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Learning for All

Investing in People's Knowledge and Skills
to Promote Development



World Bank Group
Education Strategy 2020



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FOREWORD

We are living through a period of extraordinary change. The stunning rise of the middle-income countries, led by China, India, and Brazil, has intensified the desire of many nations to increase their competitiveness by building more highly skilled workforces. Technological advances are changing job profiles and skills, while offering possibilities for accelerated learning. Persistently high levels of unemployment, especially among youth, have highlighted the failure of education systems to prepare young people with the right skills for the job market and have fueled calls for greater opportunity and accountability.

Expanding and improving education are key to adapting to change and confronting these challenges. Simply put, investments in quality education lead to more rapid and sustainable economic growth and development. Educated individuals are more employable, able to earn higher wages, cope better with economic shocks, and raise healthier children. But although developing countries have made great strides over the past decade toward the Millennium Development Goals of universal primary education and gender equity, an abundance of evidence shows that many children and youth in developing countries leave school without having learned much at all.

This is why our Education Strategy 2020 sets the goal of achieving Learning for All. Learning for All means ensuring that all children and youth—not just the most privileged or the smartest—can not only go to school, but also acquire the knowledge and skills that they need to lead healthy, productive lives and secure meaningful employment. The three pillars of our strategy are: **Invest early. Invest smartly. Invest for all.** To learn more, read on.

This strategy reflects the best insights and knowledge of what works in education, gleaned from our worldwide consultations with governments, teachers, students, parents, civil society, and development partners in over 100 countries. We are grateful to all of the participants who came together to shape this strategy with their energy, ideas, and experiences. In a real sense, this is their strategy. We look forward to working with them to achieve Learning for All.

Tamar Manuelyan Atinc
Vice President, Human Development Network
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ABBREVIATIONS

ADB	Asian Development Bank
AFD	Alliance Française de Développement
AfDB	African Development Bank Group
AUSAID	Australian Agency for International Development
BNPP	Bank Netherlands Partnership Program
BRICs	Brazil, Russia, India, and China
CCT	conditional cash transfer
CSO	civil society organization
CODE	Committee on Development Effectiveness, Board of Directors, World Bank
DFID	Department for International Development, United Kingdom
EC	European Commission
ECD	early childhood development
EFA FTI	Education for All Fast Track Initiative
EMIS	education management information system
ESS2020	World Bank Education Sector Strategy 2020
FAS	Foundation-Assisted Schools Program, Pakistan
GDP	gross domestic product
IADB	Inter-American Development Bank
ICT	information and communication technology
ICR	Implementation Completion Report, World Bank
IDA	International Development Association
IEG	Independent Evaluation Group, World Bank
IFC	International Finance Corporation
ILO	International Labour Organization
KEF	Korean Education Fund
KPI	key performance indicator

MDG	Millennium Development Goal
LLECE	Latin American Laboratory for Assessment of the Quality of Education
NZAID	New Zealand Aid
ODA	overseas development assistance
OECD	Organisation for Economic Co-operation and Development
P4R	Program for Results (World Bank lending instrument)
PAD	Project Appraisal Document, World Bank
PCD	Partnership for Child Development
PFED	Partnership for Education Development
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PPP	public-private partnership
READ	Russia Education Aid for Development
SABER	System Assessment and Benchmarking for Education Results, World Bank
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
TIMSS	Trends in International Mathematics and Science Study
UIS	UNESCO Institute of Statistics
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WDR	World Development Report

All dollar amounts are U.S. dollars unless otherwise indicated.

EXECUTIVE SUMMARY

Education is fundamental to development and growth. Access to education, which is a basic human right enshrined in the Universal Declaration of Human Rights and the United Nations Convention on the Rights of the Child, is also a strategic development investment. The human mind makes possible all other development achievements, from health advances and agricultural innovation to infrastructure construction and private sector growth. For developing countries to reap these benefits fully—both by learning from the stock of global ideas and through innovation—they need to unleash the potential of the human mind. And there is no better tool for doing so than education.

The Education Sector Strategy 2020 lays out the World Bank Group’s agenda for achieving “Learning for All” in the developing world over the next decade. The overarching goal is not just schooling, but learning. Getting millions more children into school has been a great achievement. The World Bank Group is committed to building on this progress and stepping up its support to help all countries achieve Education for All (EFA) and the education Millennium Development Goals (MDGs). The driver of development will, however, ultimately be what individuals *learn*, both in and out of school, from preschool through the labor market. The Bank’s new 10-year strategy seeks to achieve this broader “Learning for All” objective by promoting country-level reforms of education systems and building a global knowledge base powerful enough to guide those reforms.

Why A New Strategy?

The Bank Group has made substantial contributions to educational development around the world over the past 49 years. Since launching a project to build secondary schools in Tunisia in 1962, the Bank has invested \$69 billion globally in education via more than 1,500 projects. The Bank’s financial support for education has risen over the decade since the MDGs were established, surging to more than \$5 billion in 2010. Since 2001, when the International Finance Corporation (IFC) started to focus on the education sector, it has invested \$500 million in 46 private education projects.

The number of out-of-school children of primary school age fell from 106 million in 1999 to 68 million in 2008.

This period has seen great educational advances, particularly in enrolling children in school and keeping them there, and in improving gender equality. Compared to a decade ago, far fewer children in developing countries are now out of school, thanks to more effective education and development policies and sustained national investments. The number of out-of-school children of primary school age fell from 106 million in 1999 to 68 million in 2008. Even in the poorest countries, average enrollment rates at the primary level have surged above 80 percent and completion rates, above 60 percent. And between 1991 and 2007, the ratio of girls to boys in primary and secondary education in the developing world improved from 84 to 96 percent, with even larger gains in the Middle East and North Africa and in South Asia. Governments, civil society organizations (CSOs), communities, and private enterprises have contributed to this progress by building more schools and classrooms and recruiting teachers at unprecedented levels. The World Bank Group has supported these efforts—not only with financing and technical assistance, but also with ideas.

Gains in access to education have turned attention to the challenge of improving education quality and accelerating learning.

But that success has bred new challenges at a time when conditions in the world have changed. With tens of millions of children still out of school and substantial gender gaps remaining, efforts to achieve the education MDGs must continue. Gains in access have also turned attention to the challenge of improving the quality of education and accelerating learning. In addition, the global environment for education is changing. One set of changes is demographic: lower fertility rates are shifting population profiles from the very young populations typical of many low-income countries to “youth bulges” more typical of middle-income countries, increasingly concentrated in urban areas. At the same time, the stunning rise of new middle-income countries has intensified the desire of many nations to increase their competitiveness by building more skilled and agile workforces. Another set of changes is technological: incredible advances in information and communications technology (ICT) and other technologies are changing job profiles and skills demanded by labor markets, while also offering possibilities for accelerated learning and improved management of education systems.

These developments call for a new World Bank Group education strategy for the next decade. To be sure, the Bank Group has not stood still since it adopted its last strategy in 2000. It has moved closer to client countries by decentralizing its operations, with 40 percent of staff now in country offices. It has improved its results measurement and orientation, and also invested in better evaluation

of program impacts, with the education sector helping to lead the way. It has also innovated financially through greater use of sectorwide financing, pooled funding, performance-based instruments, and other approaches. And it recognized the growing role of the private sector in education by creating a health and education department at IFC. This new education strategy aims to build on these changes by setting out a new objective, together with strategic directions and instruments for implementing them. This education strategy supports and implements key Bank Group priorities—targeting the poor and vulnerable, creating opportunities for growth, promoting global collective action, and strengthening governance—laid out in its recent post-crisis directions strategy.

Objective: Learning For All, Beyond Schooling

The new strategy focuses on learning for a simple reason: 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. At the individual level, while a diploma may open doors to employment, it is a worker's skills that determine his or her productivity and ability to adapt to new technologies and opportunities. Knowledge and skills also contribute to an individual's ability to have a healthy and educated family and engage in civic life. At the societal level, recent research shows that the level of skills in a workforce—as measured by performance on international student assessments such as the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS)—predicts economic growth rates far better than do average schooling levels. For example, an increase of one standard deviation in student reading and math scores (roughly equivalent to improving a country's performance ranking from the median to the top 15 percent) is associated with a very large increase of 2 percentage points in annual GDP per capita growth.

Learning levels that have been measured in many developing countries are alarmingly low, especially among disadvantaged populations. Of course, even in poor learning environments, most students acquire some skills from school. But too often these skills are rudimentary at best. In some countries, recent studies show that a quarter to a half of youth who have graduated from primary school cannot read a single sentence. International student assessments also reveal wide knowledge gaps between most developing countries and members of the Organisation for Economic Co-operation and Development (OECD).

Despite the impressive performance of Shanghai-China in the recently released PISA 2009 results, the scores of almost every other low- and middle-income country or region were in the bottom half of results, with many lagging far behind the OECD average.

Learning needs to be encouraged early and continuously, both within and outside of the formal schooling system. The emerging science of brain development shows that to develop properly, a child's growing brain needs nurturing long before formal schooling starts at age 6 or 7. Investments in prenatal health and early childhood development programs that include education and health are essential to realize this potential. In the primary years, quality teaching is critical for giving students the foundational literacy and numeracy on which lifelong learning depends. Adolescence is another fertile period for learning, but also a time when many students leave school to marry (especially in the case of girls) or to work full-time. Second-chance and nonformal learning opportunities are thus essential to ensure that all youth can acquire skills for the labor market.

The Learning for All strategy promotes the equity goals that underlie the education MDGs. In adopting the objective of learning for all, the new strategy elevates the education MDGs by linking them to the universally shared objective of accelerating learning. Major challenges of access remain for disadvantaged populations (especially girls and women) at the primary, secondary, and tertiary levels, with demand for the latter two levels of education having grown sharply as primary completion has increased. Without confronting these challenges, it will be impossible to achieve the objective of learning for all. Children and youth cannot develop the skills and values that they need without the foundational education provided by schools. Indeed, the latest (2009) PISA results reinforce the lesson that the countries that are most successful overall in promoting learning are those with the narrowest gaps in learning achievement among students.

The bottom line of the Bank Group's education strategy is: Invest early. Invest smartly. Invest for all. First, foundational skills acquired early in childhood make possible a lifetime of learning; hence the traditional view of education as starting in primary school takes up the challenge too late. Second, getting value for the education dollar requires smart investments—that is, investments that have proven to contribute to learning. Quality needs to be the focus of education investments, with learning gains as a key metric of quality. Third, learning for all means ensuring that *all* students, not just the most privileged or gifted,

Learning for All means ensuring that all students, not just the most privileged, acquire the knowledge and skills they need to live happy, productive lives.

acquire the knowledge and skills that they need. This goal will require lowering the barriers that keep girls, people with disabilities, and ethnolinguistic minorities from attaining as much education as other population groups.

To achieve learning for all, the World Bank Group will channel its efforts in education in two strategic directions: reforming education systems at the country level and building a high-quality knowledge base for education reforms at the global level.

System Reform, Beyond Inputs

At the country level, the Bank Group will focus on supporting reforms of education systems. The term “education system” typically refers to the public schools, universities, and training programs that provide education services. In this strategy, “education system” includes the full range of learning opportunities available in a country, whether they are provided or financed by the public or private sector (including religious, nonprofit, and for-profit organizations). It includes formal and nonformal programs, plus the full range of beneficiaries of and stakeholders in these programs—teachers, trainers, administrators, employees, students and their families, and employers. It also includes the rules, policies, and accountability mechanisms that bind an education system together, as well as the resources and financing mechanisms that sustain it. This more inclusive concept of the education system allows the Bank Group and its partner countries to seize opportunities and address barriers that lie outside the bounds of the system as it is traditionally defined.

Improving education systems means moving beyond simply providing inputs. There is no question that providing adequate levels of schooling inputs—whether these are school buildings, trained teachers, or textbooks—is crucial to a nation’s educational progress. Indeed, the increase in inputs in recent years has made it possible to enroll millions more children in school; this effort must continue wherever levels of inputs remain inadequate. But improving systems also requires ensuring that inputs are used more effectively to accelerate learning. While past strategies have recognized this goal, the new strategy gives it more emphasis, setting it in a context of education system assessment and reform.

The education system approach of the new strategy focuses on increasing accountability and results as a complement to providing inputs. Strengthening education systems means aligning their governance, management of schools

Recent research shows that the level of skills in a workforce predicts economic growth rates far better than do average schooling levels.

and teachers, financing rules, and incentive mechanisms with the goal of learning for all. This entails reforming relationships of accountability among the various actors and participants in an education system so that these relationships are clear, consistent with functions, measured, monitored, and supported. It also means establishing a clear feedback cycle between financing (including international aid) and results. Because failures of governance and accountability typically have their severest effects on schools serving disadvantaged groups, this system approach promotes educational equity as well as efficiency.

Operationally, the Bank will increasingly focus its financial and technical aid on system reforms that promote learning outcomes. To achieve this, the Bank will focus on helping partner countries build the national capacity to govern and manage education systems, implement quality and equity standards, measure system performance against national education goals, and support evidence-based policy making and innovations. While this agenda sounds challenging, the system approach does not require reforming all policy domains at once. Detailed system analysis and investment in knowledge and data will allow the Bank and policymakers to “analyze globally and act locally”—that is, to assess the quality and effectiveness of multiple policy domains, but focus action on the areas where improvements can have the highest payoff in terms of schooling and learning outcomes. Internally, the Bank Group will work to improve project outcomes by strengthening the results framework for projects, improving portfolio monitoring, and selecting the right operational instruments.

Building The Knowledge Base

At the regional and global level, the Bank will help develop a high-quality knowledge base on education reform. Analytical work, practical evidence, and know-how related to education programs and policies are critical to improving the performance of education systems around the world. By investing in system assessments, impact evaluations, and assessments of learning and skills, the Bank will help its partner countries answer the key questions that shape educational reform: Where are the strengths of our system? Where are the weaknesses? What interventions have proven most effective in addressing them? Are learning opportunities reaching the most disadvantaged groups? What are the key roles of public and private sector in service delivery? Are children and youth acquiring the knowledge and skills that they need?

The education system approach focuses on promoting accountability and improving results.

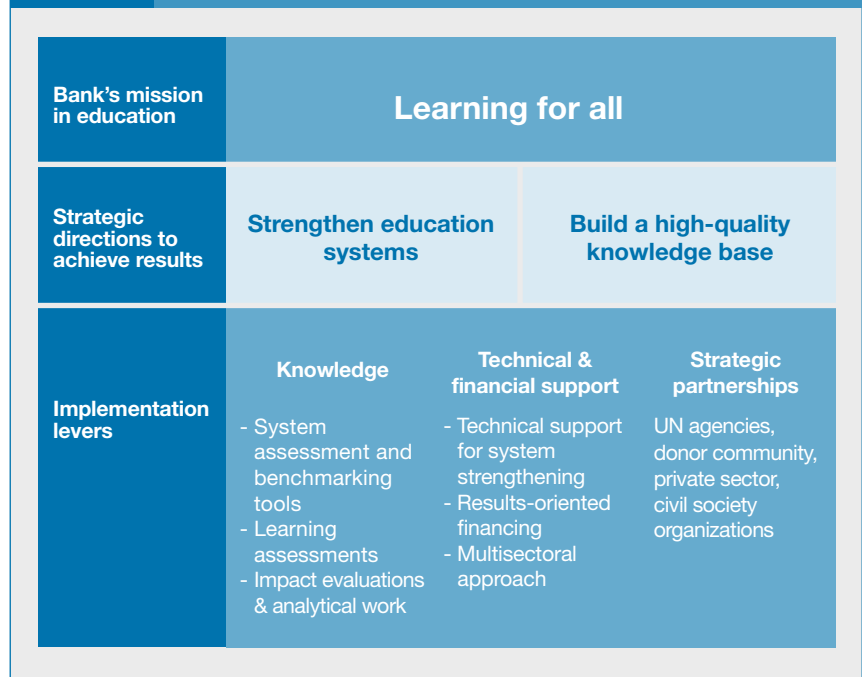
The Bank is developing new knowledge approaches to help guide education reform. New tools for system assessment and benchmarking (“system tools”) will provide detailed analysis of country capacities in a wide array of education policy domains, from early childhood development (ECD), student assessment, and teacher policy to equity and inclusion, tertiary education, and skills development, among others. In each policy domain, the system tools will analyze the “missing middle” of intermediate outcomes, illuminating the part of the results chain that lies between inputs and learning outcomes. This vital information will allow policymakers and civil society organizations to make better-informed decisions about education reforms and interventions by determining where the results chain is breaking down. And by benchmarking progress against international best practices, the tool will highlight areas of strength and weakness as well as identify successful reformers whose experience can inform education policy and practices in other countries.

Better knowledge of the strengths and weaknesses of particular education systems will enable the Bank Group to respond more effectively to the needs of its partner countries. Countries at different levels of educational development face different challenges, and priorities for assistance and knowledge sharing should vary accordingly. The new strategy therefore supplements the Bank Group’s usual regional groupings with developmental groupings based on whether a country is middle-income, low-income, or fragile, and sets out distinct priorities for each of these groups. For example, in middle-income countries, where a higher proportion of available jobs is likely to require higher-level skills, one priority is to improve quality assurance and financing for tertiary education and for workforce development. In many low-income countries and fragile states, striving to reach the MDGs remains a key priority.

Careful analysis of each country’s level of *educational* development, in addition to its overall development, allows for sharper and more operationally useful differentiation. Some countries achieve much higher levels of educational performance, in terms of system operation as well as outcomes, than would be expected based on their incomes. Detailed and internationally comparable information about education systems helps identify these strong performers in specific areas—such as teacher professional development, student assessment, or university accreditation—while also flagging weaknesses in other areas. In addition to helping the Bank Group prioritize its assistance, this system information will facilitate more effective South-South learning, by enabling countries facing specific educational challenges to learn from the stronger performers.

Figure 1

World Bank Group Strategic Priorities in Education 2020



From Strategy To Action

To implement the new strategy, the World Bank Group will focus on three areas: **knowledge generation and exchange, technical and financial support, and strategic partnerships** (see figure 1). To generate knowledge about education reforms and interventions, the Bank will provide: *system assessment and benchmarking tools, along with data*, to assess the capacity of an education system to improve learning outcomes; *assessments of student learning and achievement* that cover the basic competencies of reading and numeracy, as well as other skills, including critical thinking, problem solving, and team skills; and *impact evaluations and other analytical work* that can inform policies and interventions, together with *knowledge exchange* and debate that facilitate learning across partner countries and organizations.

Knowledge generation and exchange is an essential tool for increasing the effectiveness of all spending in a country's education sector, not just financing from the Bank Group. The Bank will use this knowledge to guide technical and financial support for countries, including: *technical and operational support for system strengthening*, prioritized according to its expected contribution

to strengthening a country's education system and advancing learning goals; *results-oriented financing*; and a *multisectoral approach* to educational development that provides the right incentives, tools, and skills for staff to work across all sectors that influence education outcomes. Improving education outcomes depends heavily on links with the health and social protection sectors: these sectors influence whether students are healthy enough to learn well, whether the system offers families a strong enough safety net to protect education in times of crisis, and whether schooling reflects adequately the demand for skills in the labor market. Within the Bank Group, the World Bank and IFC will work together to improve knowledge about the private sector's role in education and to help countries create policy environments and regulatory structures that align the private sector's efforts with national education goals. Finally, the Bank will implement this strategy through *strategic partnerships* at both the international and country levels to improve education systems. It remains committed to supporting and strengthening the global partnership EFA Fast Track Initiative, which aims to help low-income countries achieve the education MDGs.

To measure the success of the strategy, the Bank Group will use a number of performance, outcome, and impact indicators. Given that accountability is a major emphasis of the system approach to education, the Bank is committed to tracking the effectiveness of its own strategy. The indicators (see table 1) that it will use include: *performance indicators* for areas over which the Bank has direct control; *outcome indicators* for areas in which progress requires the efforts of both partner countries and the Bank; and *impact indicators*, which will monitor progress toward the ultimate goals of the education strategy.

Achieving Learning for All will be challenging, but it is the right agenda for the next decade. While countries can achieve rapid changes in enrollment rates from one school year to the next, it is much harder to make significant gains in learning outcomes. Learning gains typically require structural and behavioral shifts made possible by institutional changes, which the new strategy will support. It is not enough to get the technical details right; reforms also require navigating the twin challenges of constraints on a nation's implementation capacity and its political economy. Reforms require buy-in from a large group of stakeholders, with teachers playing a special role. Progress on the outcome and impact indicators listed in table 1 will therefore hinge on countries instituting real reforms and having the political will to follow through. The Bank Group's assistance will need to take these constraints into account, with support tailored to country circumstances and realistic targets set for learning outcomes. Yet all this effort will be worth it: when children and young people learn, lives improve and nations prosper.

The bottom line
of the Bank Group's
new education
strategy: Invest
early. Invest smartly.
Invest for all.

Table 1 | Performance, Outcome, and Impact Indicators for the 2020 Education Strategy

Performance Indicators	Outcome Indicators	Impact Indicators
<p><i>Changes in Bank Group actions to support countries</i></p> <p>1. Knowledge development to strengthen country education systems</p> <p>a) Number of education system tools developed and launched ^a</p> <p>b) % of Bank knowledge products that use system tools in the analysis</p> <p>c) % of knowledge products that use learning outcomes in analyses of basic education</p> <p>2. Organizational development to strengthen country education systems</p> <p>a) % of Education Sector staff who have completed a competency program on the education system approach and tools and on Monitoring & Evaluation (M&E) methods</p> <p>3. Technical and financial support to strengthen country education systems</p> <p>a) % of education projects or programs that have learning- or skills-related key performance indicators (KPI)</p> <p>b) % of education projects or programs that use education system tools in their design and/or their M&E approach</p> <p>c) % of education projects or programs that have a satisfactory M&E in their design and implementation</p> <p>d) % of countries furthest from reaching the education Millennium Development Goals (MDGs) that have received increased support (lending and non-lending) from the Bank Group</p> <p>e) % of education projects or programs that finance outputs/ outcomes</p>	<p><i>Changes in policy and programs of countries receiving Bank Group support</i></p> <p>1. % of (i) middle-income countries, (ii) low-income countries, (iii) fragile or conflict-affected states, (iv) Fast Track Initiative (FTI)-endorsed countries that have applied system tools and have collected and used system data</p> <p>2. % of countries that have applied learning or skills (national or international) assessments ^b</p> <p>3. % of countries whose systems have improved in at least one policy domain as measured by the system assessment tools</p> <p>4. % of countries furthest from reaching the education Millennium Development Goals (MDGs) that have taken new steps since 2010 to addressing the obstacles to attaining those goals</p>	<p><i>Ultimate goals monitored in countries receiving Bank Group support</i></p> <p>1. % of countries (or beneficiaries in countries) with increases in measured learning or skills since 2010 (or since the earliest available baseline)</p> <p>2. % of countries that have reduced schooling or learning gaps for disadvantaged populations (e.g., income groups, gender, ethnolinguistic groups, disability) since 2010 ^c</p> <p>3. % of countries furthest from reaching the education MDG in 2010 that progressed towards their attainment since 2010</p> <p>4. % of countries with gains in the skills level of their labor forces since 2010</p>

Note: a. The World Bank is developing education system tools under the System Assessment and benchmarking for Education Results (SABER) Program. One system tool, "Teacher Policies," has been launched as a prototype, together with the publication of the strategy. Other system tools to be launched during the first year of the strategy include "Student Assessment," "Early Childhood Development," and "Workforce Development." The online SABER database will be maintained by the World Bank on its externally accessible Education Web site.

b. Assessment application conducted on a regular basis and in a sustainable manner.

c. Beginning in 2010, the World Bank Group will commit US\$750 million to those countries furthest from the education MDGs, with an emphasis on countries in Sub-Saharan Africa. The Bank Group will work closely with development partners, in particular through the Fast Track Initiative, to scale up results-based financing and to support innovative interventions in these countries. Lessons from some countries indicate that demand-side interventions such as girls' scholarships and conditional cash transfer programs, as well as school grants, can lower obstacles to school enrollment and increase attendance for disadvantaged populations, as well as in lagging areas. The Bank also commits to making the lessons from these innovations more widely accessible so they can inform future policies and investments.

Education's Role in Development

People are the real wealth of nations (UNDP 2010) and education enables them to live healthier, happier, and more productive lives. There is broad agreement, backed by research findings, that education enhances people's ability to make informed decisions, be better parents, sustain a livelihood, adopt new technologies, cope with shocks, and be responsible citizens and effective stewards of the natural environment. Given that global economic growth remains sluggish despite signs of recovery from the recent economic crisis, the shortage of the "right" skills in the workforce has taken on a new urgency across the world (World Bank 2010b). Global unemployment, estimated at 205 million (or 6.6 percent of the working population) in 2009, is at an all-time high (ILO 2011). Young people, who are particularly vulnerable to layoffs, have the hardest time finding new jobs, with their unemployment rate nearly three times that of adults.

Box 1. Education "Crowds In" Investments for Growth

The Commission on Growth and Development brought together 19 world leaders (mostly from developing countries), together with academic luminaries, to review the evidence on the factors that facilitate economic growth. The commission noted in 2008, "No country has sustained rapid growth without also keeping up impressive rates of public investment—in infrastructure, education, and health. Far from crowding out private investment, this spending crowds it in. It paves the way for new industries to emerge and raises the return to any private venture that benefits from healthy, educated workers, passable roads, and reliable electricity. [...] Perhaps the best protections a government can provide are education—which makes it easier to pick up new skills—and a strong rate of job creation, which makes it easy to find new employment."

Source: Commission on Growth and Development 2008, 5–6. The report draws on workshop discussions that featured papers presented by more than 300 distinguished academics.

The Universal Declaration of Human Rights (1948) and the United Nations Convention on the Rights of the Child (1989) recognize a child’s right to an education—a worldwide acknowledgment that depriving a child of the opportunity to basic skills is tantamount to depriving that child of the chance to have a satisfying life.¹ Through the actions described in this strategy, the World Bank Group commits to removing barriers to access to quality education so that the right to education may be upheld for all children and youth.

Education improves the quality of people’s lives in ways that transcend benefits to the individual and the family by contributing to economic prosperity and reducing poverty and deprivation. Countries with low levels of education remain in a trap of technological stagnation, low growth, and low demand for education (see box 1). Research assessing the link between the quantity of education (in terms of enrollment or average years of schooling) and economic growth has been encouraging but somewhat mixed,² perhaps because ultimately what matters for growth is not the years that students spend in school, but what they learn. By measuring education levels based on what students have learned, one influential study estimates that an increase of one standard deviation in student scores on international assessments of literacy and mathematics is associated with a 2 percent increase in annual GDP per capita growth (Hanushek and Woessmann 2008).

Education has many development benefits: more rapid growth and poverty reduction, as well as better health, reduced fertility, improved resilience to economic shocks, and greater civic participation.

At the micro level, education yields its greatest benefits in countries undergoing rapid technological and economic change because it can give workers the ability to continue acquiring skills throughout life, as well as the capacity to adapt to new technology. In India farmers who have higher-level skills are better able to process codified and complex information and thus benefit from a program that uses mobile phones to communicate and receive up-to-date market, production, transport, and meteorological data (Mittal and Tripathi 2009). During India’s green revolution in the mid-1960s, farmers with more schooling in states that experienced greater technical change earned profits 40 percent higher than those earned by farmers with less schooling. In China, Ghana, and Pakistan, productivity returns to schooling have been estimated to be higher in nonfarm activities, where rapid technological change often takes place, than in farm activities.³ Today, India’s economy is predicted to continue growing at more than 8 percent annually in the coming years, further increasing the demand for skills and worker flexibility as technological change marches on.

