building the human capital base of poor countries by initiating a big push on education that delivers on the 2015 promise is not a zero sum game. Ultimately, all countries stand to benefit from the economic growth and spread of markets that

Saving lives through empowerment – education and health

Measured on the basis of cost-benefit analysis, there is a compelling case for investing in education as a source of economic growth. In other areas the returns to education are less amenable to monetary calculus. Empowerment is a case in point. When people are educated, they are not only better equipped to raise productivity, find employment and contribute to innovation – they are also armed with competencies that expand choice. This point has a very direct relevance to the G8 agenda on the MDGs.

Political leaders in the G8 are right to put child survival and maternal health at the centre of their agenda. Over 9 million children under 5 die each year, most from preventable diseases related to poverty. Around one-third of the fatalities occur in the first month of life. Similarly, millions of women around the world face life-threatening risks associated with pregnancy – a cause that the White Ribbon Alliance, bringing together campaigners from poor and rich countries alike, has done more than any other movement to highlight. Those risks are exacerbated by nutritional problems, limited access to ante-natal care or skilled attendance at birth. As a recent Save the

Children report noted, 48 million women give birth each day without a trained attendant present.

The G8 is right to make changing this picture a high priority. Progress towards the MDG targets for child survival and maternal health has been unacceptably slow. Investment in simple, affordable and proven interventions, coupled with a commitment to greater equity in health provision, could save millions of lives. The Save the Children report estimates that 1.3 million young lives could be saved each year just by eliminating shortages of midwives in the poorest countries.

Strengthening the capacity of health systems to deliver life-saving interventions along a continuum from pre-pregnancy maternal health through childbirth to early childhood care, must be a global priority. Increasing the supply, quality and affordability of health care is critical. By empowering women, in particular, to make informed choices and claim entitlements, investment can also increase demand for health services, creating powerful multiplier effects in terms of lives saved and risks avoided.

Maternal education and child survival

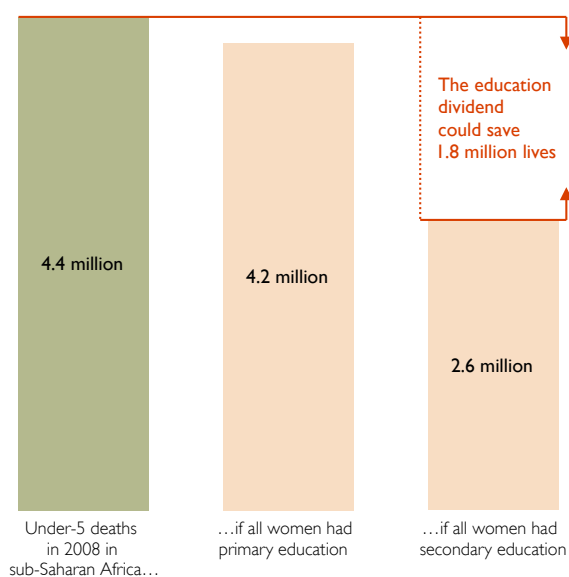
When it comes to public health, the education of young girls and women is one of the most efficient and equitable investments any society can make. That is because of the “e factor” – the empowerment effect of the knowledge, skills and confidence that comes with schooling. Education enhances autonomy. It equips women to make informed judgments, to exercise greater control over fertility and the timing of pregnancy, and to demand entitlements to skilled health care.

The empowerment effects of maternal education are evident in household survey data on child survival. Having a mother with some secondary education sharply reduces the risk of under-5 death in the poorest countries. In India: a child born to a mother with no education is half as likely to survive their first year as a child born to a mother with eight to nine years of schooling. The under-5 death rate in Ethiopia is almost three times higher

for children born to mothers with no education than for children born to mothers with secondary education or higher.

These findings powerfully capture the dynamic interaction between maternal education and child survival. That interaction has a direct relevance to the MDGs. If all young women in sub-Saharan Africa were to have attained some secondary education there would be, on one estimate, 1.8 million fewer deaths annually (Figure 11). Why the survival differential? Partly because more education is associated with higher income and less poverty. But more educated women are also more likely to seek ante-natal care, to have a skilled birth attendant at their delivery, and to vaccinate their children (Figure 12). In other words, they are more likely to utilize the health systems that the Muskoka Initiative will seek to strengthen.

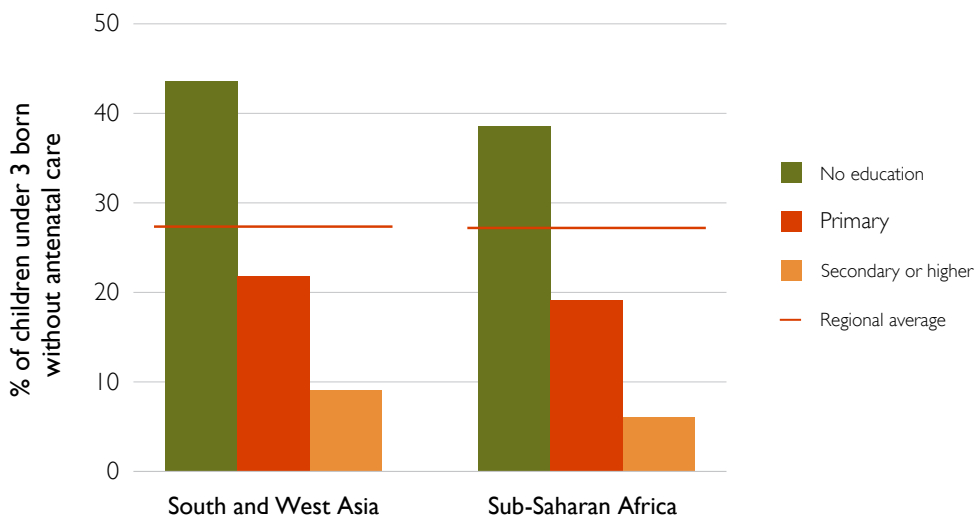
Figure 11: Estimated number of under-5 deaths under different maternal education assumptions in sub-Saharan Africa, 2003-2008



Source: UNESCO Education for All Global Monitoring Report, 2011

Note: Under-5 deaths are for 2008. Estimates are based on twenty-six countries with data for the most recent year available during the period specified.

