Learning for AII:

Investing in People's Knowledge and Skills to Promote Development

**World Bank Group Education Strategy 2020** 

**April 2011** 

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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

BRIC Brazil, Russia, India, and China

CCT conditional cash transfer CSO civil society organization

CODE Committee on Development and Effectiveness, Board of Directors,

World Bank

DFID Department for International Development, United Kingdom

EC European Commission

ECD early childhood development

ESS2020 World Bank Education Strategy 2020

FAS Foundation-Assisted Schools Program, Pakistan

FTI Education for All Fast Track Initiative

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

MDG Millennium Development Goal

NZAID New Zealand Aid

OECD Organisation for Economic Co-operation and Development

PAD Project Appraisal Document, World Bank

PCD Partnership for Child Development
PFED Partnership for Education Development

PIRLS Progress in International Reading Literacy Survey
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 Education, Scientific, and Cultural Organization

UNICEF United Nations Children's Fund

USAID United States Agency for International Development

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

## **EXECUTIVE SUMMARY**

- 1. 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.
- 2. 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?

- 3. The Bank Group has made substantial contributions to educational development around the world over the past 48 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.
- 4. This period has seen great 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

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

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.

5. 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. At the same time, urbanization is concentrating populations in cities, a trend that, if managed correctly, can lower the cost of educating students and increase the returns to education. Another set of changes is technological: incredible advances in information and communications technology (ICT) hold great potential for accelerating and making learning more inclusive, as well as

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

for improving the management and efficiency of education systems. Finally, 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.

6. 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 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 the key Bank Group priorities laid out in the recent World Bank *Post-Crisis Directions* strategy, which sets a course for sustainable recovery and growth after the global financial crisis—priorities such as targeting the poor and vulnerable, creating opportunities for growth, promoting global collective action, and strengthening governance.

#### OBJECTIVE: LEARNING FOR ALL, BEYOND SCHOOLING

7. 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.

- 8. Learning levels that have been measured in many developing countries are, however, 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, at best, rudimentary. For example, recent studies found that more than 30 percent of youths aged 15–19 years who completed six years of schooling in Mali could not read a simple sentence; the same was true of more than 50 percent of Kenyan youths. 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, and many lagged far behind the OECD average.
- **9.** The science of brain development shows that learning needs to be encouraged early and often, both inside and outside of the formal schooling system. 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 period of high potential 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.
- 10. 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 (including 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.

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- 11. 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, 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.
- 12. To achieve learning for all, the World Bank Group will focus its efforts in education on two strategic directions: reforming education systems at the country level and building a high-quality knowledge base for education reforms at the global level. The next two sections describe what these strategic directions entail for the Bank over the next decade.

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skills they need to live happy,
productive lives.

## SYSTEM REFORM, BEYOND INPUTS

- 13. At the country level, the Bank Group will focus on supporting reforms of education systems. The core idea underlying this country-level work is an expanded definition
  - of the term "education system," a term that 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 forprofit organizations). An education system thus 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. An education system 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 expanded 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.
- 14. 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.
- 15. The education system approach of the new strategy focuses on increasing accountability and results as a complement to providing results. Strengthening education systems means

aligning their governance, management of schools 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 individuals' 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.

16. 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, apply measures of system performance consistent with 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 undertake actions to improve project outcomes, such as strengthening the results framework for projects, improving portfolio monitoring, and selecting the right operational instruments.

#### BUILDING THE KNOWLEDGE BASE

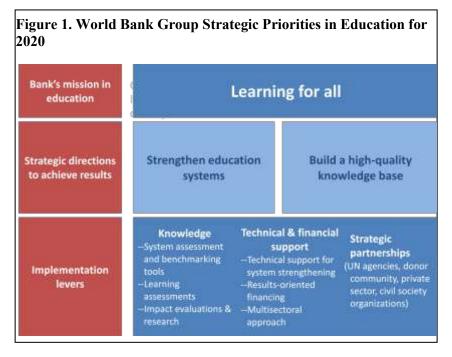
- 17. At the regional and global level, the Bank will help develop a high-quality knowledge base on education system reform. Analytical work, practical evidence, and know-how related to education programs and policies are critical to improving the performance of education systems around the world. By 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? 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?
- 18. The Bank is developing new knowledge approaches to help guide education system reform. New tools for system assessment and benchmarking ("system tools") will provide detailed analysis of country capacities in a wide variety of education policy domains, from

early childhood development (ECD), student assessment, and teacher policy to equity and inclusion, tertiary education, and skills development. In each policy domain, the system tools will assess 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

The education system approach focuses on increasing accountability and results.

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 both highlight areas of strength and weakness and identify successful reformers whose experience can inform education policy and practices in other countries.