The development benefits of education extend well beyond work productivity and growth to include better health, reduced fertility, an enhanced ability to adopt new technologies and/or cope with economic shocks, more civic participation, and even more environmentally friendly behavior. A few such benefits include:

- *Healthier children.* Other things being equal, more educated parents have healthier children, even after controlling for household income. Education increases knowledge of the benefits of vaccination and strategies for avoiding the transmission of infectious diseases. It is estimated that of the 8.2 million fewer deaths of children younger than 5 years between 1970 and 2009, one-half can be attributed to more education among women of reproductive age (Gakidou et al. 2010).
- *Better coping with economic shocks.* Households with more education cope better with economic shocks than less educated households, since they tend to have more resources and knowledge about how to cope with income fluctuations. Such households are also more able to exploit new economic opportunities. In Indonesia and Argentina, for example, more educated households fared better than less educated households during these countries' respective macroeconomic crises (see Frankenberg, Smith, and Thomas 2003 and Corbacho, Garcia-Escribano, and Inchauste 2007).
- *Adapting to environmental change.* Comparing countries with similar income and weather conditions, those countries with better-educated female populations are more capable of coping with extreme weather events than countries with low levels of female education (Blankespoor et al. 2010).

In all societies, governments assume the responsibility for giving their people the opportunity to become educated and thus receive these benefits. Indeed, there are good reasons for governments to play this role in education. Because many of the benefits of education accrue to the individual, individuals and their families are often willing to spend and sacrifice on their own to take advantage of schooling opportunities, even without government help. But as emphasized by the Commission on Growth and Development (2008, 37–38), there are strong rationales for a government's promotion of education—whether through provision, financing, or regulation—in addition to the human rights argument cited above. First, “educated people contribute more to society than they get back in higher pay.” Second, credit constraints prevent poorer families from borrowing enough to pay for schooling, even if schooling would lead to higher wages that would more than justify a loan. Both these market failures lead to

underinvestment in education, so “public spending on education is justified on the grounds of efficiency and equality of opportunity. It corrects the failure of the market to allocate enough resources to education, and it also widens access to education beyond those who can pay for it upfront.” Managed correctly, public intervention to promote education creates opportunities for gains in growth, productivity, employment, and poverty reduction. And for the development community, investing in education is a key item on the agenda as the world continues to recover from crisis, as discussed in the Bank Group’s “New World, New World Bank Group: Post-Crisis Directions” strategy paper (World Bank 2010b).

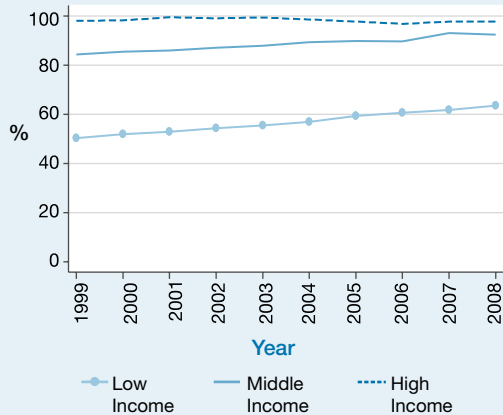
Thanks to a combination of effective policies and sustained national investments in education, far fewer children in developing countries are out of school.

Recent Developments: More Schooling, Little Learning

Compared with two decades ago, more young people are entering school, completing the primary level, and pursuing secondary education. Thanks to a combination of effective policies and sustained national investments in education, far fewer children in developing countries are out of school. Governments, civil society organizations (CSOs), communities, and private enterprises have built new schools and classrooms and recruited teachers at unprecedented levels. Even in low-income countries, average enrollment rates in primary education have surged upwards of 80 percent, and primary completion rates, above 60 percent (see figure 2). Moreover, because more schools are available in rural areas in these countries, the poorest children—as well as girls who were kept out of school because there were no schools close to home (see figure 3)—have also benefited. Between 1991 and 2008, the ratio of girls to boys in primary and secondary education in the developing world improved from 84 to 96 percent, with even larger gains in the Middle East and North Africa region and the South Asia region. However, low-income countries as a group are still far from reaching the education Millennium Development Goals (MDGs): universal primary education as measured by enrollment and primary completion rates, and gender equality in primary and secondary education. Three-fourths of the countries that are the furthest from meeting the MDG on primary completion rates are in Sub-Saharan Africa; the corresponding percentage for gender equality is 45 percent.⁴ In these countries, it may take targeted efforts on top of broad reforms to address the specific reasons why children and youth are out of school.

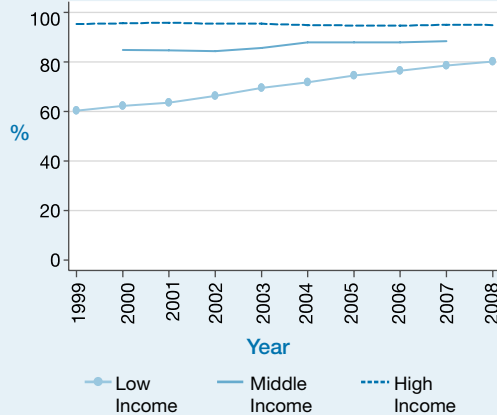
Figure 2 Progress towards Universal Access to Education

A. Primary Completion Rates by Income Group



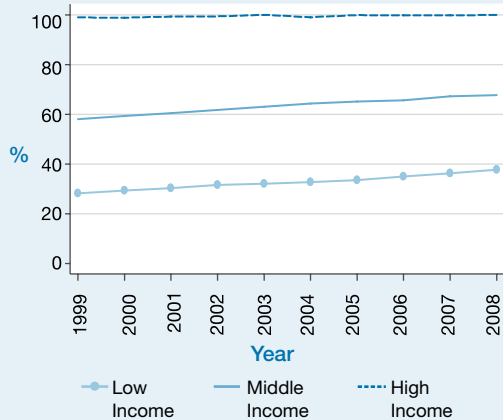
Source: UNESCO Institute for Statistics in EdStats, Sept 2010.

B. Primary Net Enrollment Rates by Income Group



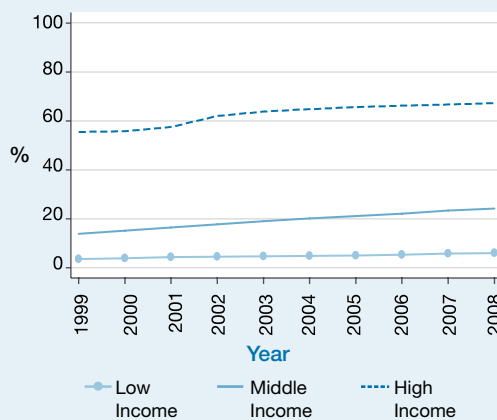
Source: UNESCO Institute for Statistics in EdStats, Sept 2010.

C. Secondary Gross Enrollment Rates by Income Group



Source: UNESCO Institute for Statistics in EdStats, Sept 2010.

D. Tertiary Gross Enrollment Rates by Income Group

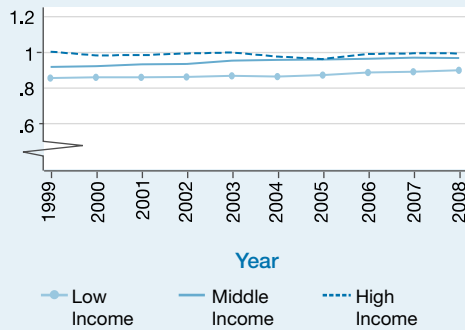


Source: UNESCO Institute for Statistics in EdStats, Sept 2010.

As primary enrollment rates have climbed, pressure has mounted to expand the capacity of secondary and tertiary education institutions. Spurred by the rise of new economic stars such as Brazil, Russia, India, and China (the BRICs), developing countries—including low-income countries—are more keenly aware that secondary and tertiary education are critical to developing a skilled, productive, and flexible labor force and creating and applying ideas and technologies that contribute to economic growth (Rodriguez 2008; COREHEG 2010).

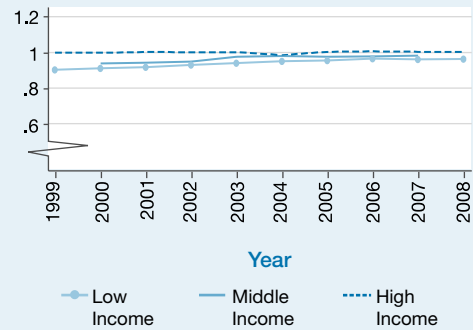
Figure 3 Progress Towards Gender Equity

A. Ratio of Female to Male Primary Completion Rates By Income Group



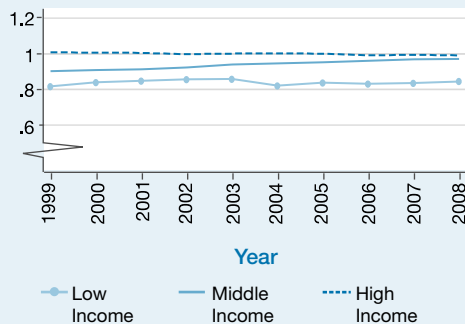
Source: UNESCO Institute for Statistics in EdStats, Sept 2010

B. Ratio of Female to Male Primary Net Enrollment Rates by Income Group



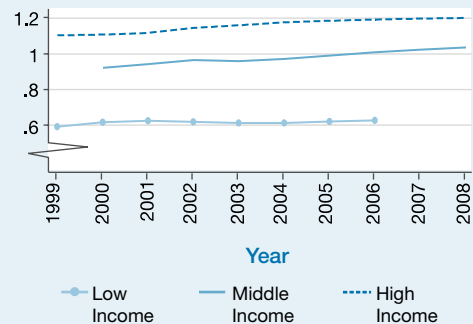
Source: UNESCO Institute for Statistics in EdStats, Sept 2010

C. Ratio of Female to Male Secondary Gross Enrollment Rates By Income Group



Source: UNESCO Institute for Statistics in EdStats, Sept 2010

D. Ratio of Female to Male Tertiary Gross Enrollment Rates By Income Group



Source: UNESCO Institute for Statistics in EdStats, Sept 2010

Income poverty remains a pervasive barrier to school attendance and learning, particularly for girls and minority groups. Schooling levels by income group indicate that children from the poorest families who enter school drop out early, although at varying rates across countries (see figure 4).⁵ In some countries, such as Pakistan and Tanzania, the impact of income poverty on education levels is visible right from the start of primary school. In Indonesia, income poverty does not seem to deter school-age children from entering primary school, but it does make them more likely to drop out and less likely to receive a secondary education. Research has shown that school enrollment is more sensitive to the price of schooling for low-income households, so eliminating fees or giving a scholarship to children will produce a larger proportional increase in the schooling of children from poorer families (Orazem and King 2008).

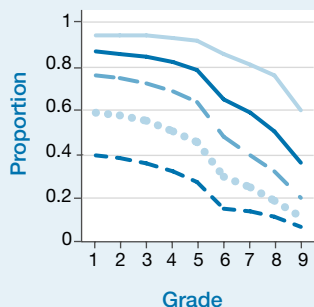
Educational progress lags even more among children and youth who face multiple sources of disadvantage: gender, place of residence, disability, or ethnolinguistic background.⁶ Research suggests that the demand for schooling in rural areas responds most to changes in income and the proximity of available schools. In places where girls receive less schooling than boys (such as Pakistan, Afghanistan, Morocco, and the rural areas of many other countries), girls' schooling seems more responsive to shifts in income and prices than boys' schooling. Demand-side interventions, such as the abolition of school fees and targeted scholarships, cash transfers for poor families, and vouchers that enable poor students to attend private educational institutions have been especially advantageous for raising girls' educational enrollment in rural areas. Together, these measures have resulted in notable increases in girls' enrollment rates at the primary and secondary levels, as in Cambodia, where scholarships conditioned on attendance raised the school participation of recipients by 20 to 33 percentage points (Filmer and Schady 2008).

For too many students, however, more schooling has not resulted in more knowledge and skills. The results of substantial resources spent on education have thus been disappointing in terms of learning outcomes. Youth are leaving school and entering the workforce without the knowledge, skills, or competencies necessary to adapt to a competitive and increasingly globalized economy. As a result, to find employment they may need remedial, second-chance, and job training programs.

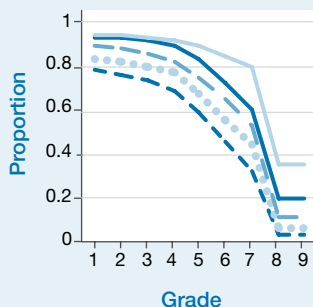
For too many students, more schooling has not resulted in greater learning.

Figure 4 Comparison of Youth Aged 15–19 Years Who Have Completed a Given Grade, by Income Quintile, Various Years

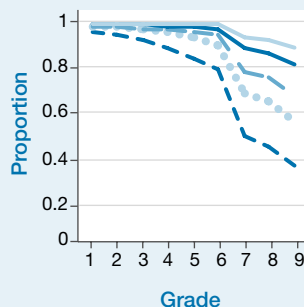
A. Pakistan 2006-07 Grade Survival Profile, ages 15-19



B. Tanzania 2007-08 Grade Survival Profile, ages 15-19



C. Indonesia 2007-08 Grade Survival Profile, ages 15-19



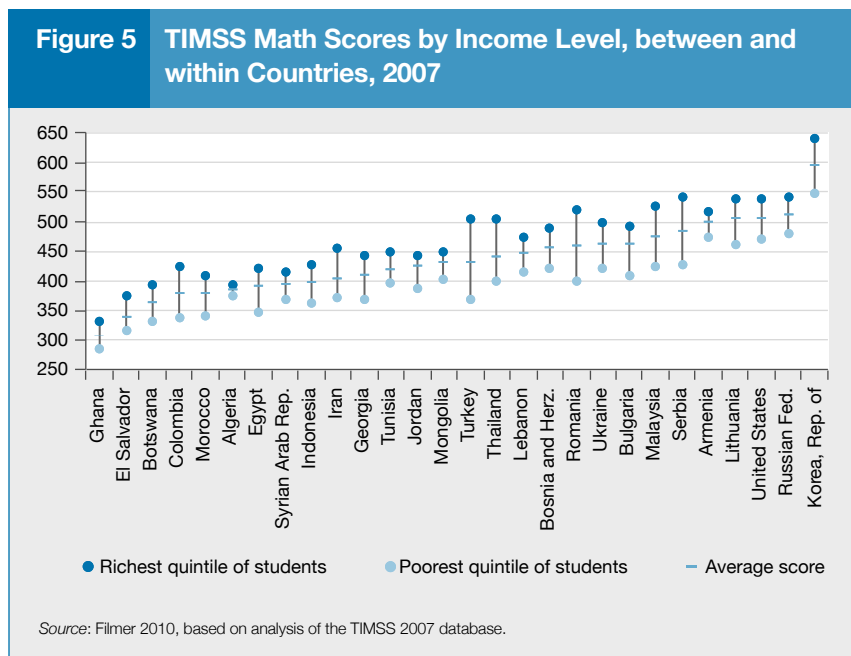
— — — Poorest •••• Quintile 2 - . - . Quintile 3 — — — Quintile 4 - - - - Richest

Source: Authors' calculations based on national demographic and health survey data.

Several studies illustrate the seriousness of the learning challenge. In India, 47 percent of children in grade 5 cannot read a second-grade text, suggesting that close to half of schoolchildren are not attaining even a basic level of literacy after five years of school (ASER 2010). In Peru only half of grade 2 students could read at all (Crouch 2006). Math results are no better: Only 37 percent of fifth-grade students tested in India can do simple division. In Pakistan, only half of third-grade students tested could answer very basic multiplication questions (Das, Pandey, and Zajonc 2006). Education systems in many countries are therefore facing the simultaneous challenges of providing basic education to hard-to-reach or disadvantaged groups, expanding post-basic education to meet greater demand for employable skills, providing second-chance learning opportunities to those who are out of school, and ensuring that the education provided at all levels yields better learning outcomes.

The results from regional and international student assessments, such as the Trends in International Mathematics and Science Study (TIMSS), the Programme for International Student Assessment (PISA), and the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) tests, illustrate the wide gulf in international test scores of students from different income levels,

both between and within countries. For example, Turkey’s average score on TIMSS is about 1.5 standard deviations below that of Lithuania and the United States (see figure 5). At the same time, the math scores of students from the richest 20 percent of families in Turkey are 1.5 standard deviations higher than those of students from the poorest 20 percent of families. Closing the gap in achievement between the poorest and richest students would put Turkey in a far better position relative to higher-performing countries. The most recent PISA report, based on the 2009 assessment, reinforces this message about attention to equality, emphasizing that “the best-performing school systems [in Canada, Finland, Japan, Korea, and the partner economies Hong Kong SAR-China, and Shanghai-China] manage to provide high-quality education to *all* students,” rather than only to students from privileged groups (OECD 2010b, 9).

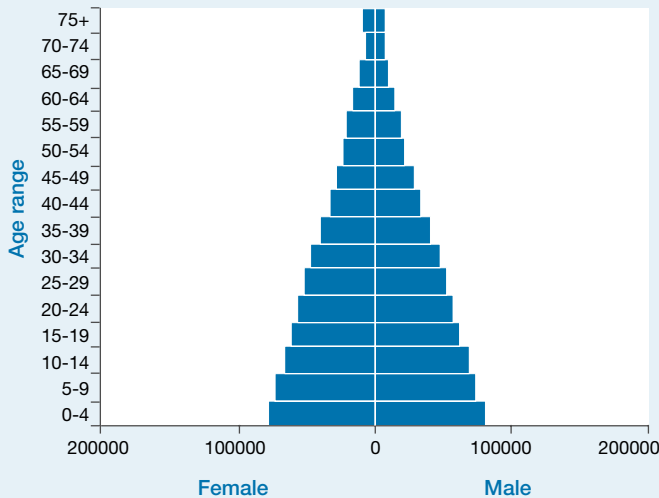


Why a New Education Strategy?

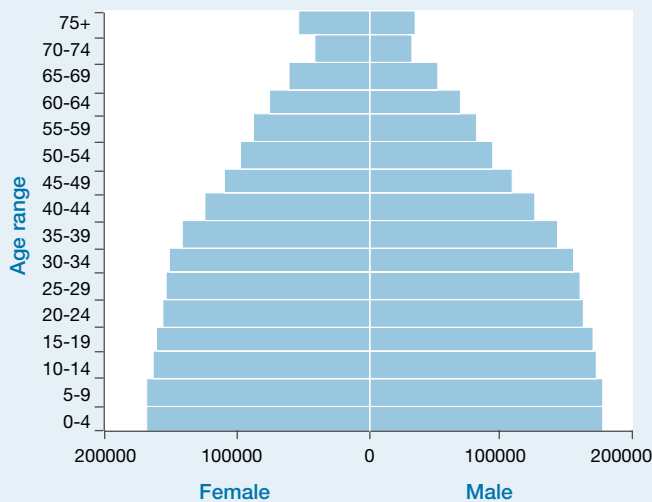
The world and the development context have changed since 2000, when the last World Bank Group education strategy was launched—and so has the World Bank Group (henceforth referred to as the “Bank”). External and internal changes call for a rethinking of the Bank’s education strategy. Economic, demographic, and technological changes are redefining the development challenge

Figure 6 Demographic Trends in Low- and Middle-Income Countries

Panel A: Population Projections in Low-Income Countries for 2020 (000s)



Panel B: Population Projections in Middle-Income Countries for 2020 excluding China (000s)



Source: World Bank, Health Nutrition and Population Statistics, Population Projection Tables by Country and Group, 2010–2050 (<http://go.worldbank.org/KZHE1CQFA0>). Note: China is excluded from Panel B; including China would make the “youth bulge” even clearer.

for all countries. Education systems must adapt to those changes so that they can produce the skilled, agile workforces and informed citizens needed in this environment. The new strategy lays out strategic directions, priorities for investment, technical support, and policy assistance for the Bank’s work in education over the next decade, within the context of global shifts and internal Bank changes.

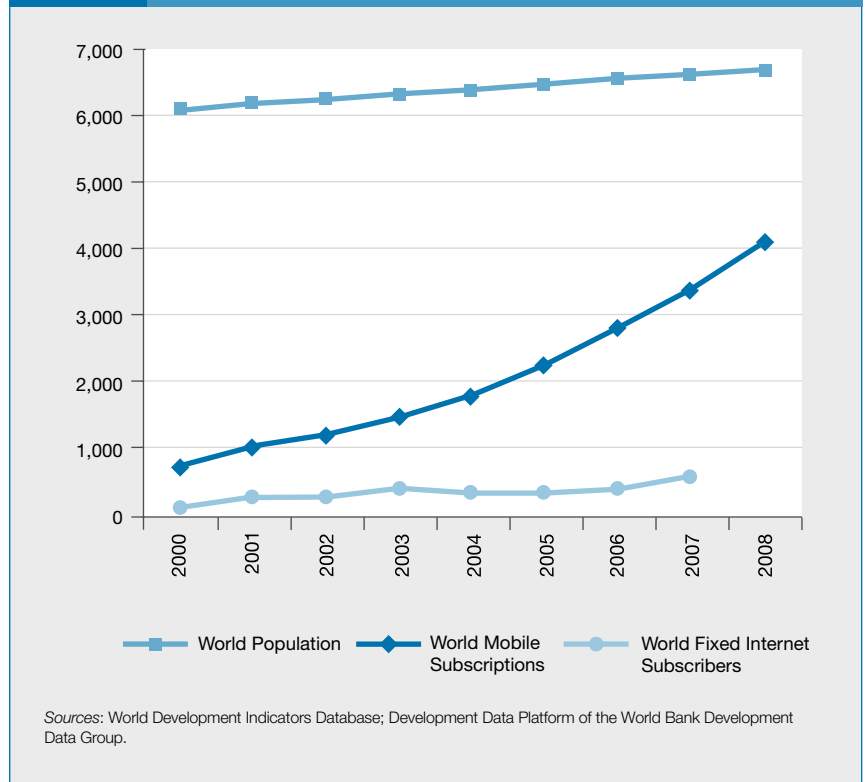
A country’s demographic landscape shapes the potential demand for education. Because their fertility rates remain high, low-income countries continue to have very young populations; on average, more than 40 percent of their populations will be under 15 years old in 2020 (see figure 6). An estimated 3.1 billion young people worldwide are between the ages of 0 and 24 years, of which 90 percent live in the developing world. Moreover, fertility is not declining as rapidly as expected in some poor countries (UN 2011). These countries must provide their young people adequate basic education while upgrading the quality of that education. Success in getting more children through basic education, moreover, creates demand for education at secondary and tertiary levels. In contrast, sharp declines in fertility rates in middle-income countries have reduced the pressure to expand primary education facilities, leaving more resources for quality improvement and the expansion of post-primary education. The proportion of 15–24-year-olds in the popula-

tions of middle-income countries is also higher than ever before. If these youth are equipped with appropriate skills and know-how when they enter the workforce, the “youth bulge” (see figure 6) could translate into remarkable economic dividends for these countries.

Urbanization is another global shift that has consequences for education: the rising urban share of the population of the developing world presents both opportunities for and challenges to the education sector. Educated migrants seek places where many other workers have similar skills because educated workers gain from proximity to others. Education can take advantage of the economies of scale presented by urbanization, with opportunities for less costly expansion of services. The challenge will be not only to expand access, but also to increase learning outcomes and education’s relevance to the urban labor market, while reducing rural-urban gaps (World Bank 2009i).

The emergence of new middle-income countries has intensified the desire of developing nations to become more competitive by building more highly skilled, agile workforces.⁷ Although the world as a whole is emerging from the global financial crisis at a modest rate, the economies of China and India are projected to grow at close to 10 percent in 2011, and that of Brazil, 4.1 percent. Even the regional economy of Sub-Saharan Africa is projected to grow by 5.5 percent in 2011. Indeed, according to the International Monetary Fund (2010), output growth in emerging and developing economies is expected to be 6.4 percent in 2011—more than twice the projected output growth of rich economies.⁸ Many of these countries initially took advantage of relatively good fiscal positions and ample reserves to buffer the effects of the crisis on education spending; however, they may struggle to maintain this spending in the face of a slow recovery. Moreover, the depth of the downturn and sluggish recovery in rich countries could cause a decline in official development assistance (ODA).⁹

Figure 7 Rise of Mobile Telephony, 2000-08 (millions)



The technological landscape also shapes potential demand for education. New information technologies have transformed—and continue to transform—how people live and communicate, how enterprises do business, the kind of jobs that are available, and the skills that are in greater or lesser demand.¹⁰ The growth of mobile phone subscribers has outpaced global population growth (see figure 7). Mobile telephony has been adopted even in the rural areas of poor countries and its use for accessing market information and banking services is growing. Similarly, the number of Internet users—most of them young people—grew by an estimated quarter of a billion people between 2000 and 2005 (OECD 2010a). These technological changes can improve the quality of service delivery, but research and field experience indicate that the new technology must be accompanied by profound changes in pedagogical methods. The ability of education systems to develop “new economy skills” can help countries become more competitive (see box 2). This implies changing the way educators are trained, increasing the supply of qualified educators, and improving the relevance of education curricula.

Box 2. Technological Change, Skills, and Education in Brazil

The rise of new technologies and their rapid diffusion have been altering the mix of jobs and skills demanded in the workplace. The introduction of computers in the workplace in the United States, for example, has decreased the demand for skills in routine and manual tasks, while sharply increasing the demand for “new economy” skills—analytical and interpersonal skills for dealing with nonroutine circumstances. Can education systems adjust fast enough to help students meet these changes in the labor market?

Recent technological changes are also affecting developing economies, perhaps especially the fast-growing ones. In Brazil, the skill structure of the labor force since the early 1980s shows a decline in manual skills and an increase in routine cognitive skills. In particular, high-income groups show an evolution in their skills mix similar to that of high-income groups in the United States. As of yet, there has been no rapid increase in “new economy skills,” but more highly educated individuals have increased their new economy skills faster than individuals with less education. Even though the speed at which an economy adapts to technological change depends on a variety of factors, this evidence reinforces the perception that more educated individuals will adapt faster to change, and by doing so, contribute to technological catch-up.

Sources: Levy and Murnane 2004; Luque and Moreno forthcoming; Bruns, Evans, and Luque 2010.

The sources of international aid have grown and become more diverse in recent years, adding to the reasons why donors should harmonize and align their programs at the country level. Guidelines for how donors should work together were elaborated by the Paris Declaration of 2005 and the Accra Plan of Action of 2008. In 2002, the Bank played a pivotal role in forming the Education for All Fast Track Initiative (EFA FTI),¹¹ a global partnership that aims to help low-income countries achieve the education MDGs. Since 2004, the initiative has provided financial support to over 40 countries. The Bank, which continues to supervise most of the grants of the partnership, is working with FTI partners to implement reforms recommended by an external evaluation of FTI (Cambridge Education, Mokoro, and Oxford Policy Management 2010). This new education strategy provides an opportunity to improve the Bank’s contributions to this global partnership.

The number of international aid donors has grown along with demand for education, making it even more important for donors to harmonize and align their programs at the country level.

Inside the World Bank the operating environment has also undergone notable reforms in the past decade. These changes were designed in part to give the Bank a better structure for responding to changes in global economic and political conditions and the global aid environment, and in part to accommodate the shifting nature of its policy dialogue with client countries. First, the Bank has raised the share of its staff who are located in country offices, both through the relocation of international staff and increased recruitment of local staff. About one-half of education staff (and an even greater percentage in East and South Asia) are located in field offices. Second, the Bank's operational instruments have increased, partly in response to greater demand for, and interest in, lending instruments that incorporate performance-based approaches, together with sectorwide financing (in the form of direct budget support), parallel financing, pooled funding, programmatic lending in support of medium-term development goals, and approaches that provide greater flexibility with reduced transaction costs. A number of middle-income countries, notably in Eastern Europe, are also using reimbursable technical assistance in order to tap the Bank's technical expertise in highly specific areas. A third internal change has resulted from the rapid growth of private-sector provision of education services, sparked by the limited ability of many governments to meet growing demand for education. To help support the private sector's ability to deliver quality education, in 2001 the International Finance Corporation (IFC) set up a department focused on financing private education providers, and in 2004 it made the education sector one of its strategic pillars.