Figure 12: Children under age 3 born without antenatal care, by maternal education, South and West Asia and sub-Saharan Africa, circa 2005



Source: UNESCO Education for All Global Monitoring Report, 2010

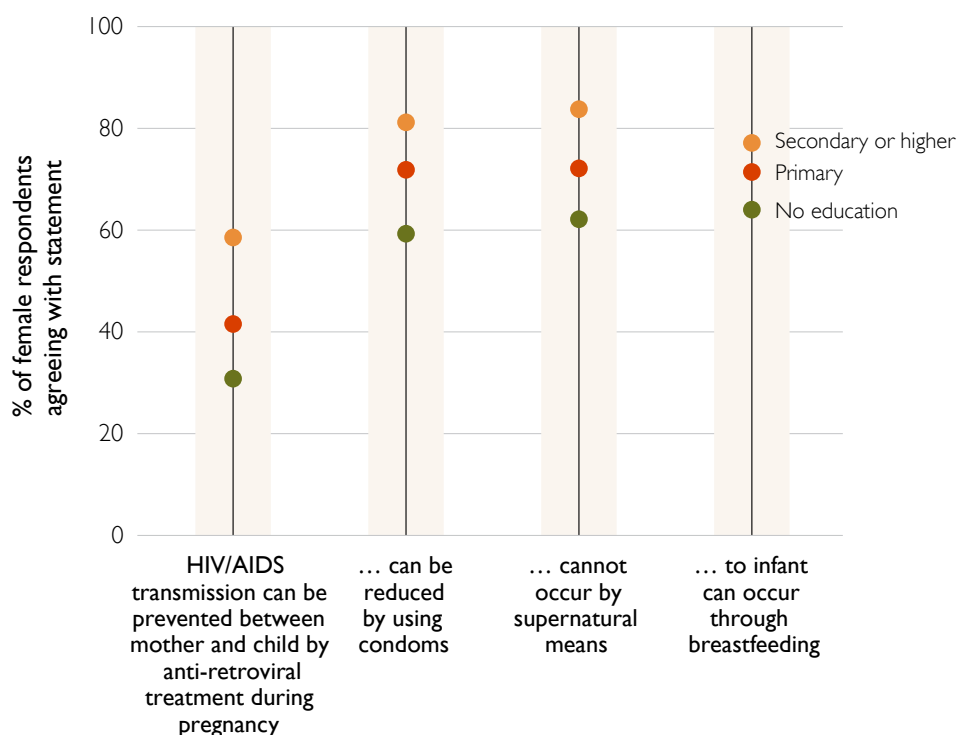
Notes: Figures presented are population weighed averages. The sample of countries used to estimate the South and West Asia average represents more than 90% of the total population of the region and the sample used to estimate the sub-Saharan Africa average more than 80%.

Strengthening the commitment on HIV/AIDS

Another example comes from the evidence on mother-to-child transmission of HIV/AIDS. Every day around 1,000 children under 15 become infected with HIV, and UNAIDS estimates that 2.5 million are living with the disease. The vast majority of children affected contract the virus in the womb, during delivery or when they are breastfed.

Education can equip mothers with the knowledge and confidence that they need to reduce the risks of transmission, potentially saving millions of future lives. In Malawi, 60% of women with a secondary education are aware that taking medicines during pregnancy can reduce transmission risks. For women with no education, that figure falls to 27%. And more educated women are more likely to seek HIV testing during pregnancy (Figure 13).

Figure 13: Percentage of female respondents answering questions on HIV and AIDs awareness, by education, selected sub-Saharan African countries, 2004-2007



Source: UNESCO Education for All Global Monitoring Report, 2011

Notes: Calculations are based on non-weighted averages for sixteen countries in sub-Saharan Africa. Data are for the most recent year available during the period specified.

Facts such as these illustrate a point that is often lost sight of in addressing the health-related MDGs. Bilateral aid for basic health care and multilateral aid channeled through initiatives such as the Global Fund for Fighting AIDS, Malaria and Tuberculosis and the GAVI Alliance unquestionably saves lives. Yet the same is true of education. And while saving a life through schooling may deliver less immediate results, education offers the prospect of lasting and cumulative results as the benefits are spread across generations.

The strength of the links between maternal schooling and health underscores damage caused by entrenched gender inequalities in the education system. These inequalities are depriving young girls of a fundamental human right. More than that, they are undermining the potential for the creation of a virtuous circle of human development. Educated women have fewer and healthier children, and they have them later. They are also less likely to be in poverty. Their children are more likely to be in school, whether they are boys or girls, and to register higher levels of learning achievement. In Kenya, having a mother with secondary education reduces by around one third the likelihood of a primary school child being unable to read a simple paragraph in Swahili.

Box 7 Ethiopia gets education on track

No country illustrates the potential for rapid progress in education better than Ethiopia.