- 19. Better knowledge of the strengths and weaknesses of particular education systems will enable the Bank Group to respond more accurately to the needs of its partner countries. Countries at different levels of educational development face different challenges, a fact that gives value to the idea of differentiating countries by development level when setting priorities for assistance and knowledge sharing. The new strategy 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. Understanding the policy environment that affects the private sector and its ability to align providers' efforts with national efforts to meet education goals helps establish the links between the IFC and the Bank's work.
- 20. Careful systems analysis will allow for clearer differentiation of countries by level of educational svstem development. rather than bν overall development alone. Use of the system approach will make it possible to go beyond income-level groupings identify strong education in specific performers In terms areas. of intermediate outcomes and the capacity for reform. the strong performers will be those



countries that achieve levels of system performance well beyond what would be expected based on their incomes, or even on their current enrollment and learning outcomes. Countries that face similar challenges can then identify strong performers in their particular areas of weakness, such as teacher professional development, student assessment, or university accreditation, and learn from them. In addition to helping the Bank Group prioritize its assistance, identification of common challenges among more comparable countries will also facilitate more effective South-South learning.

## FROM STRATEGY TO ACTION

- 21. To implement the new strategy, the World Bank Group will concentrate its implementation in 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 research that can inform policies and interventions, together with knowledge exchange and debate that facilitate effective use of existing knowledge by partner countries and organizations.
- 22. Knowledge generation and exchange is an essential tool for increasing the effectiveness of all spending in a country's education sector, not just Bank Group financing. 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 also work together so that the role of the private sector in education is recognized and properly regulated in ways that will improve outcomes. Finally, the Bank will expand to work in *strategic partnerships* in the development community 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 lowincome countries achieve the education MDGs.
- 23. 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.
- 24. 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

The bottom line of the Bank Group's new education strategy: Invest early. Invest smartly. Invest for all. 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 on their implementation. Learning for all is the right agenda to guide the Bank Group's education efforts through 2020. It is the knowledge and skills that children and youth acquire today—not simply their school attendance—that will drive their employability, productivity, health, and well-being in the decades to come, and that will help their communities and nations develop and thrive.

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

### Performance indicators

# Changes in Bank Group actions to support countries

- Knowledge development to strengthen country education systems
- a) Number of education system tools developed and launched <sup>a</sup>
- b) % of Bank knowledge products that use system tools in the analysis
- % of knowledge products that use learning outcomes in analyses of basic education.
- 2. Organizational development to strengthen country education systems
  - 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
- 3. Technical and financial support to strengthen country education systems
  - % of education projects or programs that have learning- or skills-related key performance indicators (KPI)
- % of education projects or programs that use education system tools in their design and/or their M&E approach
- % of education projects or programs that have a 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 non-lending) from the Bank Group
- e) % of education projects or programs that finance outputs/outcomes

#### **Outcome indicators**

# Changes in policy and programs of countries receiving Bank Group support

- 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 Millennium Development Goals (MDGs) that have taken new steps since 2010 to addressing the obstacles to attaining those goals

### Impact indicators

Ultimate goals monitored in countries receiving Bank Group support

- a. % of countries (or beneficiaries in countries) with increases in measured learning or skills since 2010 (or since the earliest available baseline)
- % of countries that have reduced schooling or learning gaps for disadvantaged populations (e.g., income groups, gender, ethnolinguistic groups, disability) since 2010 <sup>c</sup>
- c. % of countries furthest from reaching the education MDG 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. One system tool, "Teacher Policies Around the World," 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 Bank will commit US\$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 to support innovative interventions in these countries. Lessons from some countries indicate that demand-side interventions such as girls' scholarships, conditional cash transfer programs, and school grants can successfully address obstacles to school enrollment and 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.

# Learning for All: Investing in **People's Knowledge** and Skills to Promote Development

# PART I. RATIONALE

# 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, sustain a livelihood, adopt new technologies, be better parents, 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 211.5 million (or 6.6 percent of the working population) in 2009, is at an all-time high (ILO 2010). 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 body 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.

- 2. 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. The World Bank Group is committed to removing barriers to access to quality education through the actions described in this strategy, so that the right to education may be upheld for all children and youth.
- 3. Education improves the quality of people's lives in ways that transcend benefits to the individual and the family, including the benefits of economic prosperity and less 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,<sup>2</sup> 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).

4. At the micro level, education yields its greatest benefits in countries undergoing rapid technological and economic change because it gives workers the ability to continue acquiring skills, as well as to learn 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. 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. These findings are similar to those documented in China, Ghana, and Pakistan,

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.

where productivity returns to schooling have been estimated to be higher in nonfarm than farm activities.<sup>3</sup>

- 5. 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:
  - *Health status.* Other things being equal, more educated parents have healthier children, even after controlling for household income. 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). Education also increases knowledge about the benefits of vaccination and strategies for avoiding the transmission of infectious diseases—as in Uganda, where more educated people take more protective measures against HIV (de Walque 2007).
  - 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).

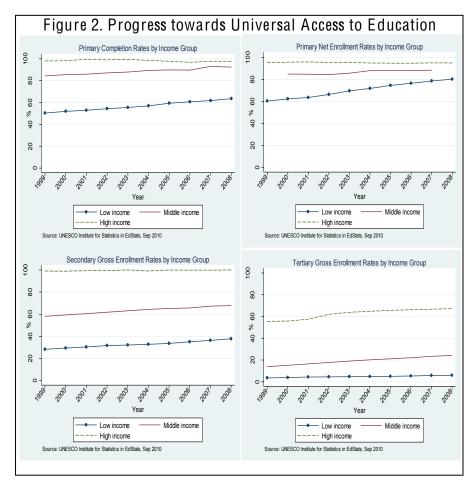
- Environmental adaptation. When they compared countries with similar income and weather conditions, Blankespoor and others (2010) found that countries with better-educated female populations were more capable of coping with extreme weather events than countries with low levels of female education.
- In all societies, governments take responsibility for ensuring that their populations have an opportunity to become educated and thus receive these benefits. 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 households 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, therefore "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. For the development community, strengthening education is therefore a key item on the agenda as the world continues to recover from crisis, as discussed in the recent Bank Group New World, New World Bank Group: Post-Crisis Directions strategy paper (World Bank 2010b).