In addition to these longer-term trends, the global financial crisis that struck in 2008 served as an immediate backdrop for the development of the education strategy. In the wake of that surprising and unexpectedly deep economic downturn, the Bank reassessed its overall strategy for the next decade, placing new emphasis on addressing such challenges as managing risk, fostering sustainable development, and promoting multipolar growth (World Bank 2010b). In its recent "Post-Crisis Directions Paper," the Bank sets out its key priorities as targeting the poor and vulnerable, creating opportunities for growth, promoting global collective action, and strengthening governance. This education strategy builds on the post-crisis directions set out for the Bank, with priorities that support those of the institution overall.

Goal and Framework for the New Strategy: Learning for All

The state of education and the expectation of leaders, citizens, and students of national education systems—that education can be an engine of economic progress and a chance for people to transform and improve their lives—all point to the immense challenges that these systems face. For its part, the World Bank commits to supporting educational development with a focus on *learning for all*.

The new strategy focuses on learning for a simple reason: growth, development, and poverty reduction depend on the knowledge and skills that people acquire, not just the number of years that they sit in a classroom. At the individual level, while a diploma may open doors to employment, it is a worker's skills that determine his or her productivity and ability to adapt to new technologies and opportunities. Knowledge and skills, including those that are learned in the classroom, help improve a person's ability to have a healthy and educated family and engage in civic life. And as noted above, at the societal level, recent research shows that the level of skills in a workforce—as measured by performance on international student assessments such as PISA and TIMSS—predicts economic growth rates far better than do average schooling levels (Hanushek and Woessmann 2008).

The “for all” part of the strategy's goal is crucial. Major access challenges remain for disadvantaged populations at all education levels; indeed, children and youth cannot develop the skills and values that they need without the foundational education provided by schools. But when an education system fails to deliver learning, the failure is most severe for poor and disadvantaged children and young people. Learning gaps are most obvious when those children and youth do not enroll in school at all, but they also happen more insidiously, when disadvantaged students attend school but learn little because the schools they attend are of such poor quality. The *learning for all* strategy thus promotes the equity goals that underlie the education MDGs; in fact, it elevates the MDGs by linking them to the universally shared objective of learning.

The new education strategy is built on the premise that *people learn throughout life*. However, the period between birth and young adulthood is especially critical because the ability to learn that is developed during this period provides a foundation for lifelong learning (see box 3). The extent to which children and young people learn during these years depends on their ability to learn, the learn-

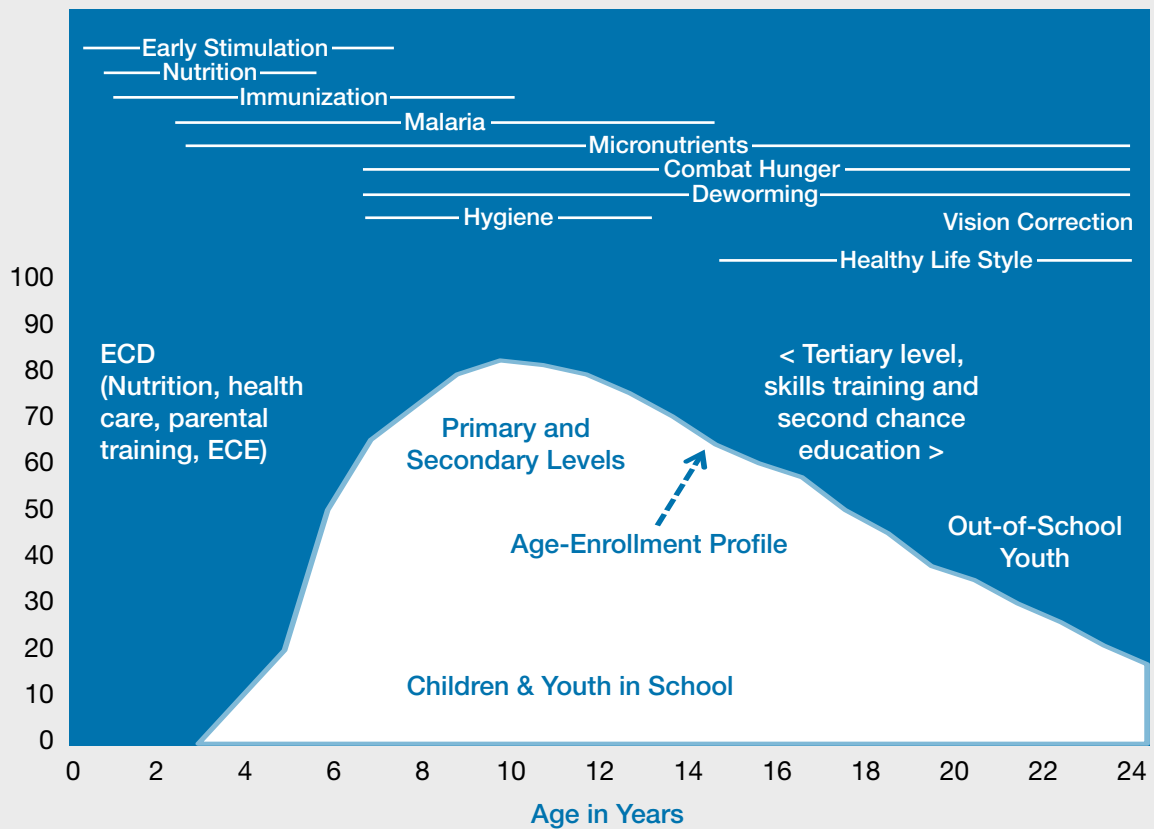
The new education strategy is built on the premise that people learn throughout life, not simply during the years that they spend in formal schooling.

Learning outcomes have been typically measured in terms of reading and numeracy skills, but the knowledge and competencies that help people live healthy, productive, and satisfying lives are much broader.

ing opportunities available to them and the quality of those opportunities. Several key findings inform the new strategy:

- Early malnutrition, disease, abuse, and neglect impair a child’s physical and cognitive development, with long-term consequences for that child’s capacity to learn. The educational effects of severe deprivation at the beginning of life can be difficult—and costly—to overcome. Investments in the nutritional and health status of very young children and the quality of their interaction with parents and caregivers determine the readiness of children to learn.
- Learning outcomes have typically been measured in terms of reading and numeracy skills, but the knowledge and competencies that help people live healthy, productive, and satisfying lives are much broader.¹² In other words, education is not only about reading, writing, and arithmetic (the “3Rs”). Social, communication, teamwork, critical thinking, and problem-solving skills are invaluable for people to function well at home, in their communities, and at work. Specific technical or vocational skills related to an occupation are also important for success in the labor market.
- Learning is not only about schooling. Programs that address hunger, malnutrition, and disease among schoolchildren significantly improve their academic performance, a reason why school-based feeding and health programs can be valuable in times of drought, economic crisis, and natural disaster (Bundy and O’Connell 2010). Indeed, learning is not simply the business of education agencies; it should also involve social welfare and/or social protection and health agencies in the design and implementation of policies across sectors that ensure young children have the foundational skills to succeed in school. Box 3 overlays these interventions in a life-cycle view of learning.
- Youth who drop out of school early are vulnerable to unemployment, poverty, teen marriage, pregnancy, and delinquency. In addition to preventing young people from dropping out of school, alternative (“second-chance” or “catch-up”) learning opportunities that take into account the reasons why they are not in school are needed. These reasons usually include income poverty, gender, disability, family catastrophes, social conflict and wars, as well as perceived low market returns to education. The challenge is to give these young people appropriate opportunities to consolidate their basic knowledge and competencies, and then equip them with technical or vocational skills that promote employment and entrepreneurship (World Bank 2011).
- While most governments consider basic education part of their mandate, learning opportunities—from preschool to universities and training programs—are not provided only by governments. The role of the nonstate, or private, sector is discussed in the next section.

Box 3. Learning is a Lifelong Process



Source: Authors' contribution.

Note: ECD – early childhood development; ECE – early childhood education.

Learning happens throughout life: a person's brain starts growing from early on in life and continues to do so into adulthood. At each stage of brain development there are opportunities for learning. But whether a person can take full advantage of those opportunities depends significantly on the learning that takes place during his or her younger years (through age 25), when an individual acquires the ability to learn.

The years up to age 5 are particularly important for later learning. During infancy a child gradually develops sight, hearing, receptive language, and speech. Between the ages of 1 and 5, the brain develops very rapidly as the child develops executive functions, such as a working memory and self-control; higher cognitive functions, such as solving puzzles; fine motor skills, such as picking up objects and writing; and gross motor skills, such as walking and running. Children need a stimulating and responsive environment to develop these abilities; deprivation inflicts profound long-term damage to a child. A supportive environment starts with good maternal nutrition and health during pregnancy and continues with proper nutrition and cognitive and psychological stimulation during early childhood. The availability of an integrated system of parenting education, nutrition, and health care—in short, an effective early childhood development (ECD) system—can thus have substantial benefits for children.

Box 3. Learning is a Lifelong Process

Between the ages of 6 and 12, children are expected to acquire the basic reading, mathematics, and analytical skills that determine their ability to continue learning. Sufficient instructional time and appropriate pedagogy are critical for developing those skills. Beyond the initial primary grades, children continue to acquire reading comprehension and mathematical skills, as well as basic science skills. The capacity for language also grows considerably at this stage, so it is a critical time for learning grammar, second or third languages, and expanding vocabulary. Children in these age groups benefit from the instructional use of their mother tongue, combined with instruction in the dominant language. Experts also argue that from this period onwards, youth acquire individual and social values that help guide them throughout life.

Early adolescence is generally marked by both emotional immaturity and high cognitive potential. Because neurodevelopmental maturation occurs at different ages, young people may benefit more from a strong general education at this stage, with specialized vocational and technical education deferred until upper secondary education. For many youth, the period after age 16 is a time of transition from school to working life and even to parenthood. For young people who have dropped out of school, second-chance programs offered through vocational or technical schools, as well as on-the-job training, can lead to high returns in labor markets. At the same time, many more of these youth are now enrolling in upper secondary and tertiary education, as well as in a large variety of skills training programs, to acquire the skills valued in the labor market. Private education and nonformal learning opportunities are particularly important for this age group, though they generally do not receive the level of policy attention that they deserve. Building and harnessing the life and work skills, values, and attitudes of young adults should be a cornerstone of development policy.

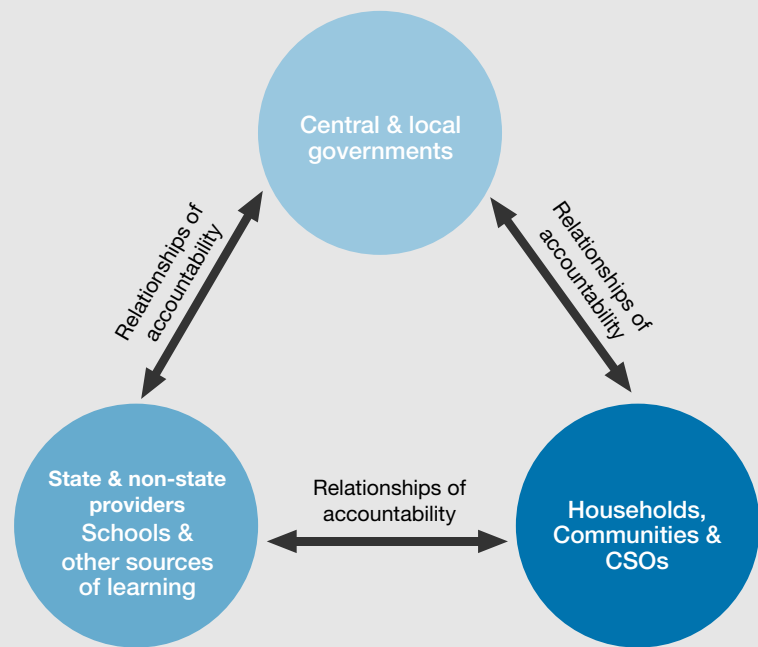
Sources: Abadzi 2010; Bhutta et al. 2008; Cunha et al. 2006; ECD Community of Practice 2010; Engle et al. 2007; Fernald et al. 2009; Grantham-McGregor et al. 2007; Jakubowski et al. 2010; Lloyd 2005; OECD 2007; Perez-Brito and Goldstein 2010; Walker et al. 2007.

The debate on what is an effective learning environment and how to achieve it is ongoing, but it is clear that focusing solely on educational inputs will have limited success. One side in the debate focuses on providing adequate academic infrastructure (e.g., equipped classrooms, trained teachers, learning materials for students, reference materials for teachers) as a means to improve learning outcomes. Yet the evidence for learning dividends from input-focused investments has been mixed, except perhaps in settings with extreme shortages (Hanushek 1986, 1996; Kremer and Holla 2008). Another side in the debate places less emphasis on the quantity and quality of resources and more emphasis on a system's ability to transform those resources efficiently and effectively into learning outcomes. That ability hinges on the capacity of the education system to formulate policy, set standards, implement quality assurance, assess student performance, manage human and financial resources, and engage in intergovernmental and external partnerships (Fullan 2005; Mourshed, Chijoke, and Barber 2010). One aspect of this is the importance of greater autonomy at the provider level; together with competition for resources (e.g., through the use of performance incentives or vouchers), this autonomy can generate strong provider motivation to improve service delivery (World Bank 2003; Orazem, Glewwe, and Patrinos 2007; Bruns, Filmer, and Patrinos 2011).

Redefining “Education System” Beyond Formal Schooling

The new Bank strategy redefines the term “education system” to encompass all learning opportunities in a given society, whether within or outside of formal education institutions. In this definition, an education system consists of all parties who participate in the provision, financing, regulation, and use of learning services. Thus in addition to national and local governments, participants include students and their families, communities, private providers, and non-state organizations. This larger network of stakeholders makes up an education system in the broader sense (see figure 8). The relationships, whether contractual or noncontractual, that connect them and their resources are what make the delivery of education services possible. In such a system, decision making does not reside with only one group; instead, important decisions that affect learning outcomes are influenced by all of these stakeholders. This is a broader and more accurate depiction of an education system. Its elements are outlined in the paragraphs below.

Figure 8 An Education System as a Network of Accountability Relationships



Source: Adapted from World Bank 2003.

The new Bank strategy encompasses all learning opportunities in a given society, whether within or outside of formal education institutions.

First, an education system includes the full range of formal and nonformal learning opportunities available to children, youth, and adults in a given country—whether they are provided and/or financed by state or nonstate entities. The latter group can be private individuals, private enterprises, community organizations, or faith-based organizations, among others. An education system thus encompasses primary and secondary schools, tertiary institutions, training institutes, and other private and nonformal learning programs, together with their teaching staff (e.g., teachers, trainers, and professors), nonacademic personnel, and administrators. Although most institutions of learning are provided and/or financed by the state, in many countries the education system includes privately provided or privately financed institutions and programs. In populous countries such as Brazil, India, Indonesia, or Nigeria, the education system spans a stunningly large number of structures and participants at all levels of education, linked together by contractual and noncontractual relationships for the delivery of educational services.

Second, an education system includes beneficiaries and stakeholders—students and trainees, their families, and communities, as well as employers—whose taxes, collective choices, and “voice” can be potential forces for improving how the system works. For example, in India, Indonesia, and Pakistan, the equivalent of village education committees are tasked with monitoring and supporting schools. In many countries, moreover, employers finance their employees’ participation in job-training programs. When students or trainees have reliable information about the quality of education services, they are better able to choose among providers and/or extract better services. In low-income African countries, lessons learned from EFA FTI show that providing information to a diverse set of stakeholders, including the Local Education Group (which includes government, civil society groups, and donors), can improve the education dialogue and equip stakeholders with knowledge that helps them hold governments accountable for education investments and results.

Third, an education system has several core policy domains that correspond to various system functions and together keep it running. These policy domains include laws, rules, and regulations that determine how teachers are recruited, deployed, paid, and managed; how fiscal resources are allocated and spent; how schools and other learning institutions are established and supervised; how students are taught, treated in schools, and assessed; and how universities and other tertiary education institutions are organized, accredited, and financed. The quality of these policy domains and who is accountable for them are critical questions for education reform.

Priorities of the New Education Strategy

The Bank’s priorities in education over the next decade will be, first, to strengthen the capacity of education systems to achieve learning goals and, second, to contribute to building a high-quality global knowledge base on education systems. The new education strategy affirms the Bank’s commitment to education through operational, financial, and technical assistance that help its partner countries achieve national development goals by making their education systems more effective.

The priorities of the new strategy were determined on the basis of a consultation program that was unprecedented in its scope. Two phases of internal and external consultations, as well as technical work on specific themes carried out

by staff across Bank units, honed the messages and specific directions of the strategy.¹³ In each phase, the Bank consulted with several groups of external stakeholders (including governments, private sector representatives, teachers, students, development partners, and civil society) on the overall approach of the strategy. During the first phase (March–June 2010), the Bank held meetings in 24 countries with representatives from 69 countries. In the second phase (August–November 2010), a draft strategy paper was discussed in 29 meetings with representatives from 59 countries. In all, 115 countries were represented in the consultations. During both phases, other people sent additional comments to a website dedicated to the strategy. (Annex 1 lists the number of countries and regions represented in both consultation phases.) A summary of each discussion was sent by email to the participants in order to solicit further comments before that summary was posted on the strategy’s website.¹⁴

Priority 1: Strengthening Education Systems

Ample evidence now shows that improving learning outcomes require much more than investing in more trained teachers and more classrooms, critical though these investments are (Duflo, Dupas, and Kremer 2008; Fullan 2005; Orazem, Glewwe, and Patrinos 2007). Investments in these inputs expand an education system’s physical capacity to deliver services, but do not guarantee that it functions effectively or efficiently. Nor do they guarantee that it delivers the competencies and skills needed by students to thrive in a global economy. The challenge will be to make education systems achieve their goals effectively and efficiently, given constraints on financial resources, administrative and technical capacity, leadership skills, and political capital.

Strengthening an education system so that it efficiently delivers better learning outcomes requires a number of interrelated actions. First, the mechanisms that connect the various parts of the system (specifically, its governance, management, financing rules, and incentive mechanisms) should support clear and aligned functions, authority, and relationships of accountability within the system (box 4). Second, the effectiveness of these mechanisms in producing learning and skills outcomes should be measured and monitored at all levels. In this regard, information and communication technology (ICT) can play an important role in improving the management and accountability of the system by, for example, allowing better—and more timely—monitoring of the various dimensions of a national education system and lowering the cost of implementing student learning assessments.

Box 4. Promoting Accountability through Information and Local Autonomy

According to the expanded definition of an education system, relationships of accountability are the key levers that make a system work. Two powerful mechanisms for improving the accountability of educational providers are availability of information and greater autonomy for providers.

Availability of information

There is no magic bullet for improving learning outcomes, but making more information available on results—with respect to both enrollment and learning achievement—has been shown to lead to progress. In India the school report cards developed by the District Information System for Education summarize school information in an easy-to-read format, giving parents and stakeholders access to previously unavailable information with which they can hold schools and authorities accountable. Data from the report cards are also published on the Internet, promoting local accountability. In the context of a similar school management reform in the Punjab province of Pakistan, student and school report cards were produced and disseminated. By increasing knowledge of educational quality and empowering parents with this information, the intervention increased learning achievement by between 0.10 and 0.15 standard deviations in both government and lower-quality private schools; it also reduced the fees charged by higher-quality private schools by 21 percent.

Local autonomy

Improved performance and measurable outcomes depend on a careful balance between three policy instruments that influence the behavior of local actors: (1) greater *autonomy* at the local level; (2) enforcing relationships of *accountability*; and (3) effective *assessment* systems. Increased autonomy at the local level empowers *stakeholders* through greater decision-making authority and more flexible financing. In turn, teachers and school administrators get involved as partners in efforts to improve the quality and relevance of local education. Past reforms have also increased the participation of parents and communities in schools, given that they have incentives to demand the efficient use of resources to increase learning and keep providers accountable for these results. Research around the world has found that increased autonomy policies change the dynamics within schools because parents become more involved or because teacher behaviors change. There is evidence, moreover, that these instruments have reduced repetition, failure, and dropout rates. The evidence on learning outcomes is mixed, however: positive results on learning were observed in El Salvador, Nicaragua, Mexico, and Kenya, but no effects were found in either Brazil or Honduras.

Sources: Andrabi et al. 2008; Bruns, Filmer, and Patrinos 2011; and Barrera-Osorio, Fasih, and Patrinos 2009.

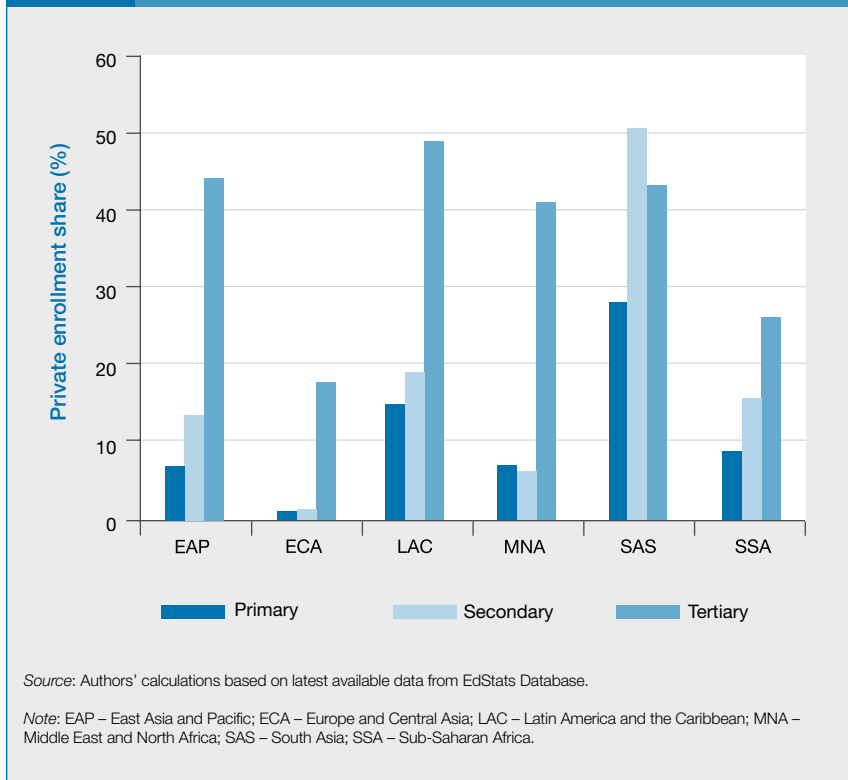
The World Development Report 2004 on service delivery (World Bank 2003), together with the World Bank Governance and Anti-Corruption Strategy adopted in 2007 (World Bank 2007b), shine a spotlight on governance issues. The message of these documents is clear, if not easy to adhere to: without well-defined responsibilities and performance goals, there is no way to generate the information needed to manage and assess a service delivery system (in this case, education). In addition to clearly defined responsibilities and goals, an education system needs three additional elements to accomplish its aims: (1) policies and regulations on quality assurance, learning standards, compensatory programs, and budgetary processes that are transparently implemented and enforced; (2) adequate financing (Alderman and Vegas 2010); and, finally, (3) compliance with these policies and regulations.¹⁵

A system approach can broaden the potential agenda for action in education policy, enabling governments to take advantage of a greater number of service providers and delivery channels.

Past education strategies of the World Bank have focused very much on formal schools that are funded and/or operated by governments. The new strategy explicitly recognizes that learning opportunities go beyond those offered by the public sector, as well as beyond traditional formal programs. Critical learning activities are available outside of formal schooling, such as before the “official” age of school entry or after a young person has left school. When young people drop out of school early, many are unlikely ever to return, so other learning opportunities, such as work skills training, are needed to help them prepare for and find employment. Even while children and youth are still in school, they may be engaged in supplementary learning activities outside the purview of the government. Services outside of traditional formal programs—such as tutorial services, which are often provided by private tutors—are prevalent in many countries, including South Korea, Turkey, Bangladesh, and the United States (Dang and Rogers 2008; Bray 2009).

Learning opportunities include education services offered by the nonstate sector. This sector—which encompasses both for-profit and not-for-profit entities—functions as a provider, funder, and/or innovator in education. Nonstate provision of education services at all levels has increased dramatically across the world. The share of private sector enrollment is highest in South Asia and in Latin America and the Caribbean, even in these regions’ low-income countries. It is significantly higher in secondary and tertiary education than in primary education (see figure 9).

Figure 9 Share of Enrollment in Private Schools by Region, 2009



Although it is often assumed that the private sector serves mainly students who can most easily afford to pay, private entities are providing education to even the poorest communities, especially in areas that governments do not reach. The private sector also collaborates directly with the government in different ways. In many countries, for example, governments subsidize or contract non-state organizations to provide education, or specific services within education institutions, while covering much of the cost.¹⁶ Lastly, the private sector is also a significant source of financing for the education sector. The IFC, for example, has been facilitating private sector education investments in emerging economies since 2001. Recognizing the value of private sector involvement does not mean abdicating government responsibility: governments typically have to provide appropriate regulation and oversight to ensure the quality and relevance of privately provided services, as well as access for disadvantaged students.

Beyond basic education, demand for tertiary education and for technical and vocational education and training (TVET) is growing in every region served by the Bank. Given the higher cost of these education services, cost-effectiveness and returns to investments are principal concerns. One approach is for governments to leverage the growth of private tertiary and TVET institutions by implementing quality assurance and equality promotion systems. Sustainable financing is another concern. Tapping diverse funding sources (e.g., cost-sharing schemes coupled with financial aid, contract research and training, and fundraising) and using performance-based allocation mechanisms are two paths toward this goal (COREHEG 2010). A special focus of tertiary education policy is to promote science, technology, and innovation through more effective use of partnerships among universities (STI Group 2010). With respect to TVET, policymakers will need to create sound governance structures and a regulatory framework that maintain a dynamic balance between skills supply and demand, as well as design financially sustainable and socially equitable programs.¹⁷

Finally, a system approach must also include a strategy for addressing equity problems across population groups. As mentioned earlier, the most recent PISA report, based on the 2009 test, demonstrates that more equitable systems typically achieve greater overall educational progress. A key function of education systems is to monitor the learning outcomes of different population groups and design programs that address specific barriers. A well-functioning education system will therefore have policies or programs that examine the coverage of the system and address the disadvantages faced by some population groups (e.g., low-income groups, ethnolinguistic minorities, disabled people, and girls) and will target special resources to assist those disadvantaged groups.

Briefly, to strengthen an education system means to align its governance, management, financing, and performance incentive mechanisms to produce learning for all. It means, first of all, recognizing the many providers, consumers, and stakeholders in education and the roles that these participants have in the system. Accountability relationships among them should be clear, coordinated, and consistent with their assigned functions in support of national education goals. Performance and learning outcomes should be monitored and measured so that a robust feedback cycle linking policy, financing and results is established.

The Bank will increasingly focus its analytical work and financial and technical aid on reforms in client countries that address system challenges and overcome obstacles to better learning. The Bank will support efforts by partner countries

To strengthen an education system means to align its governance, management, financing, and performance incentive mechanisms to produce learning for all.

to govern and manage education systems, implement quality and equity standards, apply measures of system performance consistent with national education goals, and promote evidence-based policy making and innovations.