Over the past decade the number of children out of school has fallen by around 4 million. The net enrolment ratio has more than doubled from 36% to 78%. In 1999, there were only seven girls in primary school for every 10 boys. By 2008, gender parity had almost been achieved.

What are the policies that have made a difference? School infrastructure has been expanded through large-scale classroom construction programmes. Particular attention has been paid to locating new schools in disadvantaged areas. Of the 6,000 schools built since 1997, over 85% are in rural areas. This has reduced the distance between schools and communities, a major source of gender inequality.

More teachers have been recruited and the government has strengthened teacher training programmes. Since 2004, the number of primary school teachers recruited and trained has increased rapidly, with around 12% annual growth in the number of teachers on average. This has helped to keep class sizes under control despite the large numbers of additional children entering school. More teachers have been deployed to disadvantaged rural areas.

The abolition of primary school fees together with government-funded block grants to schools have helped to reduce the number of children out of school. Broader pro-poor policies have also played a role. The Productive Safety Net Programme, Ethiopia's flagship social protection and food security programme, has reached 7 million people since 2005. The programme has been instrumental in improving children's well-being, including reducing the number of hours they spend working. Many households report that the cash transfers have allowed them to send children to school.

These achievements have been made possible by a sustained increase in the education budget, which had risen to around 23% of government spending by 2007, one of the highest shares in sub-Saharan Africa. Aid has also played an important role, with donors providing support to the government-led Education Sector Development Programme.

Thanks to these commitments, Ethiopia is now on track to achieve the 2015 goal of universal primary education. To ensure it meets the target, sustained domestic political commitment and strengthened international cooperation are needed.

It is important to emphasize that none of this represents a case for diminishing the commitment to child survival and maternal health. The MDGs themselves are all closely linked. Progress in any one area is unlikely to prove sustainable in the absence of progress across a broad front. Adopting a narrow focus on one or two goals to the exclusion of others is likely to prove counterproductive – and nowhere more so than in areas such as child survival and maternal health. Neglect of education is particularly damaging since there is a very real sense in which education is the glue that binds the MDG framework together. It is, after all, through education that people gain the capabilities that they need to take greater control over their lives.



Karachi: In a poor area of Karachi, Pakistan, classes take place on a rooftop to avoid the gang shootings at street level. ©UNESCO/A. Soomro

4. Preparing for take-off – the next five years

Five years is a narrow window of opportunity. Some people may take the view that it is too narrow for addressing a task of the magnitude at hand. Getting millions of children into school, raising learning achievement levels, and overcoming deeply entrenched inequalities pose daunting challenges that cannot be resolved overnight. Education reform is a marathon, not a sprint. Yet the experience of the past decade demonstrates that rapid progress

is possible. Five years is long enough to put in place the policies that can set countries on a new course, if national political leadership is backed by strengthened international cooperation. One without the other will not deliver on the 2015 promise, with devastating consequences for millions of children – and for international efforts to combat a source of inefficiency and injustice at the heart of globalization.

National policies – the starting point for change

There is no substitute for national political leadership and effective policies. That is why the impetus for accelerated progress has to come from governments in the poorest countries. Many governments have stepped up to the plate, increasing financing, strengthening planning systems, and working to improve the efficiency and equity of their school systems. There are no automatic blueprints for successful reform, but some broad lessons can be drawn with a wider application.

Starting early through good quality early childhood interventions can help to prepare children for school and equalize opportunity. Strengthened maternal and child health programmes, including nutritional support, should be seen as priority investments for education. With donor support, several countries – including Burundi, Liberia and Ghana – have abolished user fees for these programmes, removing barriers for the poorest and most vulnerable sections of society. There are strong grounds for this approach to be applied more widely.

Effective early childhood support can greatly enhance school readiness. In Viet Nam, a pre-school nutrition programme was associated with higher test scores in the first two grades of primary school. However, in most of the poorest countries – especially in sub-Saharan Africa – few children have access to early childhood programmes, and children from the poorest households have the most limited access. Several countries have demonstrated that change is possible. In 2007, Ghana adopted an early childhood development policy aimed at providing two years of free and compulsory education from the age of 4. In 2008, 1.3 million children were enrolled – almost double the number at the start of the decade. Evidence from the World Bank suggests that early childhood provision is a good investment, with savings and efficiency gains from reduced dropout rates in primary school exceeding the costs of the intervention.

Policies for expanding access to primary school have been extensively documented. Fast movers like Tanzania, Kenya and Mozambique have withdrawn user fees, which reduce demand in the poorest households. Many have also adopted measures aimed at stimulating demand for education through targeted incentives. One striking example is the system of stipends for girls introduced by Bangladesh. Another is the targeted support provided by Nepal for low-caste girls. In Malawi, cash transfers have been provided to females aged 13-22 attending school, sharply reducing dropout rates. Social protection measures that provide a source of income during periods of drought, unemployment or rising food prices can enable poor households to avoid taking children out of school.

Accommodating more children in an education system requires more schools, more teachers and more books. One reason Ethiopia has been able to increase the number of children in school by almost 4 million since 2000 is that it embarked on a major classroom construction programme in rural areas. This reduced the distance between communities and school – a major factor in determining whether or not girls in particular are sent to school.

Improving access to school is easier than raising learning achievement levels. In fact, some commentators maintain that there has been a trade-off between access and quality – that increased enrolment has driven down standards. Is that assessment justified?