# Recent Developments: More Schooling, Little Learning

7. Compared with two decades ago, more young people are entering school, completing the primary level, and transitioning to 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 more 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 and in South Asia. However, low-income countries as a group are still far from reaching the education Millennium

Three-fourths of the countries that are the furthest from achieving universal primary completion are in Sub-Saharan Africa.



Development Goals (MDGs): universal primary education as measured by enrollment and primary completion and gender rates. 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 is 45 percent.<sup>4</sup> In these countries, targeted efforts may be needed to address the specific reasons why children and youth are out of school.

8. As primary enrollment rates have

climbed, pressure has mounted to expand the capacity of secondary and tertiary education

#### Box 2. Technological Progress, Skills, and Education in Brazil

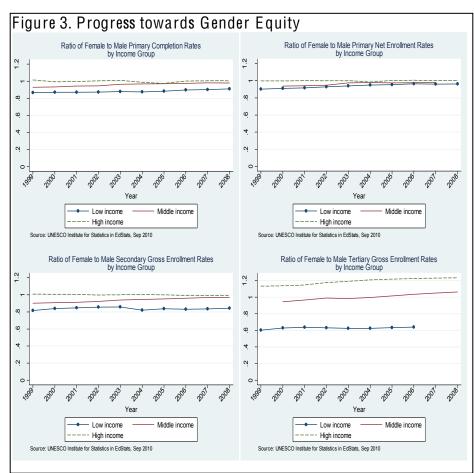
The unprecedented recent speed of technological progress and its rapid assimilation into the workplace has dramatically altered the skills mix of the labor force. Tasks that can be automated are now more likely to be performed by computers, which may increase the productivity of an economy as a whole, but creates labor market tension for individuals specialized in such tasks. 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 it has sharply increased the demand for "new economy" skills—that is, analytical and/or interpersonal skills used in dealing with nonroutine circumstances. This trend is a powerful argument for aligning school curricula with labor market needs.

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 educated individuals have increased their new economy skills faster than individuals with lower educational attainment. 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.

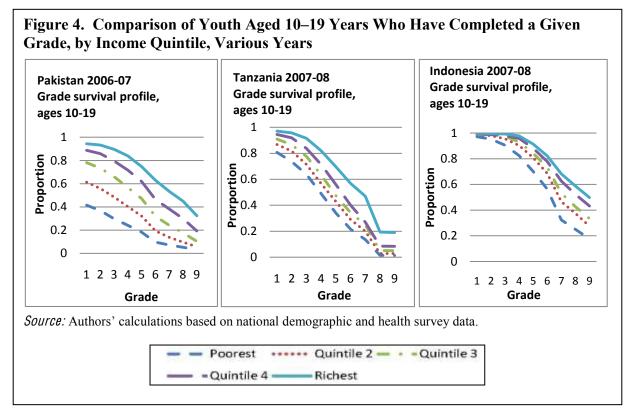
institutions. Spurred by the rise of new economic stars such as Brazil, Russia, India, and China (the BRICs), developing countries—including low-income countries—are more keenly aware

secondary and that tertiary education are critical to the development of skilled, productive, and flexible labor force and creation and application of ideas and technologies that contribute to economic (Rodriguez growth 2008; **COREHEG** 2010). Innovations in tertiary education can contribute to the "new economy skills" help countries become more competitive (see box 2). It also increases the supply of qualified teachers, professionals, and technicians, as well as the application of advanced knowledge.



- 9. Within countries,
- 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 also drop out early, although at varying rates across countries (see figure 4). 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 affect the rate at which school-age children enter primary school, but it does affect the rate at which they drop out and transition to secondary education. Research has shown that the responsiveness of school enrollment to the price of schooling (i.e., its price elasticity) is higher for low-income households, so eliminating fees or giving a cash subsidy to households conditioned on children's continued school enrollment will produce a larger proportional increase in the schooling of children from poorer families (Orazem and King 2008).
- 10. Educational progress lags even more among children and youth who face multiple sources of disadvantage related to gender, place of residence, disability, or ethnolinguistic background.<sup>6</sup> The education solutions for these groups are more complex, but past and ongoing programs offer useful lessons. 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 that compensate families for the opportunity cost of children's school attendance, 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).