Priority 2: Building a High-Quality Knowledge Base to Underpin Education Reforms

The choice and design of education policies and investments can be improved by a high-quality knowledge base: reliable, timely, and comparable statistics on learning outcomes; the state and performance of education systems; and analytical work, practical evidence, and know-how about the impact and cost of programs and policies. Education data have improved tremendously in the past two decades. Only 45 and 46 percent of the 283 education indicators tracked annually by countries worldwide were available in 1990 and 1995, respectively. By comparison, the availability of these indicators averaged 64 percent during the period 2000–2006. This is an important achievement. Nevertheless, despite efforts to improve the availability and quality of educational data on the part of the World Bank, the UNESCO Institute of Statistics (UIS), the donor community, and national governments, significant information gaps persist even for important indicators. During the years 2000–2007, for example, the average availability of data on the four education MDG indicators remained between 49 and 60 percent, crippling efforts to estimate countries' likelihood of reaching the MDGs by 2015.

Three important advances—and their associated challenges—explain the state of education data today. First, more countries have either established or improved an education management and information system (EMIS) that collects and records enrollment data and other information from schools each academic year. As one of the most important sources of information in the sector, an EMIS enhances allocation efficiency. For example, by recording accurate and timely information about the supply and location of teachers and students, EMIS data help mitigate the problem of imbalances in the deployment of teachers or the supply of classrooms and learning materials. Between 1998 and 2009, 44 percent of World Bank education projects financed EMIS activities and 11 percent supported school mapping activities (Porta Pallais and Klein 2010). However, these efforts were missing a clear strategy for implementing “best practice” approaches or plans for training local technicians in the best design and use of an EMIS. Moreover, EMIS databases in developing countries frequently neglect the tertiary education level, as well as nonstate and nonformal providers. Expanding these systems to make them more inclusive of all parts of an education system is a priority area.

Significant information gaps persist even for important indicators—and filling them is a priority of the strategy.

Second, the number of sample-based household and school surveys fielded in developing countries has increased, and some of them are now conducted on a fairly regular basis. Among the established surveys that are fielded in many countries are the Demographic and Health Surveys, the Multiple Indicators Cluster Surveys, and the Living Standards Measurement Surveys. Many individual countries also have their own income and consumption household surveys which collect individual-level information on educational attainment, at the least (UN 2005). These surveys produce data that make it possible to analyze the factors that affect educational achievement, with possible disaggregation by segments of the population. Individual-level data collected through these surveys allow a better understanding of the extent to which people access educational services and why they may not be able to do so. It is when such individual and household information are linked to supply-side data on the availability and quality of schools that the obstacles to educational progress can be examined in greater depth and policy solutions developed to overcome them. Unfortunately, the scope of current surveys is still quite narrow, providing only glimpses of the education services available to respondents and the barriers to access and learning.

In the next 10 years, the Bank will continue to support the development and use of regular education data, including measures of learning and system performance.

Third, more countries are measuring the reading and math competencies of their students through national assessment systems. And more countries are participating in regional and international student assessments (e.g., the LLECE, PIRLS, SACMEQ, PISA, and TIMSS tests) and benchmarking their performance against those of other countries. The number of countries participating in PISA, for example, grew from 43 in 2000 to 65 in 2009, while the countries participating in TIMSS grew from 45 in 1995 to 65 in 2011. This is good progress, but data on learning outcomes are still rare, sporadic, and limited in scope in most developing countries. Besides having more countries participate in regional or international tests and develop their national assessment systems, current measures of learning will need to expand beyond basic competencies in order to better assess the relevance of education systems to the world of work and to life in general. In particular, widely accepted comparable measures of important skills, such as problem solving, teamwork, and communication, are still notably absent from international assessments.¹⁸

Can information from assessments really influence education reforms? Yes, indeed, as a few examples show: Uruguay launched a large-scale reform of the education system in the mid-1990s, triggered in part by a study based on two assessments of student learning conducted in 1990 among a sample of 4th- and

9th-grade students.¹⁹ The reform entailed targeted assistance for the poorest students; improvements in professional development for in-service teachers as well as salary increments; additional resources for schools; and training of school principals. In Sri Lanka, the first national assessment of learning outcomes, which was conducted in 2003, gave the country an objective measure of the cognitive achievement of its students. This knowledge enabled the government to introduce a resource distribution formula for quality inputs that would increase public resources allocated to the poorest schools relative to the richest schools. In the Kyrgyz Republic, an improvement of the existing school exit examination and university scholarship test allowed better measurement of learning outcomes for more than a million students in secondary schools and provided the basis for performance-based bonuses in two regions of the country. In the United States, low national performance relative to other rich countries on the 2009 PISA has spurred intense examination of its policies and practices and what it can learn from the countries that have outpaced it (Tucker 2011).

Over the next decade, the Bank will continue to support the development and use of regular education data. It will support efforts by partner countries to measure both student achievement (i.e., learning outcomes) and the overall performance of education systems on a regular and systematic basis, and to use such data to inform education policies and investments. The Bank will invest also in the development of indicators that measure education system functions, collect data that correspond to those indicators, and produce analytical work. This work will dovetail with the efforts of governments and international agencies to develop new indicators for the quality and performance of education systems.

One obvious data gap in education today is the lack of periodic, systemwide information on education finance and expenditures—that is, information on costs and on public and private expenditures. While budgetary data are generally available in planning and budget documents, the flow of resources through an education system and actual expenditures are often mysteries to actors within the system. One of the principal messages from consultations on the new strategy is that wasteful misallocation and use of resources, together with corrupt practices, stem from the inability to track resource flows and spending. Collecting and managing such financial data require technical expertise and funding; many developing countries will need both types of assistance. Decision makers at the country level in particular need the capacity and resources to use financial data in their decisions. Efforts to promote the effective dissemination and use of these data among stakeholders in the education system are equally important.

Finally, analytical work, practical evidence, and know-how related to education programs and policies are critical to improving the performance of education systems. Empirical analyses of development topics are a regular part of the work of Bank staff. In the past 10 years, they have engaged in hundreds of rigorous impact evaluations, many in the education sector. These evaluations present an opportunity to generate global knowledge and continually improve the Bank's operations and technical advice. Many more impact evaluations of education interventions have been conducted today than a decade ago, but more needs to be learned about how to make these efforts more useful for policy (see box 5).²⁰ In addition, while there is evidence on how direct interventions at the school or classroom level affect learning, there is much less evidence on what leads to effective reform of an education system. Unlike school- or classroom-based interventions, complex system reforms cannot be evaluated with standard impact evaluation techniques, which rely on the existence of a "comparison group" that is not affected by the intervention being evaluated. And while impact evaluations of primary and secondary education have grown in number, impact evaluations of interventions at the tertiary level in developing countries remain scarce.

Box 5. How Do Impact Evaluations Inform Education System Reforms?

The World Bank Group has worked energetically over the past five years to expand the portfolio of education impact evaluations and systematically harvest their lessons. The approach has been to integrate rigorous impact evaluations into new or ongoing operations, with technical support from experts across the Bank. Ideally, integration takes place at the project design stage, as early integration permits not only better tracking of impacts, but can also improve project design by tracing expected impact channels. In some cases, the evaluation design has included a randomized controlled trial, which allows the most straightforward linkage between interventions and impacts, but other rigorous approaches are also used.

Once an evaluation generates findings, they can inform operational practice. Findings provide real-time feedback that allows a project to be evaluated; they also help set priorities and allocate resources in a client country over the longer term. Once enough evaluations of related interventions have been carried out, the findings are synthesized at the global level and used to guide reforms and inspire innovations in other countries.

Adoption of this new approach to evaluations and knowledge generation has led to substantial changes in the way in which World Bank operations are designed and implemented, and in the way that lessons are drawn from these operations. From a baseline of virtually no rigorous impact evaluations at the World Bank, a recent survey found that there are 55 active evaluations in education (20 percent of all active evaluations), together with 42 completed evaluations (25 percent of the total). These evaluations assess measures to increase the demand for schooling and improve the delivery of educational services. Some of these studies have been carried out by Bank staff, others in collaboration with outside researchers supported by the Bank.

With so many areas to cover, the Bank began by focusing its evaluation efforts where they could be most influential, concentrating on (1) clusters of projects that were about to get underway and (2) topics for which there was the most demand from country governments and Bank task team leaders. One major area of evaluation research has been interventions that seek to improve accountability for results in education. Impact evaluations in this area have been grouped around four topics: school-based management, information for accountability, teacher incentives, and leveraging the private sector.

Source: World Bank, n.d., “Discovering What Works in Education: Informed Policy Making through Impact Evaluations,” <http://go.worldbank.org/JSUWGQ13R0> (accessed October 2010); Bruns, Filmore, and Patrinos 2011; Banerjee and Duflo 2011; Murnane and Willett 2011.

Applying the System Approach

To make the system approach of the strategy more concrete, this section offers several examples of how the learning-for-all goal and the two strategic priorities can be applied in few key areas of education policy: working in fragile situations; involving the private sector in education; promoting gender equality; and linking education systems to labor markets.

The system approach may seem complex. After all, it is complicated enough to try to improve the formal public education system—so how can policymakers hope to improve the system under this broader definition, which includes parts of the system that they do not even manage? The key to implementing the system approach is to recognize that it does not imply *acting* on all parts of the system at once, but being aware of them and analyzing how they affect each other. Hence, the approach laid out in this strategy does not necessarily imply more complex projects and programs. An IEG review warns that more complex projects have lower project success rates (IEG 2010). Instead, the system and knowledge-based approach of the strategy can be summarized as “Analyze globally, act locally.” One of the foundations of the system approach is accurate and reliable information on the roles and performance of students, providers, and institutions, which allow policy makers to understand the connections between them and identify the most pressing needs and institutional capacity gaps, as well as options for filling them.

Private sector. As discussed above, the private or nonstate sector is an important provider of education in many developing and transition countries. Yet, central education agencies in many countries do not have hard data on how many nonstate or nonformal providers of education operate in their countries or how many students they enroll, and often do not have a regulatory framework for private schools. Under a system approach, better information about the private education market can help policymakers assess supply shortages and financing deficits, design appropriate expansion plans, and distill lessons that might improve public sector performance and inform reforms at secondary or higher education levels, where there are typically more private providers. The strategy supports the expansion of the knowledge base through data collection, impact evaluation, and the development of a system assessment and benchmarking tool for the private-education policy framework.

Fragile states. Knowledge tools and information are perhaps even more critical in fragile states, where broken communication links between governments, providers, and beneficiaries are one of the effects of conflict, reflecting both the destruction of communication infrastructure and deep social fractures. One way to start repairing the damage is to improve the availability and accuracy of policy-level information on institutional capacity, resource gaps, and performance at the local level while making sure that services recover quickly. In fragile contexts, where the needs are great and families may have to assume the cost of restoring basic services, doing enough analysis to identify the interventions with the highest value-added is imperative. For example, the second phase of the Education for All program in Haiti helps keep the system running by stimulating school supply in remote areas using nongovernment providers. At the same time, it helps Haiti make the recovery from crisis to development by building the administrative capacity of the Ministry of Education, training communities to provide longer-term support in school management, and strengthening accountability between local authorities, teachers, schools and parents. The program also finances the development of new certification standards and procedures and builds the government's ability to regulate and collect information on nonstate providers to ensure quality.

Gender equality. A recent review of programs to increase girls' education demonstrates that there is no shortage of ideas about interventions that could be effective in promoting gender equality in education. "The Power of Educating Adolescent Girls" (Lloyd 2009), part of the *Girls Count* series, examines an array of policies and programs that aim to promote adolescent girls' education. The familiar approach to gender equality focuses on single or bundled programs rather than systemic reform. But the ten actions recommended by the review of 300-plus programs are far-ranging: scholarships for girls, recruitment and training of female teachers, girl-friendly curricula and pedagogical approaches that enhance learning and employment, after-school tutoring, and greater support for the nonformal education sector. These recommendations imply a need to address this educational challenge using a system approach. For example, the recommendation to collect and compile data on nonformal education and to upgrade, certify, and license this part of the education system means a general improvement that would benefit adolescent boys as well. The challenge for policymakers and the development community will be to identify the reforms and programs that will have the largest benefit for gender equality.

Addressing gender inequality within the system framework also implies a need to work closely with other sectors, particularly those of justice, health, agriculture, and infrastructure. The multisectoral approach goes beyond economic measures to ensure equal access to schooling by helping provide a safe and healthy environment for girls to attend school, as well as improve the economic returns to female education by raising education quality and making education more relevant to the labor market. By emphasizing the development of system assessment and benchmarking with specific targets for equality and inclusion, the strategy helps promote gender equality by identifying where the disparities are widest, what factors explain them, and which interventions are most likely to be effective.

Linkages between education and labor markets. Improving the labor-market relevance of education is an objective of the strategy. Many young people in developing countries are leaving school and entering the labor market without the knowledge, skills, and competencies necessary for employment in a competitive modern economy. This leaves thousands of young people frustrated and disillusioned that they are not earning the promised returns to education. By focusing on learning, the new strategy looks beyond enrollment and years of schooling completed to whether school-leavers will be able to find a job and earn a living. The system approach to education reform recognizes employers as key stakeholders in education and regards nonformal skills training as part of a continuum of learning opportunities for acquiring key knowledge and skills. Efforts are underway in the Bank, in collaboration with development partners, to develop a framework and tools to measure the skills and competencies of a country's labor force. One aim of these efforts is to increase the share of education projects that include labor-market objectives and thereby improve the acquisition of workforce skills.

If the intense debate about learning deficits in rich countries (e.g., France, the United States, and the United Kingdom) is any indication, achieving learning for all in developing countries will be a long, challenging, and uncertain mission. Yet improvements in the enabling environment for learning in every country can be achieved in the next decade, and the Bank Group is ready to help. This section provides a quick review of the Bank's past work in education in order to distill lessons learned; it is followed by a discussion of key implementation issues of the new strategy.

Past World Bank Group Strategies

The new strategy for 2020 is informed by both the World Bank Group education strategy launched in 2000 (just before the adoption of the MDGs) and its update in 2005 (World Bank 2005a). The 2000 strategy stated that the Bank’s mission in education is “to ensure everyone completes a basic education of adequate quality, acquires foundation skills—literacy, numeracy, reasoning, and social skills, such as teamwork—and has further opportunities to learn advanced skills throughout life in a range of post-basic education settings.” It focused on four priority areas that were to be addressed according to country conditions (see table 2). To achieve these priorities, the Bank would focus on the client, analyze comprehensively but act selectively, use knowledge well, concentrate on development impact, and work with others in productive partnerships (World Bank 1999). These operating principles certainly still apply to the new strategy.

Table 2 | Focus of World Bank Group Education Strategies

	2000	2005 Update	For 2020
Objective	<i>Quality education for all</i>	<i>Education for all and education for the knowledge economy</i>	<i>Learning for all</i>
Priorities or themes	<ul style="list-style-type: none"> Basic education (poorest, girls) Early interventions (early childhood development, school health) Innovative delivery Systemic reform 	<ul style="list-style-type: none"> Integrate education into a countrywide perspective Adopt a sectorwide, or holistic, approach Become more results oriented 	<ul style="list-style-type: none"> At the country level, strengthen education systems to achieve results At the global level, develop a high-quality knowledge base on education systems

The strategy update of 2005 affirmed the Bank’s commitment to education for all and emphasized the desired outcome of educational progress: a knowledge-driven economy and a cohesive society. It also replaced the emphasis on basic education with a focus on developing holistic education systems, thus increasing attention to post-basic education: “Our strategic thrust is to help countries integrate education into national economic strategies and develop holistic education systems responsive to national socioeconomic needs.” Its primary themes were to integrate education into a countrywide perspective, adopt a systemwide approach, and focus on results (World Bank 2005a). Its emphasis on a holistic approach may be why an increasingly larger share of education lending in the past five years has fallen under the category of “general education.” Lastly, the emphasis on results has yielded greater enthusiasm for impact evaluation activities, as discussed in box 5, but has not yet led to a more systematic inclusion of education outcome indicators in all education projects or country assistance plans.

The centerpiece of the new education strategy is learning for all. This goal is to be attained not only through more investments in inputs (e.g., more trained teachers or university professors, a better curriculum, more learning materials), but also through support for institutional changes in the education system. The new strategy emphasizes the importance of aligning governance arrangements, financing, incentives, accountability mechanisms, and management tools with national educational goals. It explicitly recognizes that the term “educational institutions” applies not only to formal public schools and universities, but also to learning opportunities offered by organizations outside of the government sector and formal education institutions.

A Brief History of World Bank Group Finance for Education

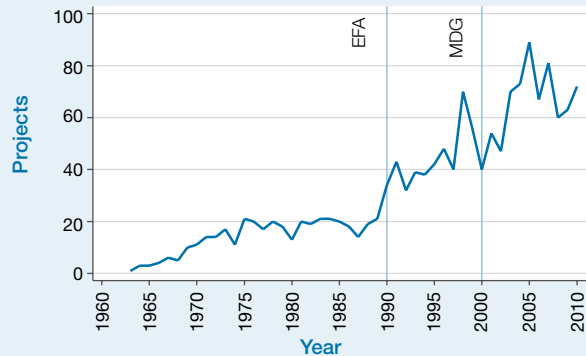
The World Bank Group has been supporting educational development for nearly 50 years. It approved its first education project—to build secondary schools in Tunisia—in September 1962. Eugene Black, the World Bank president at the time, justified the support with the following words: “Nothing is more vital to the economic progress of underdeveloped countries than the development of human resources through widespread education.” Since then, the World Bank has supported 1,539 education projects (or projects with education components), representing a total investment of \$68.9 billion (in 2005 constant prices). Its support for education has increased over time, both in terms of numbers of

projects, the amount of lending, and as a share of total Bank lending (see figure 10). In addition, since 2001 the IFC has invested \$500 million in 46 education projects with the private sector.

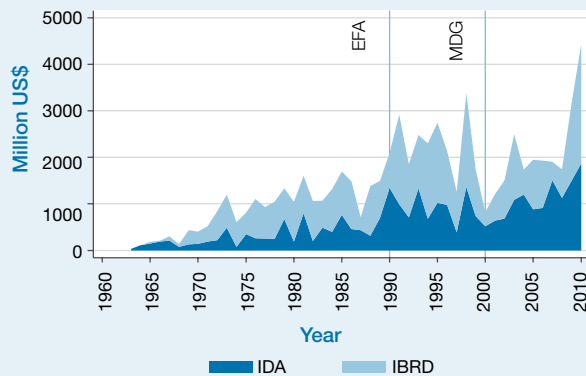
Commitments from both the International Development Association (IDA) and the International Bank for Reconstruction and Development (IBRD) show the rising trend in education lending, with IBRD lending showing greater volatility over the years (see figure 10, panel B). About 44 percent of all projects have been funded by IDA credits. In 2009 and 2010, in response to the economic crisis, total education lending reached an all time high of \$3.2 and \$4.4 billion (constant 2005 prices), respectively, through a combination of additional financing and approval of large projects in Brazil, India, Indonesia, Mexico, and Pakistan. With economic recovery, alternative financial sources are becoming more available again for developing countries, especially middle-income countries, and IBRD lending is expected to return to levels that are more sustainable for the size of the Bank's administrative budget.

Figure 10 Trends in World Bank Lending for Education, 1963-2010

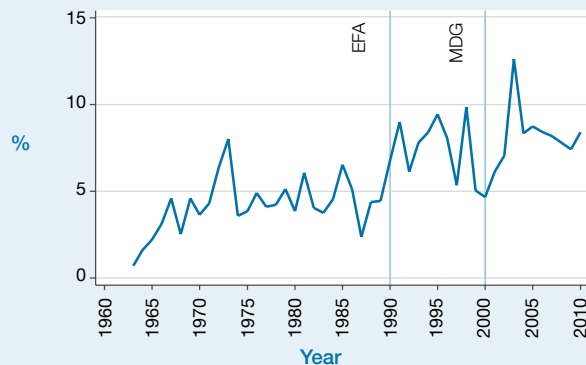
A. Total Number of Projects with an Education Component



B. Amount of Education Lending



C. Education as Percentage of Total World Bank Lending

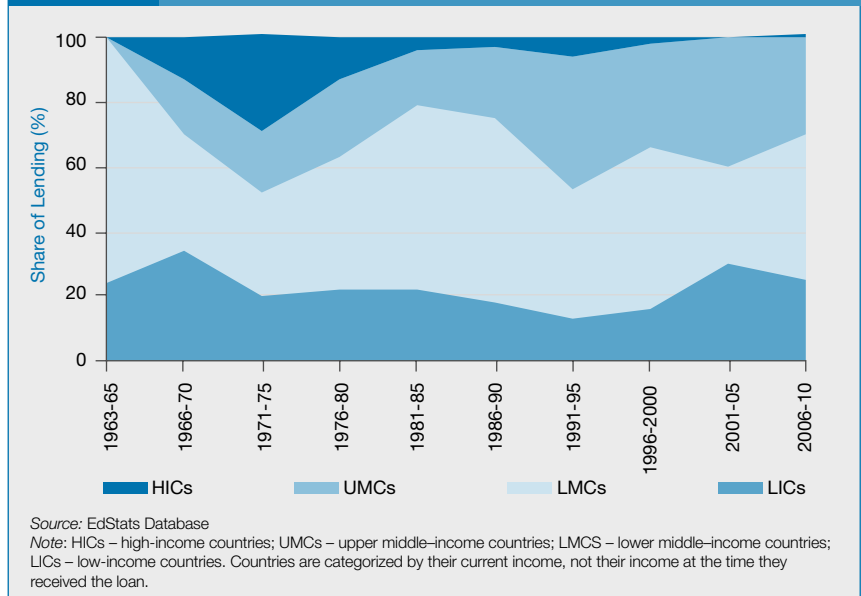


Source: EdStats Database

Note: EFA – Education for All Declaration (Jomtien);

Millennium Development Goal - Dakar EFA Forum & agreement on MDGs.

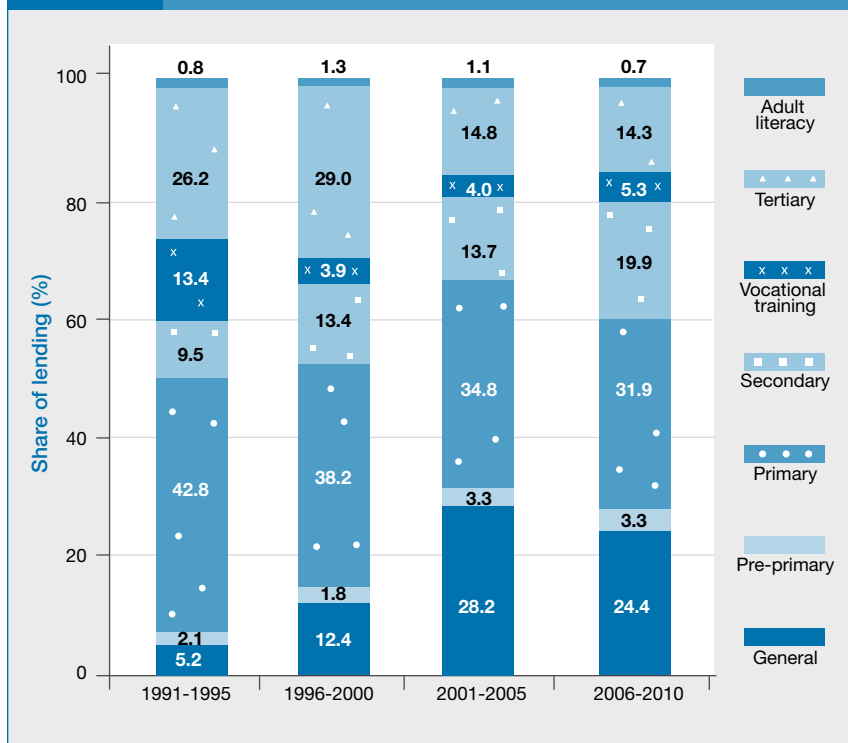
Figure 11 Distribution of World Bank Lending for Education, by Country Income Group



World Bank financial support for education rose in response to the call for Education for All and the Millennium Development Goals, with more assistance going to poorer, more populous countries.

Low- and lower middle-income countries (as measured by per capita GDP) receive the largest share of Bank education lending (see figure 11). Moreover, the World Bank has been a steadfast investor in and donor to basic education. The 1990 Education for All and 2000 Millennium Development Goal declarations marked progressively greater Bank commitments to primary education (see figure 12). Since 2000, for example, the share of education funding for tertiary education and vocational education has declined, while the share of “general education” funding—which benefits several education levels—increased. On average, about half of “general education” lending goes to basic education. Using this estimate, lending to preprimary and primary education increased from 47 percent over the decade 1991–2000 to 49 percent the following decade. Moreover, assuming that about half of lending for secondary education benefits the lower level of secondary education, the share of basic education (i.e., preprimary, primary, and lower secondary education) rose from 53 to 58 percent over the decade 2001–2010. Compared to the previous decade, lending for tertiary education was halved during this decade.

Figure 12 Share of Bank Education Lending by Subsector, 1991-2010



Patterns and trends in the Bank’s financial support for education become clearer when the characteristics of recipient countries are taken into account. An econometric analysis of Bank education lending from 1962 that simultaneously takes into account factors such as population size, GDP per capita, and world region shows several patterns (King and Nguyen 2010). First, it confirms that Bank lending indeed rose significantly following 2000—after the Dakar World Education Forum on Education for All, the commitment to achieving the MDGs that same year, and the launching of EFA FTI in 2002. Second, Bank lending has been statistically significantly higher to countries with larger youth populations (ages 0–14) and poorer countries (as measured by per capita GDP). Third, controlling for both population size and per capita GDP, the Bank has provided more aid to countries in South Asia and Africa relative to other regions. Countries that eventually became eligible for funding from the EFA FTI Catalytic Fund (which began in 2004) received substantially more resources from the Bank over time (even before EFA FTI was created) than have noneligible countries.

IFC education lending is projected to grow over the next five years, as education is one of IFC's five strategic pillars. The distribution of its investments is notably different than those of the World Bank. Over the period 1988–2010, about one-half of IFC investments have been in higher education, 37 percent in primary or secondary education, and 11 percent in vocational and technical education. Nearly 38 percent of these investments were made in the Latin American region, 28 percent in Sub-Saharan Africa, and 14 percent in the Middle East and North Africa. The main focus of the IFC's education strategy is to: finance larger network providers, who have the ability to invest across borders and go down-market to reach poorer populations; provide financing for education to small and medium enterprises, which typically target poor populations, and to students through partner banks; and offer advisory services to companies to support the quality of education and to banks to ensure responsible lending to the sector.

Bank projects have been most successful in getting and keeping children in school and improving educational equity, but they have lagged in improving learning and employment outcomes.

Past Performance of the Education Portfolio

A portfolio note by IEG was prepared to inform the new strategy and highlight areas in need of improvement in the education sector.²¹ IEG had completed a number of earlier evaluations of education spending, including reviews of support for primary education (2006), and lending for secondary (2004) and tertiary (2002) education. Since the 2000 education strategy, three-quarters of all education projects that closed during fiscal years 2001–09 received an IEG outcome rating of satisfactory or higher, compared with 76 percent for other sectors. This rating is based on an operation's stated objectives and three criteria: the relevance of the objectives and design, the extent to which the objectives were achieved, and the efficient use of project resources. There was a decline in the middle of the decade, but the most recent project exits (FY 2009) also received satisfactory ratings of 77 percent, up from a lower rating of 50 percent in the previous year and consistent with past performance and the Bank average. Furthermore, FY 2009 ratings for Bank supervision of education projects were at 86 percent and those for performance of partner countries, 85 percent—essentially at par with the Bank average—suggesting that improved performance can be sustained.