There is no question that enrolment surges have dampened quality in many countries. Yet that outcome is not inevitable:

- Tanzania managed to accommodate another 3 million children in its primary school system while registering an increase in learning achievement scores. One of the keys to this achievement was a strengthened focus on early grade reading and special measures for reintegrating over-age children into education. (Box 8).

Box 8 Tanzania – increasing access, improving quality and strengthening equity

Many countries have struggled to combine increased enrolment with improved learning achievement. The experience of Tanzania demonstrates that a combination of political leadership and practical policies make it possible the advance on both fronts.

The past decade has seen a transformation of Tanzania's education profile. Net enrolment has increased from 53% to 96%, with an additional 3 million primary school age children entering school. In the midst of this enrolment surge, Tanzania registered an increase in learning achievement for math in the 2007 SACMEQ assessment. That outcome is all the more remarkable given that many of the new entrants to school would have come from households with high levels of poverty. How did Tanzania avoid a trade-off between education quality and quantity?

Increased public spending is part of the answer. This created the conditions for the withdrawal of user fees in 2001 and

financed a major programme of teacher recruitment, classroom construction and school replenishment. Recognising that provision had to be made for a large number of over-age children, but that a surge of enrolment by these children into grade 1 would overwhelm the system, a parallel structure was created. The Complementary Basic education programme was designed to provide education aimed at allowing pupils to re-enter the formal system in grade 5. By 2006, over half a million students were enrolled.

Policy makers also had to address the problem of high dropout rates. Ten years ago, almost half of entrants to grade 1 had dropped out by grade three, reflecting the poor quality of provision in the early grades. Measures were taken to increase the proportion of more experienced teachers in the early grade, while at the same time strengthening in-service training on literacy teaching. By 2007, very few students were dropping out before grade 6.

- Under a Learn to Read programme introduced in 2005, the Indian state of Madhya Pradesh taught an additional 2.5 million grade 5 children to read in just two years. Education planners in the state created a literacy support system that provided in-service training to teachers, assessment tools and child-friendly textbooks.
- Brazil's overall performance in the PISA learning achievement test has improved markedly in recent years in math, reading and science. Behind this national picture, the literacy rate in Minas Gerais, Brazil, jumped from 49% to 73% just three years into a reform programme. Education planners have used assessment tools to identify under-performing schools and regions, set targets for improvement, and provided extensive in-service support and training for teachers (Box 9).
- In South Africa, Western Cape Province introduced reforms that enabled literacy test scores for children in the poorest wealth quintiles to catch up with those in the second richest quintile between 2004 and 2008. As in Brazil, education reforms were marked by a strong commitment to equity and an increased emphasis on teacher training for the delivery of basic literacy skills.
- In Ghana, where enrolment has gone up from 60% to almost 80%, shortages of textbooks had been a major barrier to learning. Reform measures have included universal textbook provision in core subjects (the student-textbook ratio has declined from 4:1 to 1:1).
- In Malawi a nationwide in-service training programme for all grade 1-3 teachers on foundational reading skills reduced the percentage of children in grade 3 unable to read a single word from 47% to 27% in just two years.

Box 9 Brazil – improved learning achievement with greater equity

The education reform process in Brazil provides valuable lessons for many of the world's poorest countries. Above all, Brazil's experience demonstrates that it is possible to achieve early gains in access, quality and equity. The critical condition for success has been political leadership.

Education reform in Brazil has encompassed three distinctive policy streams. The first is increased public spending and redistributive finance. Spending has increased from 4% to 5.2% of GDP since 2000. Under a programme called FUNDEB, the federal government has increased transfers to schools in the poorest states, with additional weighting for disadvantaged social groups. The state of Maranhao, with one of the lowest levels of average income, has been able to increase funding for education by around one-quarter through state transfers.

The second reform stream is social protection. Through the Bolsa Familia programme, Brazil now transfers around 1% to 2% of GDP to around 12 million families. The transfer, part of which is conditional on children attending school, has reduced the pressure on children from the poorest households to drop out of schools and enter labour markets.

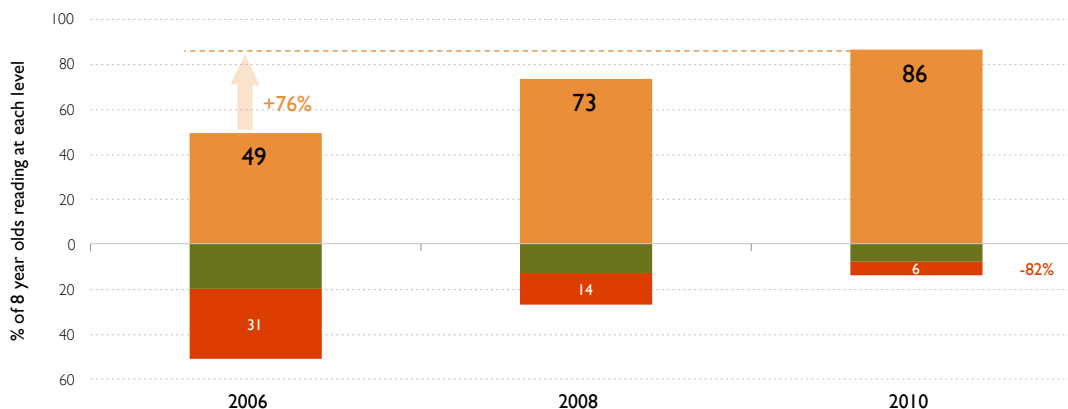
The third reform priority has been the education system itself. Recognising that information is one of the keys to effective policy design, education authorities in Brazil have developed a comprehensive index of school performance covering virtually every segment of the school system. Policy makers now have a

clear picture of how well each of its schools is performing – and the evidence has been used to guide the development of new approaches. The Ministry of Education has taken a strong normative role in establishing standards for teachers, instituting and supporting high-quality teacher training programmes, and setting targets for underperforming schools. Qualification standards for teachers have been increased and individual states are using different strategies to raise the quality of teaching, combining classroom observation with improved instructional materials and in-service support

The state of Minas Gerais has been a leader in school reform, combining high levels of autonomy at the school management level with effective central administration. The state provides oversight and support in key areas such as curriculum standards, learning materials and teacher training. The department of education established baseline student achievement data for each school, so that teachers, students and parents could see the starting point.