11. For too many students, however, more schooling has not resulted in more knowledge and

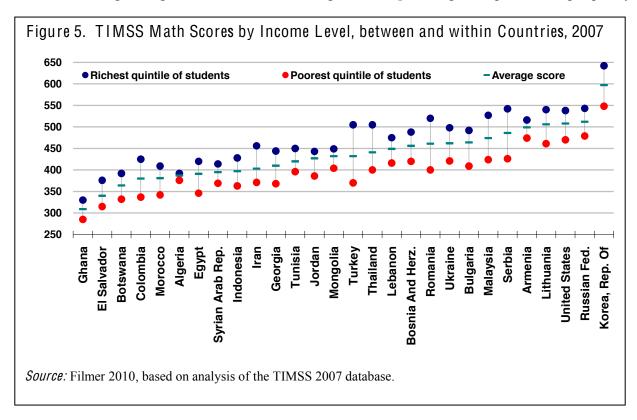
skills. The results of substantial resources spent on education have thus been disappointing in terms of learning outcomes. Youth are leaving school and entering the workforce without the knowledge, skills, or competencies necessary to adapt to a competitive and increasingly globalized economy. As a result, they will need remedial, second-chance, and job training programs to fill these gaps. Several studies illustrate the seriousness of the learning challenge. More than 30 percent of Malian

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

youths aged 15–19 years who completed six years of schooling could not read a simple sentence;

the same was true of more than 50 percent of Kenyan youths. In Pakistan, tests of grade 3 children found that only half could answer very basic multiplication questions (Das, Pandey, and Zajonc 2006). And a study in Peru found that only about 50 percent of children in grade 2 could read at all (Crouch 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 is relevant and of good quality.

12. Findings from country-based studies correspond with the results of 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. Figure 5 illustrates the wide gulf in international math test scores of students from different income levels, both between and within countries. For example, the graph shows that in Turkey, the average score is about 1.5 standard deviations below that of Lithuania and the United States. At the same time, the math scores of students from the richest 20 percent of families are 1.5 standard deviations higher than those of students from poorest 20 percent of families. Closing the learning gap in achievement by closing the learning gap between the poorest and richest students would put Turkey in a far better position relative to better-performing countries. The most recent PISA report, based on the 2009 assessment, reinforces this message about 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



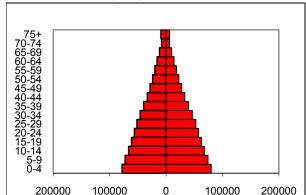
education to all students," rather than only to an elite (OECD 2010b, 9).

# Why a New Education Strategy?

- 13. 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 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 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, setting these components within the context of global economic and technological shifts and internal Bank changes.
- 14. 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. 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 populations 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.

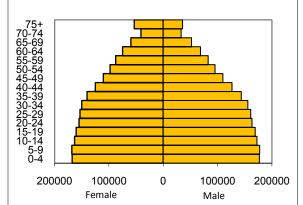
Figure 6. Demographic Trends in Low- and Middle-Income Countries

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



Female

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



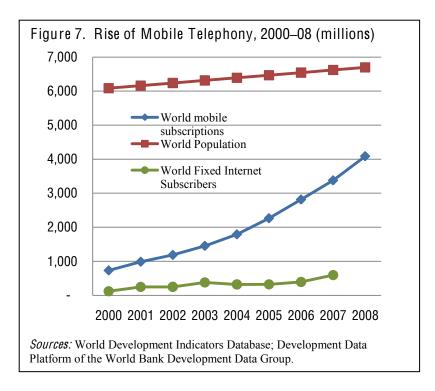
*Source:* World Bank, Health Nutrition and Population Statistics, Population Projection Tables by Country and Group, 2010–2050 (http://go.worldbank.org/KZHE1CQFA0).

Note: China is excluded from Panel B; including China would make the "youth bulge" even clearer.

- 15. Urbanization is another major demographic change: the urban share of the population of the developing world continues to grow rapidly, presenting both opportunities 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 economies of scale, with positive impacts for growth. The challenge will be for governments to increase learning and access for these growing urban populations while reducing wide rural-urban gaps in outcomes (World Bank 2009i).
- The emergence of new middle-income countries has also intensified the desire of many more developing nations to become more competitive by developing more highly skilled, agile workforces.<sup>8</sup> 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, at the rate of 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 7.2 percent in 2010 and 6.4 percent in 2011—more than twice the projected output growth of rich economies.9 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). It is all the more impressive that the recently completed replenishment process for the International Development Association (IDA) yielded an unprecedented funding level over 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, Dec. 15, 2010)

17. The technological landscape also shapes the potential demand for education. New information technologies have transformed—and continue to transform—how people live communicate, and 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, for instance, outpaced global population growth (see figure 7). Mobile telephony has been adopted even in the rural areas of poor countries, and its accessing for market information and banking services are 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.

18. The fact that international aid has become more diverse in recent years and that educational demands are growing makes it even more important for donors to harmonize and align their programs at the country level. Guidelines for how donors should work together have already been 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), <sup>11</sup> a global compact that aims to help low-income countries achieve the education MDGs. The initiative has provided financial support to 36 countries since 2004. The Bank is now working with its partners to address recommendations for major reforms made by a recent external evaluation of FTI; this

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.

new education strategy provides an opportunity to review the Bank's role in this global partnership.