Nonetheless, IEG's note raises cautionary flags about the performance of education projects. According to the review, learning outcomes have not been easy to improve markedly. Less well-performing Bank projects have been those focused

on learning outcomes and interventions related to governance and management rather than inputs. This is not surprising; learning outcomes are influenced by many factors well beyond the Bank's control, and IEG is right to raise cautions about the ability of the Bank or governments to spark large improvements in learning outcomes with any single reform or even package of reforms. However, as IEG also agrees, *learning for all* is the right goal, and the response should not be to abandon learning goals, but to ensure that projects' learning objectives are realistic and identify important intermediate objectives in the results chain in order to accelerate learning.

IEG raises the concern that the system approach could increase the complexity of projects, as more complex projects have tended to have lower success rates. As discussed above, taking a system approach does not imply trying to reform the whole education system at once. Rather, the system approach analyses the strong points and weak links in each system in order to improve education outcomes. Detailed system analysis and investment in knowledge and data will allow the Bank and policymakers to "analyze globally and act locally," that is, to assess the quality and effectiveness of multiple policy domains, but focus action on areas where improvements will have the highest payoff in terms of schooling and learning outcomes. More robust monitoring and evaluation (M&E) by all development partners is a crucial part of this knowledge base for action.

IEG warns that a focus on *learning for all* could lead to insufficient attention to education of the poor, by diverting attention from access to quality. Yet improving education quality is a pro-poor objective, because quality is typically worse in the schools serving poorer and more marginalized communities. Indeed, the evidence is that learning outcomes of the poorest and least-advantaged students are, on average, the most disappointing. It is precisely in poor communities and schools where a system perspective on teacher policies (i.e., recruitment, training, deployment, motivation, and incentives for performance) is needed and where public resources allocated to education must reach the classrooms. Evidence shows that, even in low-income countries, a perception that students are not learning what they should leads to more dropouts and more transfers to low-cost private schools that are perceived to be of higher quality.

To prepare for the new strategy, the Bank has been taking concrete steps to ensure robust implementation and mitigate the risks to portfolio performance. First, the Bank is allocating substantial additional IDA resources through 2015

to help achieve the education MDGs, with a focus on the poorest populations in countries furthest from the MDGs. Second, the new framework and tools for system assessment and benchmarking being developed by Bank staff will help in diagnosing countries' education policies and programs in specific areas and identifying areas for improvement. Third, several measures are being taken to strengthen monitoring, evaluation, and accountability, such as integrating portfolio tracking and reporting on a quarterly basis and increasing management oversight at the sector and country levels, including careful reviews of Implementation Status Reports.

Contributions to the Education Knowledge Base

The Bank's investment in education has not only been financial. Consultations for this strategy singled out analytical and evaluative products as key Bank contributions to understanding the education challenges and policy options in client countries, as well as development issues as a whole. Between FY01 and FY10, the Bank invested \$49 million in Economic and Sector Work in education,²² producing about 280 pieces of research and other analytical work that examine critical education issues. This work includes status reports on countries' education indicators, as well as sector and subsector analyses of fiscal and structural issues. In addition, Bank staff working on other sectors produced nearly 900 pieces of analytical work that included discussions of education topics. Many country reports, such as public expenditure reviews and poverty assessments, include a chapter on the education sector.

Several recent regional reports have also focused on the education sector. In Latin America and the Caribbean, the regional studies program included research on teacher incentives, innovations, and early childhood development in 2010. In the Middle East and North Africa, a 2008 regional study focused on governance issues and reforms in education. Similarly, regional studies in Sub-Saharan Africa have focused on, among other topics, teacher management (2008), early childhood development (2008), and tertiary education (2009). Cross-regional reports have also been produced, such as the 2006 study that analyzed progress in secondary education in East Asia and Latin America. And in the past decade, reports such as the yearly *World Development Report* and the *EFA Global Monitoring Report* have examined education issues. These have included the influential reports on governance and service delivery (2004) and youth (2007). Through external publications, Bank staff have also been important contribu-

tors to both the global knowledge base and policy debates on education (see box 6). These knowledge products, directly or indirectly, underpin the Bank’s lending and policy dialogue in education. Previous studies have shown that there is a significant positive relationship between the quality of the economic analyses in project preparation and the performance of projects.²³

Box 6. World Bank Group Staff Contributions to the Global Knowledge Base in Education

Most policy makers have probably heard of the *World Development Report* (WDR) series. The WDR is, however, just a small part of the World Bank’s publications, which cover all development areas in which Bank staff work, including education. These publications span books, book chapters, working papers, and articles in peer-reviewed scholarly journals. Overall, professional journals are the most common vehicle for Bank publications. Around 500 journal articles on education have been authored by Bank staff, accounting for half of the Bank’s publications on education. The remaining publications are split about equally between books, book chapters, and working papers (many of which end up as book chapters or journal articles). Focusing on just one thematic area—the economics of education—the Bank has published more journal articles than 14 top universities—only Harvard University comes close.

What has been achieved as a result of the 1,000 Bank publications on education? One way of answering this question is to ask how far these publications have influenced thinking in the development field. This is a reasonable question, since the Bank thinks of itself as a “knowledge bank” and aspires to be both a *generator* of new knowledge and a *synthesizer* of existing knowledge. An obvious measure of the Bank’s success as a generator of knowledge is citations. The broadest citation data available today come from Google Scholar, which covers not just journal articles, but also books, book chapters, working papers, dissertations, and technical reports. Journal articles have a highly skewed citation distribution: many articles never get cited, or are cited just a few times, while others are cited a great deal. The median citation count for Bank education articles is 13, while that of Bank books is 10. With respect to mean citations, Bank books do better than Bank articles—47 compared to 43. Bank book chapters are cited very infrequently, with a mean of just 8.5.

Citations by publications are only one measure of the impact of the Bank’s knowledge work, but it has been very difficult to find another measure of impact that can be tracked over time.

Source: Estimates by Wagstaff, based on Ravallion and Wagstaff (2010).

Finally, the Bank has been an active broker of exchanges across regional borders, enabling countries that share similar levels of economic and educational development to benefit from each other's experiences and policy lessons. In addition to more familiar North-South knowledge exchanges, South-South exchanges abound. Besides holding regional or global conferences for participants from different countries, the Bank sponsors study tours that give participants from one country a ground-level view of another country's education system. For example, with the Bank's facilitation, a higher education team from the Moroccan government visited Colombia in early 2011 to learn more about Colombia's higher education compulsory learning exams and the role these assessments play in improving the quality of tertiary education; a return visit was made by the Colombian higher education team to Morocco. This is an example of the kind of cross-border learning that the Arab League Educational, Scientific, and Cultural Organization (ALESCO) and the Organization of Ibero-American States (OEI), with assistance from the World Bank, support in order to improve the education systems in the countries of the Arab League.

Because country needs vary, there is no single set of investments and policy support that the Bank will implement across all partner countries.

Differentiating Education Priorities According to Need and Capacity

The strategy set out in this paper is a framework for World Bank Group investments in education over the next 10 years, not a plan of action. How it will apply to a particular country will depend on the specific education needs of that country and its economic and political capacity for reform—and, of course, on the level of engagement of the Bank and the IFC with the country. Thus, no single set of investments is being recommended across all countries—except perhaps to do more to measure learning outcomes. Given immense differences among countries, it would be unwise to prescribe a one-size-fits-all program of analytical work and investments. It would also be unwise to believe that an appropriate set of investments over the next 10 years can be known with certainty at present. Countries' political and fiscal situations are continually changing, as are the perceived demand for skills in the economy and the knowledge of what reforms or programs work best. Changes in the policy environment can indeed be significant, even earth shaking, as evidenced by dramatic events in the past decade. As a result, part of the Bank's strategy is to ensure that there is continuous monitoring, evaluative analysis, and adaptation of the Bank's work at the country and global levels.

While the Bank is committed to using a country-driven approach, for purposes of drawing lessons and encouraging exchange across countries, it makes sense to acknowledge their contextual similarities and common challenges. Thus, this strategy takes the approach of grouping countries by whether they are countries with fragile situations, low-income countries, or middle-income countries (see box 7). Countries in all three groups share many common challenges (as well as ambitions and goals) that are best addressed through a set of cross-cutting priorities for the work of the Bank, such as increasing the efficiency and effectiveness of resource use, improving transparency and accountability in education systems, and promoting investments in high-quality learning opportunities. At the same time, differentiating countries by both level of economic development and institutional capacity helps organize knowledge exchange and policy debate, staff assignments and training, as well as the identification and design of programs. Within these country groups, South-South cross-regional learning can supplement the usual regional discussions, allowing countries to learn from others that face similar challenges in other regions. The broad external consultations conducted for the strategy (see annex 1) and the lessons distilled by staff working groups point to differentiated priorities for the Bank's education work in these country groups. These priorities are outlined briefly in the following paragraphs.

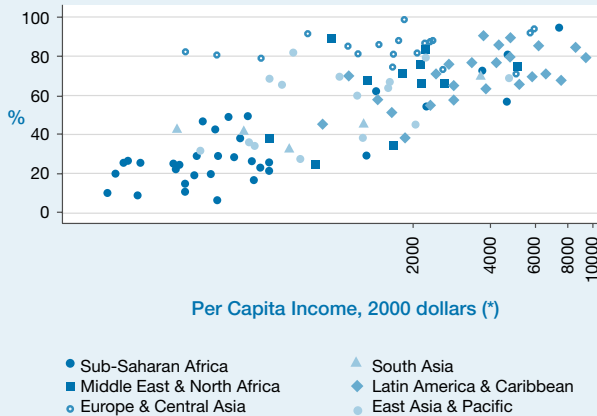
Per-capita GDP levels yield a familiar grouping of countries into low- and middle-income countries. The education systems of countries with similar levels of economic development are likely to have comparable capacity for policy reform. For example, in low-income countries that are still working to meet EFA and MDG targets, systems of student assessment are generally undeveloped. In contrast, middle-income countries typically have more established systems of student assessment that include national examinations as well as participation in international assessments. The challenges that these two groups of countries face in developing their respective student assessment systems therefore differ.

Another way to cluster countries is by whether they are experiencing conflict or fragile situations. Armed conflicts, natural disasters, and other catastrophic events threaten education outcomes because they damage school infrastructure, expose children and youth to severe physical and mental stress, and interfere directly or indirectly with school operations, teaching, and learning. A child of primary-school age is three times more likely to be out of school if she or he lives in a fragile or conflict-affected country than if she or he lives in another

Box 7. Country Groupings Lead to More Strategic Priorities for the New Education Strategy

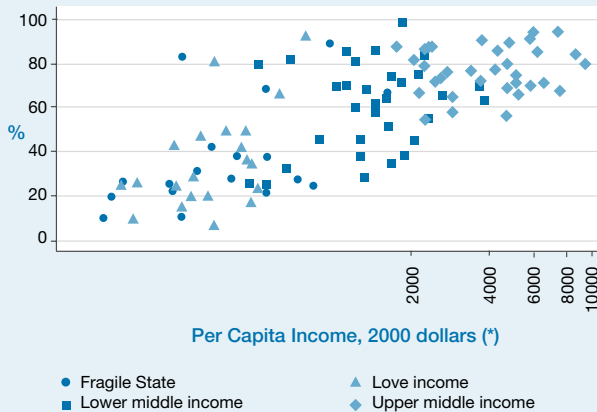
Figure B.7 Net Enrollment Rates in Secondary Education, by Country Income Groupings and Region (percentage)

A. Secondary Net Enrollment Rates by Region, 2009*



(*) Income shown in log scale

B. Secondary Net Enrollment Rates by Income Group, 2009*



(*) Income shown in log scale

Source: Authors' calculations based on latest available data from EdStats Database.
* 2009 or latest available data from EdStats Database

Past education strategies have largely been based on geographical groupings of countries. While useful, regionally based groupings do not fully exploit the World Bank Group's global coverage and its ability to connect countries with similar levels of economic and educational development across the world. Country groupings based on economic and educational development, overlaid on geographical location, can lead to clearer, more strategic priorities and assistance. However, measuring the level of education system development is a challenge. Considering that educational development, in broad terms, closely corresponds to economic development, the Bank considers a country's specific challenges and vision when determining the income grouping of the country.

Using geographical divisions alone also does not yield country groupings that are similar with respect to education indicators. A plot of the latest available secondary net enrollment rates against per capita GDP in figure B.7 shows that countries in each region span a range of low and high levels of secondary enrollment. Other education variables, such as enrollment rates for primary and tertiary education, as well as learning outcomes, show similar levels of dispersion within regions.

developing country (World Bank 2010h). In addition, youth who participated directly in armed conflict may have missed the crucial period during which they would have built social skills and human capital (Blattman and Annan 2010; Gilligan, Mvukiyehe, and Samii 2010).

Political conflicts and environmental catastrophies can also distract the attention of national leaders from service delivery and education goals, or worse, create a leadership vacuum at different levels of society that make education reforms difficult to implement. Although nearly all countries in fragile situations are low-income countries, they differ from other low-income countries in that their institutional context—the “ecosystem” and authorizing environment for any educational reform—is often unable to cope with additional political, economic, or environmental challenges. In countries emerging from conflict or fragile situations, however, education can be a powerful, cost-effective tool for speeding up social and economic recovery.²⁴

In countries experiencing fragile situations, the main challenge is likely addressing short-term educational needs without undermining the long-term development of the system as a whole. It is useful to note that many of these countries have not achieved basic education for all, so the challenge concerns both reconstruction and building the fundamentals of service delivery. In these countries, the Bank will help ensure a minimum level of resilience to keep the system running, using local stakeholders as leaders of the transition and institutional change. Even from the outset, there is a need to balance the immediate focus on emergency responses with attention to the longer-term goal of rebuilding and strengthening the system when it emerges from conflict or crisis. To identify specific actions, the Bank will assess the status of the education system and build systemwide information. In places where educational infrastructure has been destroyed, the most urgent need will be reconstruction; in places where population movements have depleted teacher supply in particular locations, the most urgent need will be to recruit and train teachers and/or redeploy them to those areas. In responding to these needs, the Bank will support equitable, cost-effective, and sustainable interventions to rebuild and reactivate learning opportunities.

In low-income countries, the main challenge is typically to achieve a balanced expansion of quality learning opportunities at all education levels with universal basic education of 7–9 years. The priorities then may be to: (1) expand the supply of high-quality basic education, especially in remote rural areas; (2) address the demand-side obstacles to universal participation of out-of-school

Country groupings based on economic and educational development, overlaid on regional groupings, can sharpen priorities and improve assistance to developing countries.

children and youth, especially through innovative strategies like conditional cash transfers to reach underserved populations (such as girls or those from poor families) and reduce disparities in education access (Fiszbein and Schady 2009); (3) support sustainable and adequate financing of education and ensure that those resources reach frontline providers, and in countries furthest from achieving the MDGs to provide additional financing and technical support for basic education over the next five years; (4) develop or strengthen a quality assurance system for all providers; and (5) support interventions to improve the relevance and quality of tertiary education and training programs.

Countries in all groups face common issues, so useful lessons from past experience apply across countries.

In middle-income countries, the main challenges are to improve the education system's capacity to contribute to workforce development and ensure that disadvantaged and low-performing learners have access to quality and relevant learning opportunities. The Bank's priorities in these countries will be to: (1) enhance the quality and relevance of the education system so as to improve its links with the labor market and the school-to-work transition, thus responding to the growing demand for flexible skills programs; (2) promote policy frameworks that ensure the quality of privately provided educational services; (3) improve the efficiency of the education system; (4) promote equality of learning opportunities for disadvantaged populations; and (5) support quality assurance and efficient and equitable financing mechanisms for tertiary education, which is increasingly under pressure to provide the workforce with the relevant skills and generate innovations that drive economic progress.

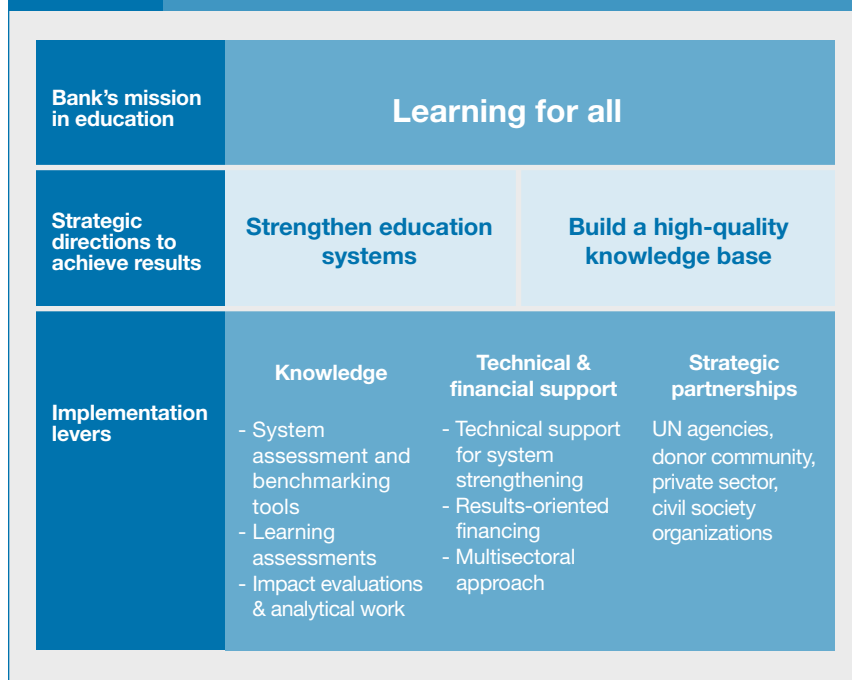
This differentiation by level and capacity is designed to provide additional insights and knowledge sharing without obscuring common challenges. Countries in all groups face common issues in many areas, and useful lessons from past experience, consistent with the emphases of the new strategy, apply across countries.²⁵ For example, quality ECD interventions are among the most cost-effective investments in human capital formation for most countries; priority areas for action should thus include improving the quality of ECD programs, providing financing for vulnerable groups, and generating better data and knowledge about the effects of interventions.²⁶ Confronting health conditions that affect learning is also important across country groupings; mechanisms for achieving this goal include more effective collaboration between health and education sectors and the adoption of proven school-based health and nutrition programs, such as deworming, school feeding, and hand washing (Bundy and O'Connell 2010). Another example of a cross-cutting issue that may help accelerate learning is ICT investments in education, although much better monitoring and evaluation is needed to assess their impact and cost effectiveness. ICT

for information purposes can also serve as a powerful tool for accountability (e.g., in the development and application of student assessments) and for system monitoring (by providing information about resource allocation) (EduTech Group 2010).

IMPLEMENTATION LEVERS FOR THE NEW STRATEGY

The World Bank Group contributes to development in three principal ways: knowledge generation and exchange, together with policy debate; financial and technical support to client countries; and partnerships. These levers will be used to achieve the educational reforms and strategic priorities of the new strategy. Each lever will involve specific actions over the next 10 years, as summarized in figure 13.

Figure 13 World Bank Group Strategic Priorities in Education 2020



Knowledge Generation and Exchange

In the area of knowledge generation and exchange, the Bank will focus its efforts on developing and using a system approach, supporting assessments of student learning, expanding the knowledge base using impact evaluations and other research, and promoting knowledge exchange between countries.

The first knowledge lever consists of applying a system approach in which a conceptual framework, analytical methods, and measurement and monitoring tools are developed for the different policy domains of an education system. The framework and tools of the approach will reflect the knowledge generated by country programs and reforms, lessons from successful and failed practices in countries around the world, and evidence from research and impact evaluations. This multiyear program, System Assessment and Benchmarking for Education Results (SABER), is being implemented in partnership with national researchers, decision makers, external partners, and other actors.

The approach assesses a country's institutional capacity and policies related to specific dimensions of its education system; diagnoses its strengths and weaknesses against global standards, best practices, and the performance of comparator countries; and guides reforms aimed at improving learning for all. The framework, analytical methods and measurement tools will not be applied in a one-size-fits-all manner. Rather, the approach will be applied contextually, with diagnostics and interpretations that are appropriate to each country's starting point and constraints. Country-specific diagnostics and performance reports will make it possible to obtain simple, objective, up-to-date snapshots of how a system functions, how well it is performing, and what the system can do to achieve measurably better results. Specifically, these system assessment and diagnostic tools will:

- describe the key functions, rules, regulations, and incentive mechanisms of the core policy domains of the system in a given country or jurisdiction—that is, teacher policies and management, assessments of student learning and achievement, education financing, equity and inclusion, monitoring and information, private provision, and quality assurance—as well as their challenges and good practices;
- collect data on the policies and performance of the core policy domains of the education system, as well as on levels of education, such as early childhood development, workforce development, and tertiary education; and
- inform education policy decisions and investments and identify key knowledge gaps.

The development of SABER tools involves five key stages. First, for each policy domain, a conceptual framework is elaborated based on relevant global knowledge and experience. Each framework identifies the policy goals and instruments that, according to the best evidence available, matter most in increasing learning for all. In the second stage, each framework is used to develop the cor-

The first knowledge lever is to develop and apply a system approach that can be used to assess the characteristics and effectiveness of a country's education system against global standards, best practices, and the performance of comparator countries.

responding assessment tools and construct prototypes for those tools. The third stage is to engage with government agencies and stakeholders in selected pilot countries in validating the framework and assessment tools. The fourth stage is to communicate and disseminate the results of the pilots in order to build support for the system tools and the framework for each policy domain. Finally, the fifth stage is to promote the global application of the system approach; to achieve this, a core competency program is being developed and will be available to Bank staff as well as country and donor partners.

The SABER program is still in its early stages. Efforts are underway to pilot and validate system frameworks and diagnostic tools for a subset of the core policy domains in some countries. These efforts are already generating detailed country assessment reports and data. The first policy domains to be developed, on teacher policies and student assessments, demonstrate how a system approach can be used. They were developed, piloted, and validated in a number of countries in collaboration with government agencies, development partners, and international and local experts.²⁷ As the tools are reapplied in individual countries in the future, the system database will be updated, allowing each participating country to track its own progress with respect to its system reforms and education results. As desired, each country will also be able to benchmark its performance against a variety of comparator countries (e.g., other countries in its region, countries at a similar level of economic or educational development, or countries at the leading edge of educational performance).

The second knowledge lever is learning assessments. The Bank will support efforts to increase the availability of data on learning and skills, joining governments and other international organizations that are now measuring these outcomes.²⁸ The aim is to assist countries in defining a framework for data collection, analysis, and usage, helping develop a culture of results monitoring and assessment to raise the effectiveness of domestic investments and international aid. In addition to national assessment systems, the Bank will encourage country participation in international and/or regional assessments, such as PIRLS, PISA, SACMEQ, and TIMSS, as a means of building a global database on learning achievement. Education projects over the past decade have increasingly financed assessments of student learning and achievement (e.g., the share of Bank education projects supporting student assessments rose from 37 to 60 percent of projects over the past decade). However, as the IEG portfolio review indicates, the success of these projects in measuring learning outcomes has been mixed (IEG 2010). To do better in the future, the Bank will promote assess-

The second knowledge lever is learning assessments. The World Bank will support the development of tools to increase availability of data and analysis on learning outcomes and skills.

ments of student learning and achievement as part of its support for education systems (see box 8).

Box 8. The ABCs of a Learning Assessment System

Assessment is the process of gathering and evaluating information on what students know, understand, and can do. Assessments enable policy makers and other education stakeholders to make informed decisions about what to do next to support the educational process.

An assessment system is a group of policies, structures, practices, and tools for generating and using information on student learning and achievement.

Assessment systems tend to be made up of three main activities that correspond to three information needs: classroom assessments for providing real-time information to support teaching and learning in individual classrooms; examinations for making high-stakes decisions about individual students at different stages of the education system (e.g., certification or selection of students); and large-scale assessments for monitoring and providing information on overall system performance levels and contributing factors.

Several factors drive the value or quality of the information generated by assessment activities. These include factors related to the enabling environment (i.e., policies, leadership, organizations, and human and fiscal resources for assessment); system alignment (i.e., the extent to which assessments are aligned with system learning goals, standards, curricula, textbooks, and other pedagogical resources); and technical quality (i.e., the rigor of assessment instruments, processes, and procedures).

In 2009, one-half of new World Bank education projects included support for assessment activities. Large-scale assessments of student achievement levels were the most common type of assessment activity supported. Support typically focused on enabling environment factors, in particular, strengthening organizations and human resources for assessments.

Sources: Clarke and Ramirez 2010; Liberman and Clarke 2010.

Third, research helps reveal the strategic choices for policy and investments—and assess the impact of those choices. The Bank recognizes that when human, financial, and political resources are limited, it is essential to carry out rigorous research on how best to allocate and use those resources to achieve education goals. The Bank has long been a major contributor to research on education issues, including the economic returns to education, the impact of institutional

arrangements on education outcomes, the quality of service delivery, and the responsiveness of education demand to price and income changes. Global education research has also expanded, helped by more and better data on many dimensions of countries' education systems, and by information technologies that are better able than ever before to store, process, and analyze those data.

One type of education research on developing countries that has been growing is the use of experimental and quasi-experimental methods to evaluate the impact of policy reforms and investments. To date, most such studies have focused on the effects of either specific inputs—such as adding teachers to a school or introducing computers in classrooms—or specific, well-defined policy reforms, such as abolishing school fees or giving low-income families a cash transfer conditioned on school enrollment. More research is needed on the impact of institutional changes, such as the establishment of national assessments of student learning and achievement, national accreditation mechanisms for private schools and universities, and the decentralization of the management of secondary schools. Designing impact evaluations for institutional changes that are adopted on a national scale without pilots or phase-ins is more difficult because it is hard to define the appropriate counterfactual. Fortunately, a number of evaluation approaches are available.²⁹

More research is needed on the impact of institutional changes, such as the establishment of national assessments of student learning.

Lastly, besides helping to fill key knowledge gaps, the Bank is committed to brokering knowledge exchanges. Better understanding of comparative system strengths, learning outcomes, and potential solutions to problems will allow countries to learn from each others' experiences. Much of this learning will be South-South, as countries seek out examples of successful approaches in other countries in similar situations. Education research in wealthier countries also yields lessons for developing countries, allowing North-South learning, and because wealthy countries have no monopoly on good educational practice, South-North learning has great potential as well.

Technical and Financial Support

Three principles will guide the selection and design of operations. First, a system approach to the Bank's analytical work should change the way the Bank prioritizes its technical and financial assistance in a given country. In other words, the scope and design of an analytical or operational product will be justified based on its expected contribution to strengthening the education system as a whole and, ultimately, the advancement of learning goals. This point

has implications for the appraisal process of technical and operational products. Second, the Bank will support operations that establish a feedback cycle between financing and results. Smart financing means that financial aid from the Bank will be increasingly geared towards specific measurable results agreed on with countries. Third, the Bank will respond to opportunities for using a multi-sectoral approach to achieve education outcomes. This means working with the other sectors in the Bank (e.g., health, nutrition, social protection, labor, infrastructure, agriculture, transport, finance, and private sector) in order to ensure that students acquire critical skills for life and work, as well as generate broader policies that lead to employment and economic growth. Each of these principles is elaborated below.