Outcomes underline how effective national policies can deliver early results. In 2006, a state-wide assessment showed that only 49% of 8-year-olds were able to read at the recommended proficiency level. Over the next four years, the percentage reading at the recommended level increased to 86%; and the proportion performing poorly fell from 31% to 6% (Figure 14).

Figure 14: Changes in literacy levels, Minas Gerais (2006-2008)



Source: McKenzie (2011)

What each of these cases demonstrates is the power of public policy to deliver early gains in learning achievement. Ensuring that children acquire early grade reading and numeracy skills is the starting point for the transition to higher levels of performance. Every child should have gained basic literacy and numeracy skills after four years in school, putting them on track to progressively increase their learning achievement levels. Successful reformers have set clear and achievable goals, identified areas of disadvantage, provided teachers with in-service training to deliver basic literacy and numeracy skills, developed appropriate teaching materials, and used assessments to identify problems.

Whether the issue is access, the quality of education or equity, targeting children who are hard to reach and marginalized confronts governments with difficult challenges. One of the features of countries that have progressed rapidly towards the 2015 goals is that they have prioritized equity, specifically targeting disadvantaged social groups, areas and schools. But the equity problem extends beyond children of primary school age. Education policy must also address the transition from education to employment. For the 74 million adolescent children who are out of lower-secondary school and youth who, having missed out on earlier learning opportunities, face the prospect of a lifetime of unemployment, low pay and insecurity, education systems have to provide a second chance and opportunities for training.

To overcome the barriers to effective teaching outlined earlier in this report, governments need to meet a wide range of challenges. They need to recruit more teachers, and to increase the share of recruits who are female and members of ethnic or linguistic minorities. The presence of female teachers in

classrooms can help to boost the enrolment and learning achievement of girls, while ethnic minority teachers are best placed to deliver teaching in an appropriate language. Apart from recruiting more teachers, governments need to ensure that these teachers show up in classrooms. The high levels of absenteeism reported in many countries – reaching over 20% in some assessments from South Asia and sub-Saharan Africa – point to problems in motivation and accountability.

Looking beyond recruitment, teachers must also be trained, assessed and supported. This implies the development of effective pre-service and in-service training systems, along with regular system-wide assessments. One reason Brazil has registered such marked progress is that education planners have used learning achievement information to identify failing schools, set clear targets and gear teacher support to the attainment of those targets. More generally, large-scale assessments – such as those developed by ASER in India and Uwezo in Africa – can play a vital role in informing education planners about problems, giving parents a voice and giving education quality and equity a more prominent place on the international agenda.

There are no “one-size fits all” reform packages to raise the quality of teaching. The jury is still out on the effect of individual financial incentives on teacher performance. What is clear is that simultaneously recruiting more teachers while raising the standard of new recruits is likely to exercise upward pressure on recurrent budgets in education. More broadly, evidence from a recent OECD assessment of high-performing education systems has drawn attention to the importance of measures that raise the status of the teaching profession, provide continuous training, and reduce class sizes to realistic norms.

New technologies – and new opportunities

Information and communication technologies (ICTs) have opened up new horizons in education. These technologies are changing how people live, learn and interact. In 2009, an estimated 1.7 billion people – over one-quarter of the world’s population – were using the internet. Mobile cellular penetration in developing countries has more than doubled since 2005, reaching the 50% mark. New technologies do not offer a quick fix for systemic problems in education systems. What they do offer is a vehicle for improving access to opportunities for education and the quality of service provision.

We are already getting glimpses of the role that ICT can play in expanding access to education and raising the quality of learning. The Open Educational Resource (OER) movement, which provides free access to educational material that can be downloaded, adapted and used without restriction, has seen a tremendous growth in recent years. Leaders of that movement, such as the Massachusetts Institute of Technology (MIT), have put all of their course materials online free of charge. Visits to the site are growing strongly – and over half are from non-US users. Apple provides a similar service to over 800 higher education institutions through its iTunes U platform, which offers universities the choice to make learning resources publicly available free of charge.

Along with the iTunes U, Apple's latest hardware - the iPad, the iPhone and the iPod Touch - has opened new horizons in learning. Educational applications provide opportunities for both school-based and out-of-school learning, with specialised programmes geared towards the needs of disadvantaged groups. The MIT programme is a cutting-edge illustration of the expanded scope for distance learning. There are now about 100 higher education institutions around the world in the Open Course Ware Consortium. These institutions are making available curriculum material, textbooks and in some cases whole libraries. Many are transforming learning in other ways, making available high-quality, web-based courses that allow students to work on their own through interactive technologies, and to attend virtual courses. Proposals developed by John Sexton, president of New York University, demonstrate what is possible. He wants to open access

to his world-class university to people around the world, not only by opening campuses in different countries but also by enabling internet-taught students to move into formal university learning. If the internet was invented for anything it was for this: the chance for a whole generation to skill themselves into a better life. In India, 24x7 Learning, one of the country's main e-learning platforms, has already reached over 1 million students through courses that it hosts for academic institutions and companies.