- Inside the World Bank the operating environment has 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 in the global aid environment, and in part to accommodate the shifting nature of its policy dialogue with client countries. First, the Bank has continued to expand its staff to country offices, both through relocation of international staff and increased recruitment of local staff. At the end of FY10, about 40 percent of education staff (and an even greater percentage in East and South Asia) were located in field offices. Second, the Bank's operational instruments have been changing, partly in response to increasing 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 IFC set up a department focused on financing private education providers, and in 2004 the IFC made education sector one of its strategic pillars.
- 20. 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 World Bank Group 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 Group 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 Group, with priorities that support those of the institution overall.

# PART II. THE WORLD BANK'S EDUCATION STRATEGY

# Goal and Framework for the New Strategy: Learning for All

21. 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*.

- 22. 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 also contribute to an individual'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).
- 23. The "for all" part of the strategy's goal is crucial. Major challenges of access 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 those schools are of such poor quality. The learning for all strategy thus promotes the equity goals that underlie the education MDGs—and in fact elevates the MDGs by linking them to the universally shared objective of accelerating learning.

24. 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. However, the period between birth and young adulthood is especially critical because the

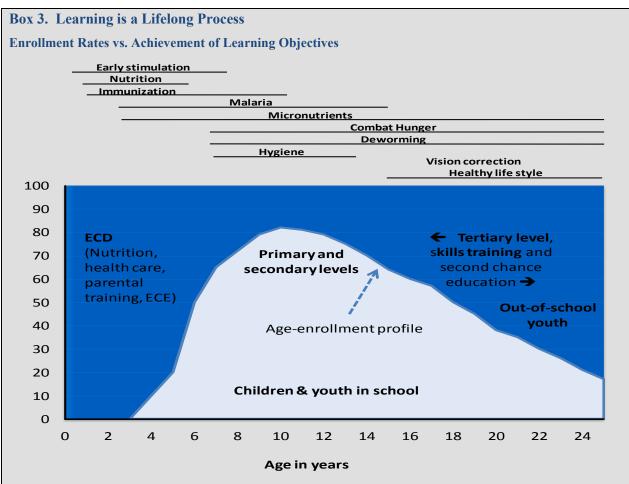
The new education strategy is built on the premise that people learn throughout life, not simply during the years that they spend in formal schooling.

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

- 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. <sup>12</sup> In other words, education is not only about learning the 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 and/or vocational skills related to an occupation are also important for success in the labor market.
- Learning is not only about schooling. 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. Likewise, 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 (or "second-chance") learning opportunities that take into account the reasons why they are not in school are needed. These reasons might include income poverty, gender, disability, and other sources of disadvantage, as well as perceived low market returns to education. The challenge is to consolidate basic knowledge and competencies learned in school, then equip these young people with additional technical or vocational skills that promote employment and entrepreneurship (World Bank 2011). Unfortunately, relatively few such programs have been rigorously tested, so the knowledge base on them is relatively thin.
- 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 nonstate or private sector is discussed in the next section.



Source: Authors' contribution.

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

Learning happens throughout life: a person's brain starts growing from conception 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.

Between the ages of 6 and 8, children need to acquire the basic reading, mathematics, and analytical skills that determine their ability to continue learning beyond this stage. Teachers who spend sufficient instructional time with their students using appropriate pedagogy are critical for developing these 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, in order to acquire the skills valued on the labor market (World Bank 2011). 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; OECD 2007; Perez-Brito and Goldstein 2010; Walker et al. 2007.

25. 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 argument in the debate focuses on eliminating shortages in the academic infrastructure (e.g., equipped classrooms, trained teachers, learning materials) as a means to improve learning outcomes. Yet the evidence for learning dividends from input-focused investments has been mixed, with the possible exception of settings with extreme shortages (Hanushek 1986, 1996; Kremer and Holla 2008). Another argument in the debate places less emphasis on the quantity of resources allocated to an education system and more emphasis on the system's ability to transform those resources efficiently into learning outcomes. That ability hinges on the capacity of the government to formulate education policy, set standards, implement quality assurance, develop plans, carry out financial management, conduct student

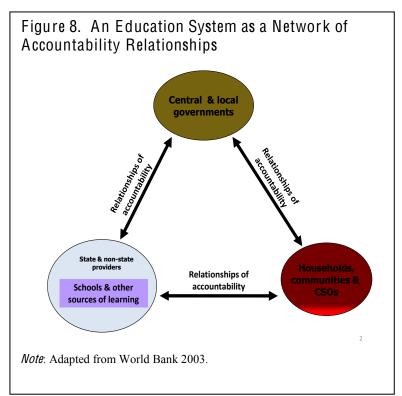
Learning outcomes have been typically measured in terms of reading and numeracy skills, but the knowledge and competencies that help people live healthy, productive, and satisfying lives are much broader.

assessments, manage human and financial resources, and engage in intergovernmental and external partnerships. A third argument highlights another issue: how greater autonomy at the provider level, together with competition for resources (e.g., through the use of performance incentives or vouchers), can generate strong provider motivation to improve service delivery (World Bank 2003; Orazem, Glewwe, and Patrinos 2007).