To illustrate how a system approach might change the operational agenda of the Bank, consider how the Bank might address teacher issues. Teacher presence and effectiveness in the classroom are, of course, critical to learning, and a very large share of public spending for education goes to teacher salaries. In 2010, about three-fourths of the Bank's education lending supported investments in teacher development. Teacher policies—particularly those that address teacher shortages, quality, and performance—are a priority across countries, although the focus of policies differ according to circumstances. For example, in hard-to-staff locations, such as remote rural areas, the policy choices might be to train more local teachers quickly, train teachers in pedagogical methods appropriate for multigrade classrooms, or offer teachers residing in more attractive areas sufficient incentives to relocate. In urban areas in emerging markets, the critical challenge might be to design appealing yet affordable incentives to attract the best graduates into teaching and away from other, well-remunerated jobs, or reduce the pull of moonlighting activities on current teachers. Are these the most promising and realistic policy options? A system approach can reveal more pressure points for change, offer a wider set of options for policy reform and investments, and identify political economy issues that a narrower, less systemic perspective might miss.

Second, the Bank will strengthen the link between technical and financial support and results. The recent global economic crisis has underscored the need to confront poverty and promote development in ways that are fiscally prudent, so it makes sense to focus attention on improving the effectiveness of expenditures. A useful starting definition of results-oriented financing is that used by the Bank's health sector: "A cash payment or nonmonetary transfer made to a national or subnational government, manager, provider, payer, or consumer of health services after predefined results have been attained and verified. Payment

The Bank will apply a system approach when prioritizing its technical and financial assistance in a given country.

is conditional on measurable actions being undertaken” (Musgrove 2010, 1). In education, the Bank is already using different forms of results-focused financing, but this approach has not been widely adopted. In ongoing programs or projects with results-oriented financing, disbursements are conditioned on the delivery of specified outputs or services, changes in government rules or structures, changes in incentive structures, and changes in specific policies.

One innovation that may strengthen the financing-results link is the Bank’s Program-for-Results (P4R) investment lending instrument, which is now being developed. P4R aims to support government programs for which the Bank’s current investment and development policy lending instruments are not well suited. P4R will allow loan disbursements based on achievement of results and performance indicators, not on the procurement of inputs. This ability will make it easier for the Bank to partner with other development organizations by pooling resources and building capacity in partner countries, an essential ingredient of successful and sustainable programs.

Even before the P4R instrument is available, Bank staff and governments have been forging ahead with creative uses of current instruments that link financing to results. In the Bangladesh Secondary Education and Access Project launched in 2008, monetary incentives are given to students, teachers, and schools if more rural students are enrolled and if these students have better attendance rates and reach higher achievement levels. In this program, the government makes transfers to targeted households in order to influence their choices, for example by inducing them to keep children in school longer than they would otherwise. The Jamaica Early Childhood Development Project (2008) disburses funds against predetermined agreed performance targets. Disbursements are made to budget line items that do not necessarily correspond with the budget lines used to buy the inputs and services needed to achieve the targets. The Vietnam Education Project (2010) pilots an output-based subsidy to semipublic and private schools as an explicit incentive for those providers to increase the access of poor students to upper secondary education. Other examples are cited in box 9.

Education outcomes are also influenced by policies that are not directly under the purview of education ministries or agencies, and therefore it is important to take a multisectoral approach to education improvements. Some examples: The availability and quality of early childhood nutrition and health programs determine the school readiness of children. School health and school feeding programs and safe water supply improve student attendance rates and per-

The Bank will strengthen the link between technical and financing support and results.

formance. Transport services and road infrastructure affect the daily cost of school attendance, both for students and teachers. Social protection programs offer families an important safety net in times of economic crisis or personal hardship so that they can keep children and youth in school and thus protect past investments in learning. In addition, policies about minimum wage levels and information programs on the skills demanded in the labor market affect expected returns to education and thus also educational choices.³⁰ Civil service reforms affect the working conditions of public sector teachers, school administrators, and professors, as well as of private sector providers, albeit indirectly. For all these reasons, the Bank's support for improving education outcomes should look not only at education policies and programs, but also those that pertain to health, social protection, employment, transport, water, public sector governance, and so on. Conversely, just as the Bank's support for education should consider the policy options outside the realm of education interventions, the Bank can increase its effectiveness by recognizing how education contributes to noneducation outcomes: less poverty, more innovation and growth, better health, greater resilience to shocks, more effective governance, among others.

A multisectoral perspective and a system approach to education reform are two facets of the same lens for identifying policy and investment choices. To embed this perspective, it is important to promote knowledge exchanges and operational collaboration across sectors within the Bank. Staff should be aware of the evidence on linkages among sectors and the concrete ways in which they can support shared development goals. This is not a new business model. In FY09, more than 40 percent of new lending for education was part of another sector's operation. The challenge is to raise the performance of multisectoral projects. Education staff will need to become more knowledgeable about the issues, conceptual and operational models, and impact of other sectors on education; and budgetary and administrative arrangements must provide sufficient incentives for collaboration with staff in other sectors. The approach requires staff to engage actively with noneducation agencies, as well as education agencies. Annex 2 outlines the linkages between the new education strategy and 17 sector strategies developed by other World Bank sectors.

The Bank's regional strategy for Sub-Saharan Africa is a good example of how the new education strategy can put the multisectoral approach into practice. While it recognizes that education is a central element of efforts towards growth and poverty reduction, it emphasizes the fact that education investments, in isolation, will not have a powerful impact. As a result, the Africa regional strategy

integrates reforms of the education system into one of its two pillars, *increasing competitiveness and employment*, thus setting a platform for multisectoral analyses and investments. Other areas of alignment between the two strategies are a focus on learning and quality, expansion of coverage at the secondary and tertiary levels, emphasis on governance as a foundation for development, and linkages with the private sector and labor markets.

Box 9. Innovations: A New Generation of World Bank Group Projects in Line with the Education Strategy

The WBG will implement the new strategy by building on a new generation of projects or programs that embody the system approach. These programs:

Reform the mechanisms that connect the various parts of the system so that relationships of accountability are clear and aligned with national education goals. The Education System Performance project in *Bulgaria* seeks to improve the system's accountability framework. It builds on reforms that have changed the way municipalities receive their funds to a per capita financing scheme, expanded the decision-making authority of school directors to manage school resources, and encouraged more participation of parents and communities in school decisions through the creation of school boards responsible for overseeing school leadership. The project is establishing performance incentives for teachers and schools, as well as a program to support underperforming schools. It will also improve the external assessment system and disseminate results on performance trends and comparisons. Project disbursements are triggered by the completion of specific results (e.g., having fully functioning school boards in targeted schools).

Measure and monitor, at all levels, the effectiveness of accountability mechanisms in producing learning and skills. The Russia Education Aid for Development (READ) Trust Fund enables the Bank to support *Angola, Ethiopia, the Kyrgyz Republic, Mozambique, Tajikistan, Vietnam, and Zambia* to improve student learning outcomes by: (1) establishing or strengthening existing systems or institutions that formulate learning goals and carry out student learning assessments; (2) improving existing or developing new instruments to measure student learning outcomes; and (3) strengthening existing or developing new mechanisms or policies that facilitate the use of learning outcome data to improve teaching and learning. Projects in *Colombia* and *Kenya* will also support standardized systems for measuring learning achievements, and produce and make available for policy making reliable information on education outcomes.

Establish clear policies and regulations on quality assurance, learning standards, compensatory programs, and budgetary processes. The Basic Education Capacity Trust Fund supports the capacity development of 50 local governments, their education offices, parliaments, education boards, and representatives of school committees and head teachers in *Indonesia*.³⁷ Under decentralization, local governments have new responsibilities for achieving national education goals. Local governments will each receive a three-year grant to help implement their Capacity Development Plan, to better allocate human and financial resources to the education sector, and provide valuable information to external partners (i.e., donors, central and provincial governments) to inform budget support for local governments.

Leverage a greater number of providers and delivery channels to expand access and improve quality and relevance. The ongoing *Mozambique* Technical and Vocational Education and Training Project seeks to transform the existing TVET system into a demand-led training system that will provide beneficiaries more market-relevant skills and economic opportunities. The project aims to involve the private sector and will establish a governance structure with representation from the government, industry, and civil society. It will also create a qualifications framework underpinned by occupational standards for targeted sectors that are experiencing employment growth and skill shortages and realign the TVET system based on occupational standards.

Finance for results and emphasize the achievement of learning outcomes. The Foundation-Assisted Schools program is a public-private partnership that offers a monthly per-student subsidy to low-cost private schools in Punjab, *Pakistan*. The subsidy is conditional on tuition-free schooling and a minimum level of student performance on an externally administered independent test. The program offers large group bonuses to teachers and competitive bonuses to schools for high student test scores. Although the program has been in effect only for a short period, initial impact evaluation results suggest significant positive effects on enrollment and school inputs, such as teachers, classrooms, and blackboards. The program provides retroactive financing of implementation targets met by the government; over 60 percent of the financing was disbursed within the first year of implementation. The evaluation work is ongoing.

Link education with youth employment through joint Bank-IFC operations. The IFC, in partnership with the Islamic Development Bank, launched an initiative in 2010 to develop a private sector agenda to address the need for Education for Employment for Youth in the Arab World. The very high unemployment rate of youth in the Arab world has been attributed to the poor link between education and employment-market needs. The project focuses on the role that the private sector can play in addressing this problem and will guide the first joint Bank-IFC strategy in the region.

Source: World Bank 2006, 2009e, 2009f, 2009g, 2010c, 2010e.

Strategic Partnerships

The global challenge of improving the quality of education is immense; it requires collaboration and an alignment of interests among many actors. In addition to working with developing-country governments, the Bank partners with multilateral and bilateral agencies on knowledge products, investment operations, and programmatic initiatives. Collaboration with a host of development partners, particularly UN agencies such as the United Nations Education, Scientific, and Cultural Organization (UNESCO) and the United Nations Children’s Fund (UNICEF), promotes the global commitment to achieving Education for All goals and the education MDGs. These partnerships will continue to be crucial for catalyzing the global collective action set out as a priority in the Bank Group’s “Post-Crisis Directions” strategy paper; they mobilize global and country resources for education and improve policy making within countries. One longstanding partnership between the Bank and the UN is the Program for Education Statistics (PES) hosted by the UNESCO Institute for Statistics, which aims to improve statistical methodologies and develop national capacities to produce and use high-quality data for policy making.

Strategic partnerships are crucial for mobilizing global and country resources for education and improving policy making within countries.

One prominent example of a multilateral partnership is the Education for All Fast Track Initiative (FTI), founded in 2002 to accelerate progress toward quality primary education in the lowest-income countries. A 2010 external evaluation drew valuable lessons for FTI partners, especially the Bank, on how to make the partnership more effective—namely, to build more country-owned education sector plans, strengthen accountability mechanisms, focus on measuring and monitoring results, and balance the roles of partners by reducing dependence on the Bank (Cambridge Education, Mokoro, and Oxford Policy Management 2010). During the first years of FTI, the World Bank played multiple roles. This has changed. While the Bank continues in its roles as trustee for FTI funds and as host of the FTI Secretariat for as long as these arrangements benefit the partnership, it no longer chairs the committees that allocate the funds. The Bank fully supports the new governance structure, which includes an independent chair and more representation by various stakeholders on its decision-making body.³² The Bank is still the supervising entity of the majority of FTI projects (where the local education group designates the Bank as the best-placed institution to support FTI-funded activities in that country), but it now shares this role with the United Kingdom’s Department for International Development (DFID), the Netherlands, and the United Nation’s Children’s Fund (UNICEF) in some countries. Indeed, the Bank is eager for more partners

to step up their engagement, especially in supervising FTI projects and ensuring sufficient resources for country allocations.

Across the education sector, the Bank works alongside regional development banks and bilateral development agencies in developing countries. On the whole, these agencies share the goals of helping countries attain universal access to basic education and improve the quality of services, but they provide different kinds of support to meet these goals, responding to specific regional and country-specific challenges. For example, according to its strategy, the Asian Development Bank emphasizes educational quality, inclusiveness, and relevant skills at all levels of education and promotes the use of innovative models of service delivery and financing. The Inter-American Development Bank focuses its efforts on early childhood development, teacher quality, and the school-to-work transition. The African Development Bank emphasizes the reform of higher education, as well as math and science teaching at the secondary level. The European Union focuses on basic education, embracing the range of interventions from early childhood to skills development, using linkages with other sectors, enlarging available financing options, and ensuring the effectiveness of aid flows (see annex 3 for details on the education strategies of multilateral and bilateral agencies).

Bilateral development agencies tend to support particular aspects of an education system, embedded in a larger framework of poverty reduction and inclusive growth, and use budget support, grants, and analytical work as vehicles for their support. For instance, DFID's priority is equality in the provision of quality education for all, with special attention to girls' education and to states with fragile situations. In Asia Pacific countries, the Australian Agency for International Development aims to help disadvantaged students complete basic education and progress to higher levels of education while improving the relevance and quality of vocational and technical education. The government of Japan aims to provide comprehensive support to basic education by improving the quality of the learning environment, supporting vocational training and higher education networks, and promoting education to support peace building. The education strategy of the U.S. Agency for International Development focuses on expanding the access to basic education of underserved groups, especially in crisis and conflict environments, and enhancing overall educational quality to increase knowledge and productivity.

The Bank partners with bilateral aid agencies to finance operations at the country level. In Cambodia, for example, the Bank partnered with the Japan

Fund for Poverty Reduction scholarship program to increase enrollment and attendance of disadvantaged populations (Ferreira, Filmer, and Schady 2009), and in Ethiopia with DFID, the Netherlands, Italy, Finland, and Russia to improve education quality and increase learning through systemwide reforms, including teaching and teacher recruitment, a national assessment system, and the education information system. In addition, these partnerships have both broadened and deepened global and country-specific analytical work. The research grants provided by the Bank Netherlands Partnership Program and the Norwegian Partnership and Trust Fund have been valuable for the scope and quality of sector analyses that have involved not only Bank staff, but also national and international experts, in activities that have included primary data collection, empirical analysis, and capacity development. The Spain Trust Fund for Impact Evaluation has generated Bank-wide enthusiasm for impact evaluations of specific interventions, such as conditional cash transfers, school-based management and accountability, teacher incentives, and active labor market policies. Recent partnerships with the United Kingdom through the Partnership for Education Development, with Russia through Russia Education Aid for Development Trust Fund, and with Korea through the Korean Education Fund are focused on building system assessment and benchmarking tools.

It is not enough simply to get the technical details right; reforms must also navigate the challenges of a nation's political economy.

As mentioned above, the Bank works with the private sector, including enterprises, local and global technical institutions, private donors (such as philanthropic foundations and business networks), and civil society groups as critical partners in a variety of development programs. In many cases the private-sector entities contribute directly as providers of education services at different levels, while in others they partner with governments on service provision or push for education system reforms. The private sector also includes users of the skills produced by the education sector, prompting it to help sharpen the relevance and quality of curricula and modes of delivery. For example, the spread of ICT use in jobs is one reason why schools and students are eager to be proficient in ICT. Private donors, such as the Hewlett, MasterCard, and Qatar foundations, among others, have partnered with the Bank on a variety of knowledge generation and exchange activities that have wide applicability. And as previously mentioned, since 2001 the IFC has been working with private investors to expand education investments in developing countries.

Performance, Outcomes, and Impacts

Results indicators

How will the success of the new education strategy be measured? The year 2015 is a signal year for the development community as a whole with respect to progress towards key basic development goals. The Bank reaffirms its commitment to working together with the global community to reach those goals, and this strategy supports that commitment. The Bank pledged additional aid in IDA credits at the 2010 MDG Summit for the countries lagging furthest from the targets. In addition, the success of the strategy will be measured by the extent to which the strategic priorities discussed above—strengthening education systems and building a high-quality knowledge base—have been implemented and contributed to *learning for all* in the developing world.

In concrete terms, the results framework of the strategy consists of a number of key performance (9), outcome (4), and impact (4) indicators (see table 3). These indicators will be monitored regularly; this will require establishing baseline data and specifying a monitoring process for each indicator. Program documents and country reports are expected to be the principal source of information for performance and outcome indicators; impact indicators will be based on country education statistics. Details about the measurement, baselines, and targets of these indicators are provided in annex 4.

- Each *performance indicator* is associated with specific actions to be taken by the Bank and so is under the control of Bank staff. For example, one performance indicator pertains to the number of core education policy domains (e.g., teacher policies) for which a system framework and assessment tool have been developed. As discussed in an earlier section, the specific actions that correspond to each indicator will differ according to a country's particular circumstances and capacity.
- Each *outcome indicator* tracks changes in a country as a direct result of the Bank's policy engagement, investments, and other specific actions. One example of these indicators is the number of countries that, together with the Bank or other development agencies, have adopted a system approach to identifying the challenges as well as policy options in education. Some evidence of this would be meaningful reform of the education monitoring and information system of a country, change in the way that information from student assessments is used in training and deploying new teachers, and greater availability of data about the scope and quality of the private sector at different education levels.

The results framework of the strategy consists of a number of key performance, outcome, and impact indicators.

- Each *impact indicator* depends on more than what the Bank will do by itself or even with development partners. For instance, one impact indicator is the percentage of countries with increases in measured skills outcomes; another is reduction of gender, income, and other gaps in learning outcomes. Multiple actors in a country will have to act effectively to achieve desired education goals such as learning for all. Success will require sufficient knowledge, resources, political will, and leadership—and even then, not everything will be under the control of these actors. History demonstrates that natural disasters, economic crises, and violent conflicts can derail even well-planned education reforms.

It is important to note two issues related to the application of these indicators. First, as with impact indicators generally, the question of attribution deserves attention and thought. This issue arises mainly with respect to the impact indicators for the top-tier goals of Bank assistance to partner countries, which reflect the results not only of Bank actions, but also of a host of other factors. Impact indicators therefore serve more as a signal of the Bank’s intent in education than a direct measure of its effectiveness.

Second, while it is possible to see rapid changes in average enrollment rates from one school year to the next, it is harder to produce notable gains in learning outcomes. This is a lesson from the IEG’s recent review of the Bank’s education programs—and a lesson more generally from the results of international learning assessments. Institutional changes such as those supported by the new strategy will require structural and behavioral shifts in national education systems. The duration of time needed to see changes in outcome and impact indicators depends on the speed and scale of reforms, national implementation capacity, leadership, and political will (King and Behrman 2009). Yet *learning for all* is the right agenda to guide the Bank’s education efforts through 2020. The newly released PISA 2009 results show that previously low-performing countries can catch up with higher-performing countries within a relatively short period of time.

Preparing for action

To achieve *learning for all* requires aligning the interests and priorities of stakeholders, policy makers, and development partners in support of this global education goal. As in any other sphere of public policy, the effectiveness of education policies is shaped by their political and economic environment. It is not enough simply to get the technical details right; reforms must also navigate

Change in outcome and impact indicators depends on the speed and scale of reforms, national implementation capacity, leadership, and political will.

the challenges of a nation's implementation capacity and political economy—messages that came through strongly during consultations for the new strategy. Policies are determined by the interplay of many factors: the conflicting interests of different groups; the power that each group possesses to advance its own interests; the formal and informal mechanisms through which conflicts are resolved and policy decisions made; and the historical legacies that affect a society's culture and ideology.³³ An education policy or program may not directly benefit all participants and stakeholders in a system, and the local capacity to take the actions implied by policies and investments may be limited or concentrated in a few parts of government and society. Yet for reforms to be successful and durable, broad-based ownership and support, active or tacit, are valuable, if not essential.

Another aspect of political economy is to identify and take advantage of windows of opportunity for significant reform. Reforms are easier to introduce when there is a new government; when there is a demand for broader change, as is the case during crises, and other reforms are also being made; when the costs of reform are dispersed among groups that have little political power and its benefits are concentrated on a powerful group; and when the groups that bear the costs of reform can be compensated (Barrera-Osorio, Fasih, and Patrinos 2009). These are barometers of an education system's readiness for change.

Within the Bank, areas for concrete actions are: First, to provide staff with incentives, knowledge, and tools to adopt and apply a system approach to educational reform. This means a new capacity building program for staff on system reform, use of communication and training modes consistent with the increased decentralization of staff, and greater application of a multisectoral approach to education products. Second, to continue to develop the framework and system assessment tools for more policy domains, pilot them in developing countries, engage with experts and stakeholders to validate and garner support for them, and build the corresponding country database. This set of actions implies ensuring that staff time and funding are available for this activity in the next year, and requesting assistance and collaboration from development partners for the activity. Third, to continue to improve the quality of the education portfolio, especially those projects and programs that apply the system approach of the strategy (see box 10). Drawing from the conclusions of the IEG portfolio review, this action means strengthening the results framework in education projects in support of *learning for all*; integrating portfolio tracking and reporting and increasing

Box 10. How Will the Strategy's Education System Approach Improve Portfolio Performance?

The strategy's "system approach" provides a framework to help countries formulate reforms that can achieve better results across the core policy domains of an education system. The system approach permits a country to have a clear diagnosis of the policies and programs currently in place and also to benchmark against those that evidence and good practice suggest are most likely to achieve *learning for all*. It also provides a roadmap for reforms that improve performance in a particular policy domain and, subsequently, the education system as a whole.

A system approach would consider three aspects of a reform:

- (1) the enabling environment: the degree to which the policy context is conducive to launching and sustaining the reform;
- (2) the alignment of the reform with the rest of the education system: whether the policies and objectives of the reform in a particular policy domain are consistent with those in other domains across the education system; and
- (3) the technical quality of the reform: whether the reform includes the instruments and processes needed for it to succeed.

A review of a highly successful Bank-financed operation, as determined by ex-post evaluation, exemplifies the value of using a system approach in the formulation of projects or reforms. The Secondary Education Project in Chile, initiated in the mid-1990s, aimed to improve the quality of secondary education by applying a system approach. The project financed a total revamping of Chile's national assessment system and its alignment with the curriculum, textbooks, and teacher training. To ensure an appropriate enabling environment, the Ministry of Education created a new institutional organization—the Curriculum and Evaluation Unit—that could accommodate a growing assessment responsibility and ensure its sustainability. With regard to system alignment, the introduction of a new school curriculum ensured that the new assessment was aligned with newly specified learning standards. With respect to technical quality, changes were introduced to improve the rigor of the assessment, the introduction of open-ended questions to promote problem-solving skills, regular evaluation of tenth-grade student performance, results reporting that specified the percentage of students achieving the new learning standards, and a technical design that generated comparable results from year to year, facilitating the measurement of trends and the monitoring of the impact of the reforms. University entrance exams were also aligned with the new curriculum, and Chile started to participate regularly in international assessment programs such as TIMSS and PISA.

Source: World Bank 2001a.

management oversight at sector and country levels; choosing operational instruments appropriate to the development objectives of a project; using the practical know-how of staff to improve the design and implementation of projects; and sustaining country policy dialogue and engagement.

Table 3 | Performance, Outcome, and Impact Indicators for the 2020 Education Strategy

Performance Indicators	Outcome Indicators	Impact Indicators
<p><i>Changes in Bank Group actions to support countries</i></p> <p>1. Knowledge development to strengthen country education systems</p> <ul style="list-style-type: none"> a) Number of education system tools developed and launched ^a b) % of Bank knowledge products that use system tools in the analysis c) % of knowledge products that use learning outcomes in analyses of basic education <p>2. Organizational development to strengthen country education systems</p> <ul style="list-style-type: none"> a) % of Education Sector staff who have completed a competency program on the education system approach and tools and on Monitoring & Evaluation (M&E) methods <p>3. Technical and financial support to strengthen country education systems</p> <ul style="list-style-type: none"> a) % of education projects or programs that have learning- or skills-related key performance indicators (KPI) b) % of education projects or programs that use education system tools in their design and/or their M&E approach c) % of education projects or programs that have satisfactory M&E in their design and implementation d) % of countries furthest from reaching the education Millennium Development Goals (MDGs) that have received increased support (lending and nonlending) from the Bank Group e) % of education projects or programs that finance outputs/outcomes 	<p><i>Changes in policy and programs of countries receiving Bank Group support</i></p> <ul style="list-style-type: none"> a) % of (i) middle-income countries, (ii) low-income countries, (iii) fragile or conflict-affected states, (iv) Fast Track Initiative (FTI)-endorsed countries that have applied system tools and have collected and used system data b) % of countries that have applied learning or skills (national or international) assessments ^b c) % of countries whose systems have improved in at least one policy domain as measured by the system assessment tools d) % of countries furthest from reaching the education MDGs that have taken new steps since 2010 to address the obstacles to attaining those goals 	<p><i>Ultimate goals monitored in countries receiving Bank Group support</i></p> <ul style="list-style-type: none"> a) % of countries (or beneficiaries in countries) with increases in measured learning or skills since 2010 (or since the earliest available baseline) b) % of countries that have reduced schooling or learning gaps for disadvantaged populations (e.g., by income, gender, ethnolinguistic group, disability) since 2010 ^c c) % of countries furthest from reaching the education MDGs in 2010 that progressed towards their attainment since 2010 d) % of countries with gains in the skills level of their labor forces since 2010

Note: a. The World Bank is developing education system tools under the System Assessment and Benchmarking for Education Results (SABER) Program. The SABER system tool on teacher policies has been launched as a prototype, together with the publication of the Learning for All Strategy. Other system tools to be launched during the first year of the strategy include those on student assessments, early childhood development, and workforce development.

b. Assessment should be conducted on a regular basis and in a sustainable manner.

c. Beginning in 2010, the Bank Group is committing \$750 million to those countries furthest from achieving the education MDGs, with an emphasis on countries in South Asia and Sub-Saharan Africa. The Bank Group will work closely with development partners, in particular through the Fast Track Initiative, to scale up results-based financing and to support innovative interventions in these countries.