New ICT approaches can help to improve the quality of pre-service and in-service teacher training, providing under-resourced and over-stretched institutions with access to materials, courses and support to raise the quality of teaching in the classroom. They can also provide children with access to effective, new instructional materials (Box 10).

Box 10 Bringing ICT to education in the poorest countries

A proliferation of initiatives over the past decade demonstrates the scope for harnessing ICT as a force for accelerated progress towards the Education for All goals. While limited in scope, the following gives some indication of the level of innovation.

Mobile technology support. The use of mobile phones in the poorest countries has grown exponentially in recent years, with subscriptions in sub-Saharan Africa alone rising from 54 million in 2003 to 500 million in 2010. Some projects have exploited mobile technology to deliver literacy programmes. In Tanzania, a project involving the Ministry of Education and Carnegie Mellon University in the US has developed a mobile literacy programme that can be tailored by local teachers. In Niger, a programme called ABC (Alphabétisation de base Cellulaire) trained villagers to read and write text messages on mobile phones to relay information on market prices, raising reading and numeracy standards. In Bangladesh, the Janala programme provides mobile applications for English-language teachers, enabling them to access training materials, including audio and video. Mobile applications are linked to the school curriculum. The programme aims to reach 6 million people by the end of 2011.

Quality teacher training. Several programmes are delivering support for improved teacher training. One example is Teacher Education in sub-Saharan Africa (TESSA). Comprised of 18 universities – including the United Kingdom's Open University – and related agencies operating across nine African countries, TESSA provides resources and courses for educators. Working through African universities, TESSA has developed a multilingual Open Educational Resource bank for teachers. The model has recently been exported to India through a partnership between the Open University and the University of Delhi. The UN's Global e-Schools and Communities Initiative (GeSCI) and UNESCO's Teacher Training Initiative for sub-Saharan Africa are also developing

teacher training programmes aimed at improving competency standards through online learning materials. The African Virtual University (AVU) Teacher Education Project, supported by the African Development Bank and NEPAD, is using distance and e-learning methods across 10 countries to improve the quality of math and science teaching.

Open Education Resources (Africa) is an initiative established by the South African Institute for Distance Education (SAIDE), supported by seed funding from the Hewlett Foundation, to increase access to skills and learning opportunities by harnessing OER resources. The SAIDE ACE Maths project aims to pilot a collaborative process for the selection, adaptation and use of OER materials for teacher education programmes in South Africa.

The New Economic Partnership for African Development e-school initiative. Launched in 2003, this aims to expand access to online learning in primary and secondary school systems. The aim is to connect 50% of Africa's secondary schools to the internet by 2015, and all primary and secondary school by 2025. It includes online curriculum content for teacher training. The initiative is part of a wider partnership under the e-Africa Commission – a body created to accelerate Africa's integration into the global information highway. The commission has engaged actively with governments, regional development banks and executives of telecom companies.

The Khan Academy. This not-for-profit organization created in 2006 has been in the forefront of innovation in the use of ICT for education. It provides over 2,000 videos and hundreds of exercises and assessments covering everything from physics and algebra to history and finance, and extending from the first grades of primary school up to college level. Offline versions have been extensively distributed and used by non-government organizations across sub-Saharan Africa and South Asia. The ambition is to create "the world's first free, world-class virtual school where anyone can learn anything."

Governments in the poorest countries recognize the importance of integrating new technologies into education policy. In sub-Saharan Africa alone, 39 countries have ICT strategies for the education sector. One obvious area in which such strategies can make a difference is in improving teacher support. The internet offers access to virtual teacher training courses, instructional materials, assessment exercises and many other forms of online support. Under the right conditions, teacher training institutions and ministries in national or sub-national centres could provide teachers in remote rural areas and urban slums with a pathway that links them and the children they teach to the global information highway.

That pathway is currently blocked by the global digital divide. For the most part, approaches to ICT and education in the poorest countries continue to be dominated by small-scale, fragmented project-based interventions. The reason: restricted connectivity drives up prices, restricts access and limits the speed of downloads. The headline dimensions of the digital divide can be summarized in a few statistics:

- On average, a high-speed internet connection represents 500% of average per capita monthly income in Africa, making fixed broadband effectively inaccessible for most

people. The cost in Europe: around 2% of average monthly income. Connectivity costs for broadband are 115 times higher in Mali than in France and 420 times higher in Mozambique than in the United Kingdom.

- The ITU (the UN's ICT agency) ranks 161 countries in the world on a scale measuring a composite ICT price basket. Sub-Saharan Africa accounts for 21 of the countries with the highest costs.
- An estimated 17% of the developing world's population uses the internet, compared with 64% in the developed world. Fixed broadband access is largely confined to users in rich countries: just 1% of the population in sub-Saharan Africa has access to broadband – and the region accounts for a similar share of global bandwidth.

- In 2007, African universities had on average the broadband connectivity equivalent of a residential home in Europe, but paid 50 times more for the connection than European universities.
- The gap between rich and poor countries is even wider for mobile broadband penetration, with developing countries accounting for just 3% of global subscriptions.

High cost and limited connectivity restrict the scope for exploiting the full potential of ICT in education. They also have wider consequences. There is a real danger that the global digital divide and the global education divide will become self-reinforcing, with the poorest countries locked out of new opportunities for learning and their children denied a chance to gain the ICT skills that are vital for future employment and economic growth.