# Defining "Education System"

26. 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 that are concerned with the provision, financing, regulation, and use of learning services. Thus in addition the national and local to governments, participants include private education providers, and their families. individuals communities, and nonprofit and for-profit organizations. Not only is this larger network of stakeholders crucial to an education system in the broader sense; so too are the resources and accountability relationships that connect them (see figure 8). These resources and relationships, whether contractual or noncontractual, are what make the delivery of education services possible. In such system, a decision-making authority



frequently shared by a number of stakeholders, such as between regulators and private education providers, and even, in many cases, between regulators and system users (or learners). This broader definition of an education system differs significantly from the typical definition. Its elements are outlined in the paragraphs below.

27. *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 state-provided or -financed, the education systems of many countries include many privately provided or financed institutions and programs. In populous countries such as Brazil, India, Indonesia, or Nigeria, for example, 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.

28. *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

and Pakistan, 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. Lessons learned from the Education for All Fast Track Initiative (EFA FTI) show that providing information to a diverse set of stakeholders can improve the education dialogue and equip stakeholders with knowledge that helps them hold governments accountable for education investments and results

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29. *Third*, an education system has several core policy domains that together keep it system running. These policy domains include financial allocation mechanisms; performance incentives; 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; and how students are taught, treated in schools, and assessed. The quality of these policy domains and who are accountable for them are critical questions for education reform.

# Priorities of the New Education Strategy

The Bank Group's focus in education over the next decade will be to strengthen the capacity of education systems to achieve learning goals and help build a high-quality knowledge base on education systems. The new education strategy affirms the Bank's commitment to education through operational, financial, and technical assistance that make both government resources and international education aid more effective. The priorities of the new strategy were determined on the basis of two phases of internal and external consultations, as well as technical work on specialized themes carried out by staff across Bank units. 13 In the first phase (March-June 2010), the Bank, led by the Education Sector Board members, consulted with several stakeholders (including governments, the private sector, teachers, students, development partners, and civil society) on the overall approach of the strategy, as outlined in a concept note. During this phase, the World Bank held meetings in 24 countries with representatives from 69 countries. In the second phase (August-November 2010), the sector consulted with a similar audience on a draft strategy paper in 29 meetings at which 59 countries were represented. During both phases, other people sent additional comments to a Web site dedicated to the strategy. (Annex 1 lists the number of countries and regions represented in both consultation phases.) Throughout the consultations, education stakeholders raised several consistent questions, such as "How will the strategy balance access and learning goals?" or "How will the strategy address girls' education issues?" A Frequently Asked Questions (FAQ) section in annex 2 provides detailed answers to these questions.

# Priority 1: Strengthening Education Systems

- 31. Given the more comprehensive definition of the education system explained above, it is clear that strengthening an education system goes beyond investing in more and better teachers and infrastructure, critical though these investments are. These investments 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.
- 32. Strengthening an education system so that it efficiently delivers improved 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) need to be reformed so that functions, authority, and relationships of accountability within the system are clear and aligned with national education goals. Second, the effectiveness of these mechanisms in producing learning and skills outcomes must be measured and monitored at all levels, and the education system as a whole supported and funded appropriately. In this regard, 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 by lowering the cost of implementing student learning assessments.

## Box 4. Promoting Accountability in Education Systems

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—both with respect to 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, thus 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 about 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: (i) greater autonomy at the local level; (ii) enforcing relationships of accountability, and (iii) effective assessment systems. School-based management (SBM) aims to empower stakeholders at the local level through greater decision-making authority and more flexible financing, involving teachers and school administrators 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 produce better outcomes. Research around the world has

found that these 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—although the evidence on learning outcomes is mixed, with positive results observed in El Salvador, Nicaragua, Mexico, and Kenya, and no effects found in either Brazil or Honduras.

Sources: Andrabi, Das, and Khwaja 2008; Bruns et al, forthcoming; and Barrera-Osorio, Fasih, and Patrinos 2009.

- 33. 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. First, policies and regulations on quality assurance, learning standards, compensatory programs, and budgetary processes need to be transparently implemented and enforced. Second, implementation of these policies and regulations needs to be financed adequately (Alderman and Vegas 2010). And finally, compliance with these policies and regulations must be monitored and noncompliance sanctioned.<sup>14</sup>
- 34. The new strategy explicitly recognizes that the learning opportunities available to individuals go beyond those offered by the public sector, as well as beyond traditional formal programs. Past education strategies of the World Bank have very much focused on supporting formal schools that are funded and/or operated by governments. However, critical learning activities occur outside of formal schooling years, such as before the "official" age of school entry and after a young person has left school. When young people drop out of school early, many are unlikely ever to return. Other learning opportunities, such as work skills training, are consequently needed to help them 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 provided outside of traditional formal programs exist for various reasons and should also be considered parts of an education system. Supplementary tutorial services, for

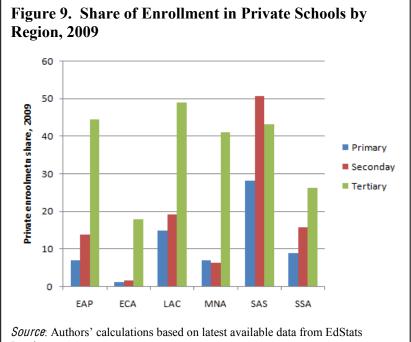
example, which are often privately provided, are prevalent in many countries, including South Korea, Turkey, Bangladesh, and the United States (Dang and Rogers 2008; Bray 2009).