ANNEX 1: EXTERNAL CONSULTATION MEETINGS

Region	Number of Countries Represented		Number of Countries that Hosted a Consultation Meeting	
	<i>Phase I</i>	<i>Phase II</i>	<i>Phase I</i>	<i>Phase II</i>
Africa	16	12	4	8
South Asia	3	4	2	4
East Asia and the Pacific	8	5	4	4
Latin America and the Caribbean	11	3	4	3
Middle East and North Africa	4	9	2	1
Europe and Central Asia	13	9	2	5
Donors	13	9	6	4
Total	69	51	24	29

ANNEX 2: MULTISECTORAL APPROACHES: LINKAGES BETWEEN EDUCATION STRATEGY 2020 AND OTHER WORLD BANK GROUP STRATEGIES

Sector (in alphabetical order)	Strategic Priorities	Linkages to Education Strategy 2020
Agriculture Action Plan 2010–2020	<ol style="list-style-type: none"> 1. Raise agricultural productivity 2. Link farmers to markets and strengthen value chains 3. Reduce risk and vulnerability 4. Facilitate agricultural entry and exit and raise rural nonfarm incomes 5. Enhance environmental services and sustainability 	<p>Education contributes to agriculture:</p> <p>Higher-order skills</p> <ul style="list-style-type: none"> • Support technology adoption • Improve the relevance and effectiveness of agricultural advice to farmers • Support regional clustering of economic activity (e.g., territorial development) <p>Agriculture contributes to education:</p> <p>Higher rural productivity and incomes</p> <ul style="list-style-type: none"> • Make education more affordable • Raise demand for agricultural technical skills
Climate Change (strategic framework)	<ol style="list-style-type: none"> 1. Support country-led climate action 2. Mobilize additional concessional and innovative, market-based finance 3. Leverage private sector resources 4. Accelerate development and deployment of new technologies 5. Step up policy research, knowledge, and capacity building 	<p>Education contributes to climate change:</p> <p>Higher-order skills</p> <ul style="list-style-type: none"> • Improve access to appropriate information and technologies • Ensure adequate capacity to plan and prepare for projected climate changes
Energy Strategy Approach Paper	<ol style="list-style-type: none"> 1. Improve the operational and financial performance of the energy sector 2. Strengthen governance 	<p>Energy contributes to education:</p> <ul style="list-style-type: none"> • Educational institutions need a reliable and low-cost supply of power <p>Education contributes to energy:</p> <ul style="list-style-type: none"> • Ensure access to appropriate information and new technologies on energy production • Ensure adequate capacity to plan and prepare for changes in energy production, delivery, and consumption
Environment Strategy 2001 (new strategy still in progress)	<ol style="list-style-type: none"> 1. Improve the quality of life 2. Improve the quality of growth 3. Protect the quality of the regional and global commons 	<p>Education contributes to environment:</p> <ul style="list-style-type: none"> • Environmental education increases environmental awareness and capacity • Environmental technical training supports preparation for and response to climate change

<p>Gender Equality as Smart Economics: A World Bank Group Gender Action Plan (fiscal years 2007–10)</p>	<p>Goal: Advance women’s economic empowerment by enhancing women’s ability to participate in land, labor, financial, and product markets</p> <ol style="list-style-type: none"> Engender operations and technical assistance in economic sectors Implement results-based initiatives (RBIs) Improve research and statistics Undertake a targeted communications campaign 	<p>Education contributes to gender empowerment:</p> <ul style="list-style-type: none"> Skilled women will have better chances to participate in productive markets Eliminating gender disparities in education (MDGs 3)—a highly effective way to empower women <p>Gender empowerment contributes to education:</p> <ul style="list-style-type: none"> Children of empowered women have better education and health outcomes
<p>Governance and Anti-Corruption 2007</p>	<ol style="list-style-type: none"> Recognize that a capable and accountable state creates opportunities for the poor Country-driven governance and anti-corruption policies and implementation Support even poorly governed countries Engage with a broad array of stakeholders Harmonize and coordinate approach with governments, donors, and other actors at country and global levels 	<p>Education contributes to governance:</p> <ul style="list-style-type: none"> System approach is consistent with better accountability and transparency <p>Governance contributes to education:</p> <ul style="list-style-type: none"> Empowers community/civil society groups to improve system performance Supports improved transparency and accountability in education system Supports adequacy, efficiency, and equity in education financing
<p>Health, Nutrition, and Population (HNP) Results 2007</p>	<ol style="list-style-type: none"> Improve level and distribution of HNP outcomes (e.g., MDGs), outputs, and system performance Prevent poverty due to illness (by improving financial protection) Improve financial sustainability of sector and its contribution to macroeconomic and fiscal policy and country competitiveness Improve governance, accountability, and transparency of sector 	<p>Education contributes to health:</p> <ul style="list-style-type: none"> Girls’ and women’s education improves knowledge and use of health care Mothers’ education reduces child mortality <p>HNP contributes to education:</p> <ul style="list-style-type: none"> Pre- and post-natal nutrition ensures healthy early childhood development School health services improve attendance and school performance
<p>Information and Communications Technology 2010</p>	<ol style="list-style-type: none"> Connect: expand affordable access to ICTs Innovate: across the economy and promote the growth of IT-based service industries Transform: support ICT applications to transform efficiency and accountability of services 	<p>Education contributes to ICT:</p> <ul style="list-style-type: none"> Develops ICT-related skills and promotes use Creates capacity for content development <p>ICT contributes to education:</p> <ul style="list-style-type: none"> IFC investments in IT now include the education sector ICT applications in education promise to be “enablers of transformation” Supports greater transparency of service delivery

<p>Private Sector Development (PSD) 2002</p>	<ol style="list-style-type: none"> 1. Extend the reach of markets: sound investment climate for poor areas to create jobs and entrepreneurial opportunity 2. Basic service delivery: where it makes sense, new entry of private providers, including small- or medium-scale local entrepreneurs 3. PSD and environmental sustainability 	<p>Education contributes to PSD:</p> <ul style="list-style-type: none"> • Policy development, regulations, institution building, and capacity building in the public sector without crowding out PSD • Trains entrepreneurs and employees to increase innovations and productivity <p>PSD contributes to education:</p> <ul style="list-style-type: none"> • Increases supply of learning opportunities • Continues IFC investments in private education projects • Enterprise training facilitates school-to-work transition
<p>Science, Technology, and Innovation (STI) Action Plan 2009</p>	<ol style="list-style-type: none"> 1. Form partnerships 2. Carry out inclusive innovation assessments and projects 3. Organize workshops and forums for promotion and dissemination 4. Provide policy advice and capacity building 5. Provide information on what other STI actors are doing 	<p>Education contributes to STI:</p> <ul style="list-style-type: none"> • Trains the next generation of scientists, engineers, technicians, and policy makers • Strengthens the capacity of local scientific and engineering institutions to conduct R&D <p>STI contributes to education:</p> <ul style="list-style-type: none"> • Creates knowledge for content development • Creates demand for science education at all levels
<p>Social Development (SD) Strategy 2005</p>	<ol style="list-style-type: none"> 1. Improve macro-level analysis that incorporates social development into poverty reduction and/or development strategies 2. Promote efficient mainstreaming of social development into projects 3. Improve research, capacity building, and partnerships 	<p>Education contributes to SD:</p> <ul style="list-style-type: none"> • System approach supports inclusion and accountability • Strategy emphasizes inclusion and equity in country and global analyses <p>SD contributes to education:</p> <ul style="list-style-type: none"> • Social analyses help identify factors affecting demand for education and consequences of policy options
<p>Social Protection and Labor (SP+L) Strategy: Emerging Issues for 2012</p>	<ol style="list-style-type: none"> 1. Build prevention against income shocks 2. Build protection from destitution and catastrophic losses in human capital 3. Promote improved opportunities and livelihoods, notably through access to better jobs and opportunities 	<p>Education contributes to SP+L:</p> <ul style="list-style-type: none"> • More education, especially for poor and disadvantaged people, supports prevention, protection, and promotion goals • Skills provide competencies that respond to changing labor market demands <p>SP+L contributes to education:</p> <ul style="list-style-type: none"> • Targeted cash transfer programs have education incentives • Labor market information improves educational choices and relevance of services
<p>Transport Business Strategy 2008–2012</p>	<ol style="list-style-type: none"> 1. Create conditions to increase support for transport investment 2. Deepen engagement in the roads and highways and urban subsectors 3. Diversify engagement in transport for trade 4. Transport and climate change: control emissions and mitigate impact 	<p>Transport contributes to education:</p> <ul style="list-style-type: none"> • Better transport services increase access to learning opportunities • Reduces risks of travel, especially for young children, women, and girls

<p>Urban and Local Government Strategy 2009</p>	<ol style="list-style-type: none"> 1. Focus on core elements of the city system: management, finance, and governance 2. Make pro-poor policies a city priority 3. Support city economies 4. Encourage progressive urban land and housing markets 5. Promote a safe and sustainable urban environment 	<p>Education contributes to urban strategy:</p> <ul style="list-style-type: none"> • Knowledge helps people improve living conditions, even in slums • Affordable schools and training programs improve urban life and livelihoods <p>Urban strategy contributes to education:</p> <ul style="list-style-type: none"> • Encourages public and private investments in education, health, water, and sanitation services
<p>Water Resources Sector Strategy 2004</p>	<ol style="list-style-type: none"> 1. Focus on management, together with connections between resource use and service management 2. Develop and improve management of infrastructure 3. Recognize political economy of management reform 	<p>Water contributes to education:</p> <ul style="list-style-type: none"> • Reliable water supply needed in educational facilities <p>Education contributes to water:</p> <ul style="list-style-type: none"> • Knowledge of hygiene increases demand for reliable water supply
<p>World Bank Post-Crisis Directions Paper 2010</p>	<p>Goal: Overcome poverty</p> <ol style="list-style-type: none"> 1. Target the poor and vulnerable 2. Create opportunities for growth 3. Provide cooperative models 4. Strengthen governance 5. Manage risk and prepare for crises 	<p>Education contributes to post-crisis strategy:</p> <ul style="list-style-type: none"> • Strengthens multidonor partnerships (Fast Track Initiative) • Improves service delivery through greater school autonomy and parent associations • Invests in impact evaluations • Expands economic opportunities for girls and women • Helps countries respond to demand for secondary and tertiary education • Cushions short- and long-term impacts on the most vulnerable students through CCTs and school grants
<p>Sources: Mandell and Watkins 2010; World Bank 2001b, 2002, 2004, 2005b, 2007a, 2007b, 2008, 2009a, 2009b, 2009c, 2009h, 2010a, 2010b, 2010g.</p>		

ANNEX 3: EDUCATION STRATEGIES OF MULTILATERAL AND BILATERAL AGENCIES

Development Agency	Education Strategy Priorities
Asian Development Bank (ADB)	<ul style="list-style-type: none"> • Increase and continue to align its support in the education sector • Emphasize strengthening quality, inclusiveness, and relevant skills • Adjust subsector priorities while recognizing major differences in education needs across countries • Utilize new and innovative models of service delivery and financing • Promote regional cooperation and cross-border collaboration
Inter-American Development Bank (IADB)	<ul style="list-style-type: none"> • Focus on three main areas over the next three years: early childhood development, school-to-work transition, and teacher quality
African Development Bank Group (AfDB)	<ul style="list-style-type: none"> • Reform and transform higher education systems in Africa by: <ul style="list-style-type: none"> – Strengthening national and regional centers of excellence for training in selected priority areas – Building and/or rehabilitating existing science and technology infrastructure – Linking higher education to the workplace
U.K. Department for International Development (DFID)	<ul style="list-style-type: none"> • Strategic priorities to help realize the vision of quality education for all: <ul style="list-style-type: none"> – Access to a basic cycle of primary and lower secondary education, with an emphasis on states with fragile situations and keeping girls in school – Quality teaching and learning, particularly for basic literacy and numeracy – Skills that enable young people to benefit from opportunities, jobs, and growth
Agence Française de Développement (AFD)	<ul style="list-style-type: none"> • Complete universal enrollment by 2015 and achieve equity between boys and girls • Enhance access to productive and decent employment and adaptability to changing needs in labor market through apprenticeships • Provide capacity building and technical assistance to governments
Danish Development Policy	<ul style="list-style-type: none"> • Enhance access to education that improves women’s economic opportunities, with an emphasis on attaining stability in states with fragile situations
Australian Agency for International Development (AUSAID)	<ul style="list-style-type: none"> • Improve the functioning of national education systems to enable more girls and boys to complete primary school and progress to higher levels of education • Improve the relevance and quality of education, including in vocational and technical education
New Zealand Aid (NZAID)	<ul style="list-style-type: none"> • Assist core bilateral partner countries to achieve the Education For All goals • Support post-basic and tertiary education, with a particular emphasis on achieving gender equality at these levels of education by 2015

U.S. Agency for International Development (USAID)	<ul style="list-style-type: none"> • Improve reading skills for 100 million children in primary grades by 2015 • Improve the ability of tertiary and workforce development programs to generate workforce skills relevant to a country's development goals • Increase equitable access to education in crisis and conflict environments for 15 million learners by 2015
Ministry of Foreign Affairs of Japan	<ul style="list-style-type: none"> • Improve the comprehensive learning environment and strengthen support to FTI countries • Promote centers for vocational training and networks for higher education • Promote education in conflict- and disaster-affected countries
European Commission	<ul style="list-style-type: none"> • Support basic education as the foundation for further learning • Reinforce joint work on a whole-sector approach • Make appropriate links with other sectors • Expand the range of financing possibilities
<p>Sources: AFD 2007, AfDB 2008, ADB 2010, AUSAID 2010, EC 2010, DFID 2010, IADB 2010, Denmark 2010, Japan 2010, NZAID 2004, USAID 2011.</p>	

ANNEX 4: STRATEGY INDICATORS WITH MEASURES, BASELINES, AND TARGETS

Performance Indicators (change in Bank actions to support partner countries)			
Indicator	Means of verification	Baseline	Target 2015/2020
1. Knowledge development to strengthen country education systems			
(a) Number of education system tools developed and launched ^a	Education online databases ^b published on the World Bank Web site	1	8/12
(b) Percent of Bank knowledge products that use system tools in the analysis	(a) In the Education Sector (ESWs)	(a) 0	(a) 25/75
	(b) When education sector analyzed (CEMs, PERs, other formal sector studies)	(b) 0	(b) 10/25
(c) Percent of knowledge products that use learning outcomes in analyses of basic education	(a) In the education sector (ESWs)	(a) 20	(a) 30/70
	(b) When education sector analyzed (CEMs, PERs, other formal sector studies)	(b) 5	(b) 10/25
2. Organizational development to strengthen country education systems			
Percent of Education Sector staff who have completed a competency program on the education system approach and tools and on Monitoring & Evaluation (M&E) methods	World Bank Learning Management System	0	30/90
3. Technical and financial support to strengthen country education systems			
(a) Percent of education projects or programs that have learning- or skills-related key performance indicators (KPI)	PADs	20	40/60
(b) Percent of education projects or programs that use education system tools in their design and/or their M&E approach	PADs ^c	0	25/75
(c) Percent of education projects or programs that have a satisfactory M&E in their design and implementation	ICRs	25	35/60
(d) Percent of countries furthest from reaching the education Millennium Development Goals (MDGs) that have received increased support (lending and non-lending) from the Bank Group	PADs	0	70/90
(e) Percent of education projects or programs that finance outputs/outcomes	PADs	5	15/25

Notes: ESW – Economic and Sector Work; CEM – Country Economic Memorandum; PER – Public Expenditure Review; ICR – Implementation Completion Report.

a. The World Bank is developing education system tools under the System Assessment and Benchmarking for Education Results (SABER) Program. One system tool, “Teacher Policies,” has been launched as a prototype, together with the publication of the Learning for All Strategy. Other system tools to be launched during the first year of the strategy include “Student Assessment,” “Early Childhood Development,” and “Workforce Development.” The online SABER database will be maintained by the World Bank on its externally accessible Education website.

b. All subsequent mentions of “online databases published on the World Bank website” refer to the online SABER database.

c. System tool mentioned in the Quality Enhancement Review (QER) of the PADs.

Outcome and Impact Indicators

Indicator	Means of verification	Baseline	Target 2015/2020
Outcomes: Changes in policy and programs of countries receiving Bank Group support ^d			
(a) Percent of (i) middle-income countries, (ii) low-income countries, (iii) fragile or conflict-affected states, (iv) Fast Track Initiative (FTI)-endorsed countries that have applied system tools and have collected and used system data	Education online databases published on the World Bank website, updated periodically	0	(i) 15/30 (ii) 20/40 (iii) 10/20 (iv) 20/40
(b) Percent of countries that have applied learning or skills (national or international) assessments ^e	Education online databases published on the World Bank website, updated periodically	30	50/70
(c) Percent of countries whose systems have improved in at least one policy domain as measured by the system assessment tools	Education online databases published on the World Bank website, updated periodically	0	5/15
(d) Percent of countries furthest from reaching the education Millennium Development Goals (MDGs) that have taken new steps since 2010 to address the obstacles to attaining those goals	Education online databases published on the World Bank website, updated periodically; World Bank projects database	0	70/90
Impact: Ultimate goals to be monitored in countries receiving Bank support			
(a) Percent of countries (or beneficiaries in countries) with increases in measured learning or skills since 2010 (or since the earliest available baseline)	Education online databases published on the World Bank website, updated periodically	0	25/40
(b) Percent of countries that have reduced schooling or learning gaps for disadvantaged populations (e.g., by income, gender, ethnolinguistic group, disability) since 2010 ^f	Education online databases published on the World Bank website, updated periodically, plus the Global Monitoring Report, updated annually until 2015 data reported	0	45/75
(c) Percent of countries furthest from reaching the education MDG in 2010 that progressed towards their attainment since 2010	Global Monitoring Report, updated annually until 2015 data reported	0	65/90
(d) Percent of countries with gains in the skills level of their labor forces since 2010	Education online databases published on the World Bank website	0	5/15

Notes: d. Includes both technical and financial support.

e. Assessment application conducted on a regular basis and in a sustainable manner.

f. Beginning in 2010, the Bank is committing \$750 million to those countries furthest from the education MDGs, with an emphasis on countries in Sub-Saharan Africa. The World Bank will work closely with development partners, in particular through the Fast Track Initiative, to scale up results-based financing and support innovative interventions in these countries. Lessons from some countries indicate that demand-side interventions such as girls' scholarships and conditional cash transfer programs, as well as school grants, can successfully lower obstacles to school enrollment and increase attendance for disadvantaged populations, as well as in lagging areas. The Bank also commits to making the lessons from these innovations more widely accessible so that they can inform future policies and investments.

BACKGROUND NOTES

- Abadzi, H. 2010. “How to Integrate Quality in the 2020 Sector Strategy? The Promise of a New Science-Based Framework.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Alderman, A., and E. Vegas. 2010. “Education Strategy 2020: Background Note on Education Finance.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Barrera-Osorio, F., A. Paglayan and D. Jorrat. 2010. “Political Economy of Education.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Bundy, D., and T. O’Connell. 2010. “School Health, Nutrition, School Feeding, and HIV Work Programs.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Clarke, M., and M. J. Ramirez. 2010. “Framework for Building an Effective Assessment System.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- COREHEG (World Bank Thematic Group on Tertiary Education). 2010. “Education Sector Strategy 2020: Tertiary Education.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- ECD (Early Childhood Development) Community of Practice. 2010. “Education Sector Strategy 2020: Background Note on Early Child Development.” World Bank, Washington, DC.
- EduTech Group. 2010. “ICTs and Education: Issues and Opportunities.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- King, E., and V. Nguyen. 2010. “World Bank Education Portfolio Review.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Liberman, J., and M. Clarke. 2010. “Review of World Bank Support for Learning Assessment Activities in Client Countries.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Perez-Brito, C., and N. Goldstein. 2010. “Mother-Tongue Instruction and Bilingual Education in the World Bank’s Education Sector Strategy 2020.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Porta Pallais, E., and J. Klein. 2010. “Increasing Education Data Availability for Knowledge Generation.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Skills/TVET (Technical and Vocational Education and Training) Community of Practice. 2010. “Education Sector Strategy 2020: Skills/Voc-Tech Education.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- STI Group. 2010. “Education Sector Strategy 2020: Science, Technology and Innovation Capacity Building.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.
- Vermeersch, C. 2010. “Results-Oriented Financing and Lending.” Background Note for the Education Sector Strategy 2020. World Bank, Washington, DC.

REFERENCES

- AFD (Agence Française de Développement). 2007. “Cadre D’Intervention Sectoriel 2007–2009 Education et Formation Professionnelle.” Agence Française de Développement, Paris.
- AfDB (African Development Bank). 2008. “Strategy for Higher Education, Science and Technology. African Development Bank.” AfDB, Tunisia. <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/10000019-EN-STRATEGY-FOR-HIGHER-EDUCATION-SCIENCE-AND-TECHNOLOGY.PDF>
- ADB (Asian Development Bank). 2010. “Education by 2020: A Sector Operations Plan.” ADB, Manila. <http://www.adb.org/Documents/Policies/Education-Operations-Plan/default.asp>.
- Andrabi, T., J. Das, and A. I. Khwaja. 2008. “Report Cards: The Impact of Providing School and Child Test Scores on Educational Markets.” Draft paper. Pomona College, Development Research Group, World Bank, and Kennedy School of Government, Harvard University. Available online on the Web page of the Harvard Kennedy School of Government, http://www.hks.harvard.edu/fs/akhwaja/papers/RC_14Nov08.pdf.
- ASER (Assessment Survey Evaluation Research). 2010. “Annual Status of Education Report 2010.” Pratham Resource Centre, Mumbai, India. http://images2.asercentre.org/aserreports/ASER_2010_Report.pdf.
- AUSAID (Australian Agency for International Development). 2010. “Building on the 2010 Blueprint: A reform Agenda for 2015.” AUSAID, Canberra, Australia. <http://www.usaid.gov.au/publications/pdf/reform-agenda-2015.pdf>.
- Autor, D., F. Levy, and R. Murnane. 2003. “The Skill Content of Recent Technological Change: An Empirical Exploration.” *Quarterly Journal of Economics* 118 (4): 1279–1333.
- Banerjee, A., and E. Duflo. 2011. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: PublicAffairs.
- Banerjee, A., R. Banerji, E. Duflo, R. Glennester, and S. Khemani. 2008. “Pitfalls of Participatory Programs: Evidence from a Randomized Evaluation in Education in India.” Policy Research Paper 4584. World Bank, Washington, DC.
- Barrera-Osorio, F., T. Fasih, and H. Patrinos. 2009. “Decentralized Decision Making in Schools: The Theory and Evidence of School-Based Management.” Report 48740. Human Development Unit, World Bank, Washington, DC.
- Belli, P., and L. Pritchett. 1995. “Does Good Economic Analysis Lead to Better Projects?” HCO (Human Capital Development and Operations Policy) Dissemination Note 53. World Bank, Washington, DC.
- Bhutta, Z., T. Ahmed, R. Black, S. Cousens, K. Dewey, E. Giugliani, B. Haider, B. Kirkwood, S. Morris, H. Sachdev, and M. Shekar (for the Maternal and Child Undernutrition Study Group). 2008. “Maternal and Child Undernutrition 3: What Works? Interventions for Maternal and Child Undernutrition and Survival.” *The Lancet* 371 (9610): 417–40.
- Blankespoor, B., S. Dasgupta, B. Laplante, and D. Wheeler. 2010. “Adaptation to Climate Extremes in Developing Countries: The Role of Education.” Policy Research Working Paper 5342. World Bank, Washington, DC.
- Blattman, C., and J. Annan. 2010. “The Consequences of Child Soldiering.” Draft paper. MIT, Cambridge, MA.
- Brahmbhatt, M., and L. Pereira da Silva. 2009. “The Global Financial Crisis: Comparisons with the Great Depression and Scenarios for Recovery.” PREM Note 141. Poverty Reduction and Economic Management Network, World Bank, Washington, DC.
- Bray, M. 2009. “Confronting the Shadow Education System: What Government Policies for What Private Tutoring?” UNESCO International Institute for Educational Planning, Paris.
- Bruns, B., D. Evans, and J. Luque. 2010. *Achieving World Class Education in Brazil: The Next Agenda*. Washington, DC: World Bank.
- Bruns, B., D. Filmer, and H. Patrinos. 2011. *Making Schools Work: New Evidence on Accountability Reforms*. Washington, DC: World Bank.
- Cambridge Education, Mokoro, and Oxford Policy Management. 2010. “Final Synthesis Report—Main Report.” Vol. 1, “Mid-Term Evaluation of the EFA Fast Track Initiative.” Cambridge Education, Cambridge, England. Available on the EFA FTI website, <http://www.educationfasttrack.org/newsroom/focus-on/mid-term-evaluation-of-the-efa-fast-track-initiative/#evaluation>.
- Commission on Growth and Development. 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington, DC: World Bank.
- “Convention on the Rights of the Child.” November 20, 1989. GA Res. 44/25, annex, 44 UN GAOR Supp. (no. 49) at 167, U.N. Doc. A/44/49 (1989); 1577 UNTS 3; 28 ILM 1456 (1989).

- Corbacho, A., M. García-Escribano, and G. Inchauste. 2007. "Argentina: Macroeconomic Crisis and Household Vulnerability." *Review of Development Economics* 11 (1): 92–106.
- CNE (Centre National de l'Éducation), PHARE (Programme Harmonisé d'Appui au Renforcement de l'Éducation), and RTI International. 2009. "Évaluation initiale des compétences fondamentales en lecture écriture basée sur l'utilisation de l'outil 'EGRA' adapté et complété en français et en arabe au Mali." Research Triangle Park, North Carolina.
- Crouch, L. 2006. "Education Sector: Standards, Accountability, and Support." In *A New Social Contract for Peru: An Agenda for Improving Education, Health Care, and the Social Safety Net*, ed. Daniel Cotlear, 71–106 (Washington, DC: World Bank).
- Cunha F., J. J. Heckman, L. Lochner, and D. V. Masterov. 2006. "Interpreting the Evidence on Life Cycle Skill Formation." In *Handbook of the Economics of Education*, Vol. 1, ed. E. Hanushek and F. Welch, 697–812 (Oxford: North-Holland).
- Dang, H., and H. Rogers. 2008. "How to Interpret the Growing Phenomenon of Private Tutoring: Human Capital Deepening, Inequality Increasing, or Waste of Resources?" Policy Research Working Paper 4530. World Bank, Washington, DC.
- Das, J., P. Pandey, and T. Zajonc. 2006. "Learning Levels and Gaps in Pakistan." World Bank Policy Research Working Paper 4067. World Bank, Washington, DC.
- De Walque, D. 2007. "How Does the Impact of an HIV/AIDS Information Campaign Vary with Educational Attainment? Evidence from Rural Uganda." Policy Research Working Paper 3289. World Bank, Washington, DC.
- Deininger, K., L. Squire, and S. Basu. 1998. "Does Economic Analysis Improve the Quality of Foreign Assistance?" *The World Bank Economic Review* 12 (3): 385–418.
- Denmark, Ministry of Foreign Affairs. International Development Cooperation. 2010. "Freedom from Poverty—Freedom to Change: Strategy for Danish Development Cooperation.: Ministry of Foreign Affairs, Copenhagen. <http://www.um.dk/NR/rdonlyres/F22BEFFF-C83A-48BF-879CBD2136F45DD/0/FreedomfromPoverty.pdf>.
- DFID (Department for International Development, United Kingdom). 2010. "Learning for All: DFID's Education Strategy 2010–2015." DFID, London. <http://www.ukafricapartnerships.org/OneStopCMS/Core/CrawlerResourceServer.aspx?resource=5f50e5d1-f79e-4b4c-8d69-4223e6748b85&mode=link&guid=a3a5eb8276d04589b9f57b3d1358f8c4>.
- . 2011. "UK Aid: Changing Lives, Delivering Results." DFID, London. <http://www.dfid.gov.uk/Documents/publications1/mar/BAR-MAR-summary-document-web.pdf>.
- Duflo, E., P. Dupas, and M. Kremer. 2008. "Peer Effects, Teacher Incentives, and the Impact of Tracking: Evidence from a Randomized Evaluation in Kenya." NBER Working Paper 14475. National Bureau of Economic Research, Cambridge, MA.
- Duflo, E. 2001. "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment." *American Economic Review* 91 (4): 795–813.
- Edstats (database). World Bank, Washington, DC. <http://go.worldbank.org/ITABCOGIV1>.
- EFA FTI (Education for All Fast Track Initiative). 2009. "Annual Report." FTI Secretariat, Washington, DC.
- Engle, P., M. Black, J. Behrman, M. Cabral de Mello, P. Gertler, L. Kapiriri, R. Matorell, M. E. Young, and International Child Development Steering Group. 2007. "Strategies to Avoid the Loss of Developmental Potential in More than 200 Million Children in the Developing World." *The Lancet* 369 (9557): 229–42.
- EC (European Commission). 2010. "More and Better Education in Developing Countries." Commission Staff Working Document 2010. EC, Brussels, Belgium.
- Fafchamps, M., and A. R. Quisumbing. 1999. "Human Capital, Productivity, and Labor Allocation in Rural Pakistan." *Journal of Human Resources* 34 (2): 369–406.
- Fernald, L., P. Kariger, P. Engle, and A. Raikes. 2009. "Examining Early Child Development in Low-Income Countries: A Toolkit for the Assessment of Children in the First Five Years of Life." World Bank, Washington, DC. http://siteresources.worldbank.org/INTCY/Resources/395766-1187899515414/Examining_ECD_Toolkit_FULL.pdf.
- Ferreira, F. H. G., D. Filmer, and N. Schady. 2009. "Own and Sibling Effects of Conditional Cash Transfer Programs: Theory and Evidence from Cambodia." Policy Research Working Paper 5001. World Bank, Washington, DC.
- Filmer, D. 2008. "Disability, Poverty, and Schooling in Developing Countries: Results from 14 Household Surveys." *World Bank Economic Review* 22 (1): 141–63.
- . 2010. "Education Attainment and Enrollment around the World: An International Database." World Bank, Washington, DC. <http://econ.worldbank.org/projects/edattain>.