Box 11 Closing the digital divide: the impact of civil society

Closing the digital divide between Africa and the world's richest countries will require international cooperation between governments, finance and public-private partnerships – but small organisations can make a big difference.

AfriKids is a partnership between a UK charity and a Ghanaian NGO (AfriKids Ghana) with a shared mission to extend children's rights in northern Ghana, one of the most disadvantaged parts of the country, by empowering local people. AfriKids has a unique strategy aimed at building local sustainability. The aim: by 2018, to generate enough profit to make the UK fundraising office redundant.

The principles of local enterprise and sustainability are fundamental to AfriKids and this is exemplified by the AfriKids Academy. Established in 2005, the academy offers free ICT education to every child in their final year of junior secondary education in Bolgatanga district. ICT is now an examinable part of the syllabus in Ghana but many schools, particularly in the north, do not have an electricity supply let alone ICT equipment. The AfriKids Academy ensures every child gets practical experience of ICT skills, better equipping them for future education and opening up a greater variety of job opportunities locally. The Academy also provides free teacher training, offers fee-paying classes in the evenings and secretarial services, the income from which helps to run the project.

Averting that danger will require new public-private partnerships to build a core ICT infrastructure, reduce connectivity costs, and facilitate networking through computer systems. In sub-Saharan Africa, the limited availability of submarine cable infrastructure and restricted coverage of broadband radio spectrum severely limits internet access. Connectivity across most of the region

depends on satellites and Very Small Aperture Terminal (VSAT) stations, which in turn increases prices and download times – a typical web page request can take up to 16 seconds to complete. The lack of competition between providers and limited computer use also drive up prices, even in countries with access to submarine cables.

Renewing the aid partnership – an agenda for the G8 and G20

Education is the foundation of strong and sustainable economic growth and the catalyst for the Millennium Development Goals. The past decade has seen some remarkable progress. For millions of children, the Education for All partnership has made a difference, opening the doors to new opportunities. Gains in education have also improved prospects for economic growth. Yet far more has to be done. We have four years to hold to the promise of universal basic education by 2015 – four years to turn words and commitments into action.

It is time to recognize that a business-as-usual model will leave us far short of the Education for All goals and the MDGs. What is required is a collective renewal of the pledge to achieve the goals set in 2000. Political leaders in the poorest countries have to take the lead, by strengthening national policies for delivering good quality learning opportunities for all. But national action alone is not enough to remove the financial barriers that are holding back efforts to recruit and support teachers, build classrooms, and deliver good quality education. Without strengthened international cooperation, we are destined for failure. Education must move up the global policy agenda. We have already seen the results that effective national policies backed by international cooperation can

deliver. We now need to build on this success to ensure that all children get access to good quality learning opportunities in basic education, creating a platform for the future expansion of opportunities for learning. High-level political commitment backed by action at both the national and international level, starting today and sustained over the next four years is the key to unlocking the potential of millions of children.

The G8 and G20 summits in 2011 provide the opportunity to set a new course. In this report I have tried to set out the case for action. By providing leadership on education, the G8 and the G20 would reinforce the effectiveness of their current strategies for achieving the MDGs and broad-based, inclusive growth in the global economy. They would also demonstrate a commitment to a model of globalization that is fairer, less divisive and more sustainable. Of course, there are limits to what the 2011 summits can achieve. Political leaders have to balance competing priorities. However, by identifying a small number of game-changing initiatives, framing clear commitments, and putting in place practical measures, political leaders in the G8 and the G20 could help to open up new opportunities for education for a whole generation of children. There are four priority areas:

Priority 1 – Closing the financing gap

Around \$16 billion in aid is needed annually in the poorest countries to pay for the teachers, schools and systems required to honour the basic education commitments. Moreover, donors need to ensure that a significant share of the increase is front-loaded. The investments needed to deliver results by 2015 have to start now. And they have to reflect an unrelenting commitment to tackling the three interlocking elements of the education emergency outlined in this report – access, quality and equity. Acting on the 2005 pledges made at the Gleneagles G8 summit would go some way towards closing the financing gap, but additional measures are needed:

- **Transform the Fast Track initiative into a Global Fund for Education:** The 2011 FTI replenishment event should provide a focal point for new donor aid commitments, averaging around \$3 billion to \$4 billion annually for 2011-2014. An expanded and strengthened FTI would provide a channel for support to national education plans that prioritize a strengthened commitment to quality learning for all, with a focus on the elimination of inequalities based on gender, poverty and other sources of disadvantage, training and support for teachers, and the development of effective assessment systems. The expanded FTI would give governments an incentive to strengthen policies in these areas and provide long-term, predictable resource flows, especially to enable the hiring and retention of teachers.
- **Integrate education into an Africa Investment Fund for infrastructure.** Like roads, ports and power stations, classrooms should be thought of as part of a country's productive infrastructure. Developing a multilateral public-private financing initiative through which governments, aid donors and multilateral agencies cooperate to create incentives, in the form of risk guarantees and future development assistance commitments, for financing through private capital markets
- **Act on a fair shares commitment:** G8 donors should undertake to meet their "fair share" of the Education for All aid financing deficit – around \$10 billion annually according to estimates by the Global Campaign for Education.
- **Consider innovative financing options.** The G8 and G20 should give serious consideration to a small tax on all financial transactions. Even at relatively low rates, of around 0.05% to 0.005% on every transaction, the revenue raised globally would be substantial. Long-term investors would not be penalized at these low rates: the main burden would fall on high-frequency traders. While global agreement on a financial transaction tax would be preferable, a group of pioneer nations led by France as G8 and G20 chair should press ahead with such a tax in 2011 to demonstrate its efficacy as a source of finance for global public goods.
- **Act on the Gleneagles commitment and review current patterns of aid allocation within the education sector.** Delivering on the pledges made in 2005 and reallocating resources within the current aid envelope could go some way towards closing the education financing gap, mobilising an additional \$4.1 billion annually by 2015.