35. A broader view of learning opportunities includes education services offered by the nonstate sector. This sector—which encompasses both for-profit and not-for-profit entities—functions alternatively as a provider, funder, and 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, including in these regions' low-income countries. It is

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.

significantly higher in secondary and tertiary education than in primary education (see figure 9).

36. Although it is often that the private assumed sector serves mainly students who can afford to pay, private entities important are providers of education services to even the poorest communities, especially in areas that governments do not reach. In many countries, subsidize governments nonstate contract organizations provide to education but cover much of the cost.<sup>15</sup> It is essential, however, that governments recognize their importance and provide appropriate regulation and oversight of private providers to ensure the efficiency and coherence of their education services. The private sector also



Database.

Note: EAP – East Asia and Pacific; ECA – Europe and Central Asia; LAC –

Latin America and the Caribbean; MNA – Middle East and North Africa; SAS –

South Asia; SSA – Sub-Saharan Africa.

successfully collaborates with the government to both improve the relevance of education services and expand access to these services. For example, private enterprises in Grenada are working with the government to set up a national training system that includes a board to evaluate graduates from programs financed by the government but provided by private sector trainers (Skills/TVET Community of Practice 2010). Lastly, the private sector can also be a significant source of financing for the education sector. The International Finance Corporation (IFC) of the World Bank Group, for example, has been facilitating private sector education investments in emerging economies since 2001.

37. These examples suggest that a system approach can broaden the potential agenda for action in education policy, enabling governments to take advantage of a greater number of providers and delivery channels. Demand for tertiary education and for technical and vocational education and training (TVET), for example, is growing in every region served by the Bank. Given the higher cost of these education services, countries are concerned about the cost-effectiveness of investments in these subsectors and the relevance of graduates' skills. One promising approach to tertiary education and TVET is for governments to leverage the growth of private institutions by implementing quality assurance and equality promotion systems. In tertiary education, a major challenge is to ensure sustainable financing. 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 (COREHEG 2010) are two ways of moving

toward this goal. 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. <sup>16</sup>

38. Finally, a system approach provides 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 their specific barriers. A well-functioning education system will therefore have policies or programs that specifically 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.

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

39. In sum, to strengthen an education system means to align its governance, management, financing, and incentive mechanisms to produce learning for all. This means reforming

accountability relationships among all participants in the system so that these relationships are clear, coordinated, and consistent with their assigned functions, and that they support national education goals. The effectiveness of these relationships—such as those between a government and the nonstate entities that it contracts to deliver education services—must then be monitored and measured in terms of learning outcomes, so that a clear feedback cycle between financing and results is established. In this manner, a system approach helps ensure that national education resources—both public and private—and international education aid are used effectively and efficiently. This thrust of the system approach thus echoes and implements the Bank Group's strategic priority of strengthening governance, laid out in its recent *Post-Crisis Directions* strategy paper.

40. At the operational level, the Bank will increasingly focus its financial and technical aid on reforms that promote learning outcomes and overcome obstacles to education among disadvantaged groups. In addition, the Bank will focus on helping partner countries build the national capacity to govern and manage education systems, implement quality and equity standards, apply measures of system performance consistent with national education goals, and support evidence-based policy making and innovations.

# Priority 2: Building a High-Quality Knowledge Base for Education Reforms

41. At the global level, the World Bank's priority will be to support the development of a knowledge base on education systems. This knowledge will include reliable and comparable

statistics on learning outcomes and the performance of education systems, as well as analytical work, practical evidence, and know-how about programs and policies.

- 42. 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, availability of these indicators averaged 64 percent during the period 2000–2006. This is an important achievement because reliable, comparable, and regular education statistics are essential for planning and monitoring progress. 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 target MDGs by 2015.
- 43. 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, EMIS can play an important role for accountability—for example, by providing information about location of teachers and students, to allow for a better balance of teacher to student ratio. Likewise, it can provide valuable information regarding the allocation of inputs in the system. 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 largely isolated, with no clear strategy for implementing "best practice" approaches or plans for training local technicians in the best use of an EMIS. Moreover, EMIS databases in developing countries frequently neglect the tertiary level, as well as nonstate and nonformal providers. Expanding EMIS to make it more inclusive of all parts of an education system is clearly a priority area.
- 44. Second, the number of sample-based household and school surveys fielded in developing countries has increased, some of which are now conducted on a fairly regular basis. These surveys have produced data that make it possible to analyze the factors that affect the educational

achievement of different segments of the student population. For example, individual-level data collected through these surveys has permitted governments to understand the extent to which disadvantaged populations can access educational services. It is when such individual and household information is linked to the 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. However, the scope of current surveys is quite narrow, providing only glimpses of the education services available to respondents and the barriers to their learning.