- Filmer, D., and N. Schady. 2008. "Getting Girls into School: Evidence from a Scholarship Program in Cambodia." *Economic Development and Cultural Change* 56 (3): 581–617.
- Fiszbein, A., and N. Schady. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. Policy Research Report 47603. Washington, DC: World Bank.
- Foster, A., and M. R. Rosenzweig. 1996. "Technical Change and Human Capital Returns and Investments: Evidence from the Green Revolution." *American Economic Review* 86 (4): 931–53.
- Frankenberg, E., J. Smith, and D. Thomas. 2003. "Economic Shocks, Wealth, and Welfare." *The Journal of Human Resources* 38 (2): 280–321.
- Fullan, M. 2005. *Leadership & Sustainability: System Thinkers in Action*. Thousand Oaks, CA: Corwin Press.
- Gakidou, E., K. Cowling, R. Lozano, and C. Murray. 2010. "Increased Educational Attainment and its Effect on Child Mortality in 175 Countries between 1970 and 2009: A Systematic Analysis." *The Lancet* 376 (9745): 959–74.
- Gilligan, M., E. Mvukiyehe, and C. Samii. 2010. "Reintegrating Rebels into Civilian Life: Quasi-Experimental Evidence from Burundi." Unpublished paper. Columbia University.
- Grantham-McGregor, S., Y. Cheung, S. Cueto, P. Glewwe, L. Richter, B. Strupp, and the International Child Development Steering Committee. 2007. "Developmental Potential in the First 5 Years for Children in Developing Countries." *The Lancet* 369 (9555): 60–70.
- Hall, G., and H. Patrinos. 2010. "Indigenous Peoples, Poverty, and Development." Draft manuscript. World Bank, Washington, DC.
- Hanushek, E. 1986. "The Economics of Schooling: Production and Efficiency in Public Schools." *Journal of Economic Literature* 24 (3): 1141–77.
- . 1996. "A More Complete Picture of School Resource Policies." *Review of Educational Research* 66 (3): 397–409.
- Hanushek, E., and L. Woessmann. 2008. "The Role of Cognitive Skills in Economic Development." *Journal of Economic Literature* 46 (3): 607–68.
- IADB (Inter-American Development Bank). 2010. "Strategy on Social Policy for Equity and Productivity." IADB Draft Profile. IADB, Washington, DC.
- IEG (Independent Evaluation Group). 2004. "Primary Education Portfolio Review." Background paper for the Evaluation of the World Bank's Support to Primary Education. Operations Evaluation Department, Washington, DC.
- . 2006. *From Increased Access to Learning Outcomes: An Unfinished Agenda*. Washington, DC: World Bank.
- . 2010. *World Bank Support to Education Since 2001: A Portfolio Note*. Washington, DC: World Bank.
- ILO (International Labour Organization). 2011. *Global Employment Trends January 2011: The Challenge of a Jobs Recovery*. Geneva: ILO.
- IMF (International Monetary Fund). 2010. *World Economic Outlook October 2010: Recovery, Risk and Rebalancing: World Economic and Financial Surveys*. Washington, DC: IMF.
- Jakubowski, M., H. Patrinos, E. Porta, and J. Wisniewski. 2010. "The Impact of the 1999 Education Reform in Poland." Policy Research Working Paper 5263. World Bank, Washington, DC.
- Japan, Ministry of Foreign Affairs. 2010. "Japan's Education Cooperation Policy 2011–2015: Education for Human Security: Building Human Capacity, Nations, and World Peace through Educational Development." International Cooperation Bureau, Tokyo. http://www.no.embjapan.go.jp/files/education_cooperation_policy.pdf.
- Jensen, R. 2007. "The Digital Divide: Information (Technology), Market Performance, and Welfare in the South India Fisheries Sector." *Quarterly Journal of Economics* 122 (3): 879–924.
- Jolliffe, D. 1998. "Skills, Schooling, and Household Income in Ghana." *World Bank Economic Review* 12 (1): 81–104.
- King, E. M., and J. R. Behrman. 2009. "Timing and Duration of Exposure in Evaluations of Social Programs." *World Bank Research Observer* 24 (1 February 2009): 55–82.
- Kremer, M., and A. Holla. 2008. "Pricing and Access: Lessons from Randomized Evaluations in Education and Health." Unpublished paper. Harvard University, Cambridge, MA.
- Krueger, A. B., and M. Lindahl. 2001. "Education for Growth: Why and for Whom?" *Journal of Economic Literature* 39 (4): 1101–36.
- Lavy, V. 2007. "Using Performance-Based Pay to Improve the Quality of Teachers." *Future of Children* 17 (1): 87–110.

- Levy, F., and R. J. Murnane. 2004. *The New Division of Labor: How Computers Are Creating the Next Job Market*. Princeton: Princeton University Press.
- Lewis, M., and M. Lockheed. 2006. *Inexcusable Absence: Why 60 Million Girls Still Aren't in School and What to Do About It*. Washington, DC: Center for Global Development.
- Lloyd, C., ed. 2005. *Growing Up Global. The Changing Transitions to Adulthood in Developing Countries*. National Research Council and Institute of Medicine of the National Academies. Washington, DC: National Academies Press.
- Lloyd, C. 2009. "New Lessons: The Power of Educating Adolescent Girls; A *Girls Count* Report on Adolescent Girls." With J. Young. The Population Council, Inc., New York.
- Luque, J., and M. Moreno. Forthcoming. *Technological Progress, Skills and Education*. Washington, DC: World Bank.
- Mandell, J., and A. Watkins. 2010. "Global Forum Action Plan: Science, Technology, and Innovation Capacity Building Partnerships for Sustainable Development." World Bank, Washington, DC. http://sitere-sources.worldbank.org/INTSTIGLOFOR/Resources/STI_GlobalForum_ActionPlan.pdf.
- Mittal, S., and G. Tripathi. 2009. "Role of Mobile Phone Technology in Improving Small Farm Productivity." *Agricultural Economics Research Review* 22: 451–59.
- Murnane, R. J., and J. B. Willett. 2010. *Methods Matter: Improving Causal Inference in Educational and Social Science Research*. New York: Oxford University Press.
- Musgrove, P. 2010. "Financial and Other Rewards for Good Performance or Results: A Guided Tour of Concepts and Terms and a Short Glossary." Results-Based Financing for Health, Center for Global Development, World Bank, Washington, DC. <http://www.rbhealth.org/rbhealth/library/doc/381/financial-and-other-rewards-good-performance-or-results-guided-tour-concepts-and-ter>.
- Mourshed, M., C. Chijioke, and M. Barber. 2010. *How the World's Most Improved School Systems Keep Getting Better*. McKinsey & Company.
- NZAID (New Zealand Agency for International Development). 2004. "Achieving Education for All." NZAID, Wellington, New Zealand.
- OECD (Organisation for Economic Co-operation and Development). 2007. *Understanding the Brain: The Birth of a Learning Science*. Paris: OECD.
- . 2009. *Economic Policy Reforms: Going for Growth*. Paris: OECD.
- . Directorate for Science Technology and Industry. 2010a. "Key ICT Indicators." OCED, Paris. www.oecd.org/sti/ICTIndicators.
- . 2010b. *PISA 2009 Results: What Students Know and Can Do*. Paris: OECD.
- Orazem, P., P. Glewwe, and H. Patrinos. 2007. "The Benefits and Costs of Alternative Strategies to Improve Educational Outcomes." Department of Economics Working Paper 07028. Iowa State University, Ames.
- Orazem, P., and E. M. King. 2008. "Schooling in Developing Countries: The Roles of Supply, Demand, and Government Policy." In *Handbook of Development Economics*, Vol. 4, ed. T. P. Schultz and J. Strauss, 3475–53 (Amsterdam: Elsevier B.V.).
- Patrinos, H., F. Barrera-Orsorio, and J. Guaqueta. 2009. *The Role and Impact of Public-Private Partnerships in Education*. Washington, DC: World Bank.
- Posarac, A., and K. Peffley. 2011. "Childhood Disability, Education, and School Health." In *Rethinking School Health: A Key Component of Education for All*, ed. D. Bundy (Washington, DC: World Bank).
- Pritchett, L. 2001. "Where Has All the Education Gone?" *World Bank Economic Review* 15 (3): 367–91.
- Ravallion, M., and A. Wagstaff. 2010. "The World Bank's Publication Record." Policy Research Working Paper 5374. Development Research Group, World Bank, Washington, DC.
- Rodriguez, A. 2008. *Knowledge and Innovation for Competitiveness*. With C. Dahlman and J. Salmi. Washington, DC: The World Bank.
- Rosenzweig, M., and A. D. Foster. 2010. "Microeconomics of Technology Adoption." *Annual Review of Economics* 2 (Sep): 395–424.
- Schady, N., L. Sondergaard, C. Bodewig, and T. P. Sohnesen. 2009. "School Closures Impact on Dropout Rates: Main Results and Lessons for the Future." World Bank and the Task Force on Impact Evaluation, Washington, DC.
- Steiner-Khamsi, G. 2006. "The Economics of Policy Borrowing and Lending: A Study of Late Adopters." *Oxford Review of Education* 32 (5): 665–78.
- Thomas, D., K. Beegle, E. Frankenberg, B. Sikoki, J. Strauss, and G. Teruel. 2003. "Education in a Crisis." *Journal of Development Economics* 74 (1): 53–85.

- Tucker, M. S. 2011. “Standing on the Shoulders of Giants: An American Agenda for Education Reform.” National Center on Education and the Economy, Washington, DC.
- UNDP (United Nations Development Programme). 2010. *The Human Development Report 2010: The Real Wealth of Nations*. New York: UNDP.
- UNESCO (United Nations Educational, Scientific, and Cultural Organization). 2010. *Education For All—Global Monitoring Report 2010*. Paris: UNESCO.
- UN (United Nations). Statistics Division, Department of Economic and Social Affairs. 2005. *Household Sample Surveys in Developing and Transition Countries*. New York: United Nations. http://unstats.un.org/unsd/HHsurveys/pdf/Household_surveys.pdf.
- “Universal Declaration of Human Rights.” December 20, 1948. GA Res. 217 (III), UN GAOR, 3d Sess., Supp. No. 13, UN Doc. A/810 (1948) 71 [UDHR].
- USAID (United States Agency for International Development). 2011. “Education Strategy: Opportunity through Learning.” USAID, Washington, DC. http://www.usaid.gov/our_work/education_and_universities/documents/USAID_ED_Strategy_feb2011.pdf.
- Vawda, A., P. Moock, J. P. Gittinger, and H. Patrinos. 2003. “Economic Analysis of World Bank Education Projects and Project Outcomes.” *International Journal of Educational Development* 23: 645–60.
- Walker S., E. Wachs, J. Fardner, B. Lozoff, G. Wasserman, E. Pollitt, J.A. Carter, and International Child Development Steering Group. 2007. “Child Development: Risk Factors for Adverse Outcomes in Developing Countries.” *The Lancet* 369 (9556): 145–57.
- World Bank. 1999. “Education Sector Strategy.” World Bank, Washington, DC.
- . 2001a. “Implementation Completion Report for the Chile Secondary Education Project (P006673).” World Bank, Washington, DC. http://www.wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2001/12/01/000094946_0111160402132/Rendered/PDF/multi0page.pdf.
- . 2001b. “Making Sustainable Commitments: An Environment Strategy for the World Bank.” World Bank, Washington, DC. <http://siteresources.worldbank.org/ENVIRONMENT/Resources/244380-1250028593656/6382907-1252510780845/6428643-1255012678534/WBG-Environment-Strategy-2001-Full.pdf>.
- . 2002. “Private Sector Development Strategy—Directions for the World Bank Group 2002.” World Bank, Washington, DC. <http://rru.worldbank.org/Documents/PapersLinks/699.pdf>.
- . 2003. *World Development Report 2004: Making Services Work for the Poor*. Washington DC: World Bank.
- . 2004. “Water Resources Sector Strategy 2004.” World Bank, Washington, DC. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2004/06/01/000090341_20040601150257/Rendered/PDF/28114.pdf.
- . 2005a. “Education Sector Strategy Update: Achieving Education for All, Broadening Our Perspective, Maximizing Our Effectiveness.” Final draft paper. World Bank, Washington, DC.
- . 2005b. “Empowering People by Transforming Institutions: Social Development in World Bank Operations.” World Bank, Washington, DC. <http://go.worldbank.org/4MK68UEPQ0>.
- . 2006. “Project Appraisal Document on a Proposed Credit in the Amount of 20.8 Million (US\$ equivalent) to the Government of Mozambique for Technical and Vocational Education and Training Project.” Report 33174-MZ. World Bank, Washington, DC. http://imagebank.worldbank.org/servlet/WDSContentServer/IW3P/IB/2006/03/01/000090341_20060301115337/Rendered/PDF/33174.pdf.
- . 2007a. “Healthy Development: The World Bank Strategy for Health, Nutrition, and Population Results.” World Bank, Washington, DC. <http://siteresources.worldbank.org/HEALTHNUTRITION-ANDPOPULATION/Resources/281627-1154048816360/HNPStrategyFinalTextAnnexes.pdf>.
- . 2007b. “Strengthening World Bank Group Engagement on Governance and Anticorruption.” World Bank, Washington, DC. <http://siteresources.worldbank.org/EXTPUBLICSECTORANDGOVERNANCE/Resources/GACStrategyPaper.pdf>.
- . 2008. “Safe, Clean, and Affordable... Transport for Development; The World Bank Group’s Transport Business Strategy 2008–2012.” World Bank, Washington, DC. http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1211381200616/Transport_Business_Strategy_web.pdf.
- . 2009a. “Development and Climate Change: The World Bank Group at Work.” World Bank, Washington, DC. <http://siteresources.worldbank.org/EXTCC/Resources/WBGatWork.pdf>.
- . 2009b. “Energy Strategy Approach Paper.” World Bank, Washington, DC. <http://siteresources.worldbank.org/EXTESC/Resources/Approach-paper.pdf?resourceurlname=Approach-paper.pdf>.
- . 2009c. “Implementing Agriculture for Development; World Bank Group Agriculture Action Plan: FY2010–2020.” World Bank, Washington, DC. http://siteresources.worldbank.org/INTARD/Resources/Agriculture_Action_Plan_web.pdf.

- . 2009d. “Project Appraisal Document on a Proposed IDA Credit in the Amount of SDR 63.6 Million (\$95 Million Equivalent) to the Government of Nigeria for the Lagos Eko Secondary Education Project.” Report No. 47453-NG. World Bank, Washington, DC. http://imagebank.worldbank.org/servlet/WDSContentServer/IW3P/IB/2009/07/29/000350881_20090729100634/Rendered/PDF/474530PAD0ID A11C0disclosed071281091.pdf.
- . 2009e. “Project Appraisal Document on a Proposed Loan in the Amount of SDR 234.1 Million (US\$350 million equivalent) to the Islamic Republic of Pakistan for the Punjab Education Sector Project.” Report No. 47591-PK. World Bank, Washington, DC. http://imagebank.worldbank.org/servlet/WDSContentServer/IW3P/IB/2009/05/19/000333038_20090519014935/Rendered/PDF/475910PAD0P1 02101Official0Use0Only1.pdf.
- . 2009f. “Project Information Document on a Proposed Education System Performance Project in Bulgaria.” World Bank, Washington, DC. http://imagebank.worldbank.org/servlet/WDSContentServer/IW3P/IB/2009/12/28/000101930_20091229134809/Rendered/PDF/Project0Inform1ument1Concept- 0Stage1.pdf.
- . 2009g. “Russia Education Aid for Development (READ): Annual Report.” World Bank, Washington, DC. http://siteresources.worldbank.org/EDUCATION/Resources/278200125666213814/READ_ AnnualReport_2009_web.pdf.
- . 2009h. “Systems of Cities Harnessing Urbanization for Growth and Poverty Alleviation: The World Bank Urban and Local Government Strategy.” World Bank, Washington, DC. <http://www.wburbanstrategy.org/urbanstrategy/sites/wburbanstrategy.org/files/FEUUR%200901%20for%20web%201029.pdf>.
- . 2009i. *World Development Report 2009: Reshaping Economic Geography*. Washington DC: World Bank.
- . 2010a. “ICTs Sector Strategy Approach Paper 2010.” World Bank, Washington, DC. http://siteresources.worldbank.org/INTICTSTRATEGY/Resources/2010-11-23_ICT_Sector_Strategy_Approach_Paper.pdf.
- . 2010b. “New World, New World Bank Group: Post-Crisis Direction.” World Bank, Washington, DC. [http://siteresources.worldbank.org/DEVCOMMIT/Documentation/22553954/DC2010-0003\(E\) PostCrisis.pdf](http://siteresources.worldbank.org/DEVCOMMIT/Documentation/22553954/DC2010-0003(E) PostCrisis.pdf).
- . 2010c. “Project Appraisal Document on a Proposed Credit in the Amount of SDR 119.4 Million (US\$ 180 Million Equivalent) to the Socialist Republic of Vietnam for a New Model University Project.” Report No. 54570-VN. World Bank, Washington, DC.
- . 2010d. “Project Appraisal Document (PAD) on a Proposed Grant in the Amount of US\$30 Million Equivalent to the Republic of Haiti for the Second Phase of the Education For All Program.” World Bank, Washington, DC. http://imagebank.worldbank.org/servlet/WDSContentServer/IW3P/IB/2010/06/09/000333037_20100609234650/Rendered/PDF/545700PAD0P110101Official0Use0Only1.pdf.
- . 2010e. “Project Appraisal Document (PAD) on a Proposed Loan in the Amount of US\$21 Million to the Republic of Colombia for the Education System Modernization Project.” World Bank, Washington, DC.
- . 2010f. “A Review of the Bulgaria School Autonomy Reforms.” Report 54890-BG. Human Development Department, ECA Region, World Bank, Washington, DC.
- . 2010g. “Social Protection and Labor Strategy: Emerging Issues for 2012.” World Bank, Washington, DC. <http://go.worldbank.org/GJEZA3JDC0>.
- . 2010h. *World Development Report 2011: Conflict, Security and Development*. Discussion draft. Unpublished. World Bank, Washington, DC.
- . 2011. “Building Resilience and Opportunity. The World Bank’s Social Protection and Labor Strategy, 2012–2022 Concept Note.” Prepared for meeting of Committee on Development Effectiveness, January 12, 2011, Washington DC.
- World Development Indicators (database). World Bank, Washington, DC. <http://data.worldbank.org/data-catalog/world-development-indicators>.
- Yang, D. 1997. “Education and Off-Farm Work.” *Economic Development and Cultural Change* 45 (3): 613–32.

Endnotes

1. The UN Covenant on Economic, Social and Cultural Rights (1966) enforces the right to education of every child and makes this right legally binding for the signatory countries.
2. See, for example, Hanushek and Woessmann (2008), Krueger and Lindahl (2001), and Pritchett (2001).
3. See, for example, Yang (1997) for China; Jolliffe (1998) for Ghana; Fafchamps and Quisumbing (1999) for Pakistan; and Jensen (2007); and Rosenzweig and Foster (2010) for India.
4. In Latin America and the Caribbean, gender inequality tends to result from boys having significantly lower enrollment and/or completion rates than girls.
5. Poor people are less able than nonpoor people to maintain their consumption in the face of income shocks. For example, during the East Asian crisis in the late 1990s, poorer households in Indonesia resorted to taking their children out of school (Thomas et al. 2003).
6. See, for example, the summaries and citations in Hall and Patrinos (2010), Lewis and Lockheed (2006), UNESCO (2010). Also, see Filmer (2008) and Posarac and Peffley (2011) on the negative impact of disability on schooling attainment.
7. The same goal is being pursued by OECD countries: “Early education helps to broaden opportunity and stimulate subsequent learning, while secondary and tertiary education improves workforce skills and enhances absorptive capacity.... Policies to improve higher education performance and output are a priority for Austria, the Czech Republic, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Poland, the Slovak Republic, Sweden, Switzerland and Turkey” (OECD 2009, 36 and 37).
8. The global financial crisis that struck in 2008 has weakened the growth prospects of rich countries in the near future because they are now reducing excessive current account imbalances and unwinding stimulus policies, while households are paying off debt and rebuilding their net worth (Brahmbhatt and Pereira da Silva 2009; Commission on Growth and Development 2008).
9. It is all the more impressive that the recently completed replenishment process for the International Development Association (IDA) yielded an unprecedented funding level for the next three years. World Bank President Robert Zoellick interprets this support from donors as showing “an extraordinary global coalition of donors and borrowers which have come together to ensure that even in these difficult economic times we offer hope and opportunity to the world’s poor. (World Bank press release, Brussels, December 15, 2010).
10. Autor, Levy, and Murnane (2003) conclude that within industries in the United States, computerization is associated with reduced labor input of routine manual and cognitive tasks and increased labor input of nonroutine cognitive tasks.
11. The Education for All Fast Track Initiative (EFA FTI) is a global partnership between more than 30 bilateral donors, international agencies, and development banks to support the achievement of universal completion of primary school by boys and girls. Through the FTI compact, low-income countries commit to design and implement sound education plans, while donor partners commit to align and harmonize additional support around these plans. Participating countries benefit from increased and better-coordinated aid from existing and potential donors. Funding has been channeled through existing bilateral and multilateral channels and also through the FTI Catalytic Fund and the Education Program Development Fund; as part of governance reforms of the partnership, these two funds are being replaced by one FTI Fund (EFA FTI 2009; also see the EFA FTI Web site at <http://www.educationfasttrack.org>).

12. “Knowledge ... includes the codified knowledge that can be set out in books, blueprints, and manuals, but also the tacit know-how acquired through experience.... It extends from abstract ideas, such as scientific formulae, to eminently practical ones, such as the traffic circle or roundabout.... Knowledge does not only consist of ideas for making more things, cheaper things, or new things. It includes the accumulated wisdom of human and social experience—as historians and social scientists interpret and reinterpret it. For example, the “invention” of the separation of powers between three branches of government, and the checks and balances it ensures, is possibly one of the most creative and influential innovations of the last few centuries. Many other institutional innovations have been tried and refined through trial and error, and have helped achieve economic and social goals more efficiently and fairly” (Commission on Growth and Development 2008, 41).
13. Some of these staff teams produced the Background Notes listed before the References. Staff working groups on issues that pertain to middle-income countries, low-income countries, and fragile states prepared presentations based on several discussions held throughout 2010.
14. Throughout the consultations, education stakeholders raised several consistent questions, such as “How will the strategy balance access and learning goals?” and “How will the strategy address girls’ education issues?” A Frequently Asked Questions (FAQ) section located on-line at www.worldbank.org/educationstrategy2020 provides detailed answers to these questions.
15. See references in Barrera-Osorio, Fasih, and Patrinos (2009).
16. In some cases, the cost of nonstate education falls on families, which account for about one-quarter of all education spending in developing countries (Patrinos, Barrera-Osorio, and Guaqueta 2009).
17. Skills/TVET Community of Practice (2010). For more details, see the background notes prepared for this strategy.
18. The Commission on Growth and Development (2008, 38, 40) criticizes the sector strongly for inadequate measurement of learning:

Researchers in this field have settled on “years of schooling” as a convenient, summary indicator of education. This is the measure they most often cite in debate, and it is much envied by their counterparts in health policy, who lack a single, “vulgar” measure (to use their term) in their field. . . . But years of schooling is only an input to education. The output—knowledge, cognitive abilities, and probably also social skills and other noncognitive skills—is often not captured. When it is measured, the results are often quite worrying. . . . We still need to know much more about education—how to get the most out of the government’s budget, and how to get the best out of teachers and their students. We recommend this as a high priority for policy research. One place to start is measurement. The abilities of students—their literacy and numeracy—need to be gauged far more widely around the world.
19. See Barrera-Osorio, Fasih, and Patrinos (2009) for a review of case studies.
20. Examples of projects that have been evaluated include demand-side interventions, such as conditional cash transfers. The latter have been implemented mostly in middle-income countries with the aim of reaching children not in school, as well as keeping children in school. This type of intervention is also spreading to low-income countries (Fiszbein and Schady 2009). On the supply side, projects that have been evaluated include public-private partnerships (Patrinos, Barrera-Osorio, and Guaqueta 2009), school-based management reforms (Barrera-Osorio, Fasih, and Patrinos 2009), mechanisms to provide parents or communities with information about the quality of an educational institution (Banerjee et al. 2008), and better incentives for teachers (Lavy 2007).
21. The note was submitted to the Committee on Development Effectiveness (CODE) of the Bank’s Board of Directors on December 29, 2010.
22. This figure includes funding from both the World Bank’s own resources and Trust Fund resources.

23. Research indicates that sector analysis has a significant positive impact on various measures of the quality of World Bank projects. Deininger, Squire, and Basu (1998) conclude that “an increase of one staff-week in the amount of time devoted to ESW [economic and sector work] before project initiation is associated with an increase in the economic rate of return for an individual project of between 0.02 and 0.04 percentage point ... \$1 of ESW [sector work] yields \$4–8 in development impact” (Deininger, Squire, and Basu 1998, 415). Two other studies found a more direct relationship between analysis and project performance. Belli and Pritchett (1995) conclude that good economic analysis led to better projects: “the probability that a project will be rated poorly three years after becoming effective is seven times higher if the economic analysis in the Staff Appraisal Report was bad than if the economic analysis was good.” Vawda et al. (2003) generally confirm the finding that the quality of economic analysis for a project is a statistically significant indicator of project outcome, irrespective of the project’s region.
24. As of 2009, the countries experiencing fragile situations were Afghanistan, Angola, Burundi, Cameroon, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Republic of Congo, Côte d’Ivoire, Djibouti, Eritrea, The Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Kosovo, Liberia, Myanmar, São Tomé and Príncipe, Sierra Leone, Solomon Islands, Somalia, Sudan, Tajikistan, Timor-Leste, Togo, Tonga, West Bank and Gaza, Republic of Yemen, and Zimbabwe.
25. For details, see the Background Notes prepared for this strategy.
26. See Background Note by ECD Community of Practice (2010).
27. The system tool on teacher policies builds evidence on policies and practice regarding teacher recruitment, selection, training, evaluation, incentives for performance, pedagogy, and professional development.
28. As part of this effort, the World Bank Group will continue to help countries improve their education management and information systems (EMIS) as a tool for management and planning. The World Bank Group will identify best practices for country EMIS, produce best practice guidelines, and develop appropriate training modules for users. The Bank is already partnering with UNESCO’s Institute of Statistics to improve the international availability of country-level education data (on enrollment and completion rates, among other indicators). Two areas of innovation are the collection of information on a wider range of indicators and the application of new information technologies to facilitate the collection, processing, and reporting of data (Porta Pallais and Klein 2010; EduTech Group 2010).
29. Examples include the strategies applied to measuring the impact of the green revolution in India (Foster and Rosenzweig 1996) and of the optimization of school network policy on dropouts in Bulgaria (Schady et al. 2009).
30. Indeed, there are numerous linkages with the social protection sector. Education systems help people acquire the human capital, including job-relevant skills, necessary to get a job and earn a good living; hence more and better education supports the “prevention, protection, and promotion goals” proposed in the new Social Protection Strategy (World Bank 2011).
31. This trust fund is funded by the Netherlands government and the European Commission.
32. See Cambridge Education, Mokoro and Oxford Policy Management (2010).
33. See Background Note by Barrera-Osorio, Paglayan, and Jorrat (2010).





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