Priority 2 – Linking Africa's children and teachers to the information highway

New technologies should become a force for expanded education opportunity in the poorest countries, not a source of deeper inequality. Public-private partnerships can help to drive the deployment of ICT. Public investments, aid and concessional finance can create the conditions for increased private investment in backbone infrastructure, enabling developing countries to leap-frog old technologies and take advantage of new, cost-effective technologies in areas such as fibre optics. Education should be a focal point for these efforts. The G20, in particular, could take the lead in bringing together the various stakeholders as part of its wider strategy on infrastructure development.

- **Build an Africa Fund that mobilizes private investment in infrastructure through public-private partnerships.** As with investment in other areas of economic infrastructure in the poorest countries, ICT offers potentially high returns. However, the high initial capital costs, coupled with the small size of the initial market and an uncertain regulatory environment, weaken the incentive for investors. Aid donors can change this picture by providing investment guarantees, meeting interest payments on bonds, and supporting public investment in ICT technologies such as submarine cables. Extending the coverage of wireless networks to make basic voice and internet connectivity available to the entire population in sub-Saharan Africa would require an investment of \$17 billion over the next 10 years. Under the right policy environment, the private sector could account for close to \$12 billion. In parallel, the Africa Fund needs to mobilize the investment required to overcome power shortages – a major barrier to internet access.
- **Cut the cost of connectivity for schools, universities and teacher-training institutes.** As an immediate priority, the G20 should frame an initiative aimed at lowering the cost and improving the accessibility of internet technologies in the education sectors of the poorest countries. The starting point: a **Global e-Teacher Support Facility**. This would bring together a range of stakeholders including internet service providers, computer companies and rich-country universities under a public-private partnership. Governments would specify a small number of specialized training hubs, which would in turn be linked through ICT technologies to district level facilities. Supported by aid donors, private companies would provide subsidized broadband connections and computers, with higher-education institutions in rich countries – such as the Open University in the United Kingdom, MIT and New York University – stepping up their support for the development and provision of appropriate teaching material. The G20 framework would consolidate, broaden and strengthen the current international patchwork of efforts. There are precedents that provide useful lessons. For example, in Chile, the Ministry of Education and the Centre for Education and Technology negotiated subsidized access with telecommunications operators to provide free unlimited internet service to all schools for 10 years.

Priority 3 – Strengthening support for countries affected by conflict

The Education for All goals will not be achieved unless the special problems facing conflict-affected states are addressed. These countries account for over 40% of out of school children in the poorest countries. At present, support to conflict-affected states is overwhelmingly concentrated on a few countries, notably Iraq and Pakistan. Urgent as the claims of these countries are, too many conflicts are forgotten. Both the G8 and the G20 should address this issue. Education can act as a powerful force for peace-building, creating the conditions for regional stability and shared security at a global level. But the neglect of education often reinforces the underlying causes of conflict.

- **Humanitarian pooled funds should be increased.** Far more could be done to maintain access to education during conflict-related emergencies. Currently, education accounts for just 2% of humanitarian aid – and it is the sector that faces the biggest gap between humanitarian aid requests and appeals. Education is the poor cousin of a heavily underfinanced humanitarian system. This does not reflect the efforts or the aspirations of people living in conflict-affected states, where parents make extraordinary efforts to keep their children in school and provide them with an education. As an immediate priority, pooled humanitarian funds should be increased from \$730 million to \$2 billion annually to provide greater support for education.
- **Donors should seize opportunities for peace.** When countries emerge from conflicts, donor support for the reconstruction of education systems is often limited, unpredictable and fragmented. Building on the successful experience of the pooled fund in Afghanistan, donors should strengthen pooled funding arrangements in other countries. South Sudan is an immediate and urgent priority because failure to embark on an ambitious programme of reconstruction in education risks undermining a hard-won peace.

Priority 4 – Acting on early childhood.

Given the weight of evidence on the impact of early childhood disadvantage on education, both the G8 and the G20 should be attaching more weight to this area. The starting point is to improve health and nutrition in the first years of life, while expanding opportunities for pre-primary education.

- **Meet the current G8 commitments.** As part of the Deauville Accountability Report, G8 members must outline exactly how they intend to deliver on their commitments to maternal, newborn and child health, nutrition and food security, and produce a plan for achieving them by 2015 including planned funding allocations, measurable indicators and a focus on reducing inequality. Specific commitments are needed to close the global gap of 3.5 million health workers. Immunization is one of the most effective ways to reduce the vulnerability of children to life-threatening illness, and it is important that donor countries make new commitments at the London GAVI pledging conference in June to fill the \$3.7 billion financing gap for immunization.
- **Scale-up opportunities for pre-school.** It is difficult to get a clear picture of donor support for pre-school education. However, the sector appears to suffer chronic under-financing in the poorest countries, and this is reflected in low rates of coverage and the poor quality of provision. The World Bank (which itself allocated just 3% of its education support to pre-primary education) and UNICEF should urgently review overall levels of provision and financing requirements for extending pre-school opportunities to the most vulnerable children.



Haiti: Rebuilding schools after the 2010 earthquake. ©UNESCO/E. Abramson