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

- 45. 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 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. Yet if the relevance of an education system to the world of work is to be accurately assessed, current measures of learning will need to expand beyond basic competencies. In particular, widely accepted comparable measures of important skills, such as problem solving, teamwork, and communication, are still notably absent from international assessments.<sup>17</sup>
- 46. Can information from assessments really influence education reforms? Yes, indeed, as a few examples show: In Uruguay, a large-scale reform of the education system was triggered in the mid 1990s, in part as a result of a study based on two assessments of student learning conducted in 1990 among a sample of 4th and 9th grade students (see Barrera et al. 2009 for a review of case studies). The reform entailed targeted policies toward 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 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.
- 47. In the next 10 years, the Bank will continue to support the development and use of EMIS systems. It will also support efforts to measure both student achievement (i.e., learning outcomes) and the overall performance of education systems on a regular and systematic basis. Most importantly, it will work with client countries to use data on student and system performance to inform education policies and investments. Specifically, the Bank will invest in the development of indicators that measure education system functions and learning outcomes (including skills that are not commonly measured), collect data that correspond to these indicators, and produce analytical work. As mentioned above, data on learning outcomes are still rare, sporadic, and very limited in scope in most partner

In the next 10 years, the Bank will continue to support the development and use of education management information systems (EMIS).

countries. This work will dovetail with the efforts of governments and international agencies to develop new indicators for the quality and performance of education systems.

48. One obvious data gap in education today is the lack of periodic, system-wide information on education financing—that is, information on costs, as well as 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 for decision-making processes. Efforts to promote the effective dissemination and use of these data among stakeholders in the education system are equally important.

49. Finally, 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. Technical and empirical analyses of development topics are a regular part of the work of Bank staff. In the past 10 years, they have engaged in a sizeable number 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). 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 to be evaluated. And while impact evaluations of basic and secondary education have grown in number, impact evaluations of interventions at the tertiary level in developing countries remain scarce.

#### Box 5. Using Impact Evaluations to Build the Knowledge Base on Education Systems

The World Bank 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 be fed back into 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 a sufficient number of 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, Filmer and Patrinos (2011).

## Applying the Strategy: Examples

- 50. To make the strategic approach more concrete, this section offers several examples of how the learning for all goal and the two strategic priorities can be applied in some 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.
- 51. 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 just being aware of them and analyzing how they affect each other. For that reason, the approach laid out in this strategy does not necessarily imply more complex projects and programs, which IEG warns 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 allows 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

- 52 *Private sector:* In leveraging the private sector, a system approach is crucial. If policy ignores the growth of private schools because "system" is defined too narrowly, that does not make the issues raised by private schooling go away. Instead, under the system approach, policymakers would use information and knowledge tools to assess that private-sector schooling growth, its causes, and its implications, as well as the adequacy of the regulatory and financing framework for private education. Armed with this information, policymakers and society at large can decide whether reforming this framework should be a top priority, or whether there is a more pressing need for improvements in other parts of the system. Many countries do not have information about how large their private sector is and often do not have clear regulatory frameworks for private schools. Better information about the private education market can help policy-makers learn lessons that might improve public sector performance and inform reforms at the 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 to for the private-education policy framework.
- 53. Fragile States: Knowledge tools and information are perhaps even more critical in fragile states, where one of the effects of conflict is broken communication links between governments, providers, and beneficiaries, reflecting both 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 the provision of services recovers quickly. In fragile contexts, where the needs are so great and families often have to assume the costs 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 non-government providers. At the same time, it helps Haiti make the from crisis to development by building the administrative capacity of the Ministry of Education, training communities to provide longerterm support in school management areas, 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 nongovernmental providers to ensure quality.
- 54. Gender equality: A recent review of programs to raise girls' education demonstrates that there is no shortage of ideas about interventions that could be effective in promoting gender equality in education. Girls Count (Lloyd and Young, 2009) examines an array of policies and programs that are meant to promote adolescent girls' education. But the ten actions recommended from the 300-plus programs reviewed are far-ranging—from scholarships for girls, recruitment and training of female teachers, girl-friendly curricula and pedagogical approaches that enhance learning and employment, after-school tutoring, to greater support for the nonformal education sector—and imply a need to view 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. A challenge for policymakers and the development community is to be able to identify the reforms and programs that are going to 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 legal, health, agriculture, and infrastructure. The multi-sectoral approach goes beyond economic measures to ensure equal access to schooling by helping to provide a safe and healthy environment for girls to attend schools and improving the economic returns to female education through raising education quality and linking education to the labor market. The strategy's emphasis on the development of system assessment and benchmarking with specific targets at equality and inclusion helps promote gender equality by identifying where the disparities are widest and what factors explain them, thus pointing to types of intervention that would be most likely effective.

55. Linkages between education systems and labor markets: Improving labor-market relevance is a key objective of the new Strategy. Currently, many young people in developing countries are leaving school and entering the workforce without the knowledge, skills, and competencies necessary to thrive in a competitive global economy. By focusing on learning, the new Strategy will turn attention from just enrollment and completion to whether school-leavers have the necessary knowledge and skills, and the aim is to increase the share of projects that include labor-market-related objectives. The system approach adopted by the Strategy reinforces this focus by recognizing employers as key stakeholders under the broader definition of the education system and by emphasizing accountability for outcomes. Under the Strategy, efforts are underway, in collaboration with development partners, to develop a framework and tools to measure the skills and competencies necessary to compete effectively in the labor market.

# PART III. LESSONS FROM PREVIOUS WORLD BANK GROUP WORK IN EDUCATION

56. 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 partner 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 the education sector in order to distill lessons learned; the following section then discusses key implementation issues of the new strategy.

## Past World Bank Group Strategies

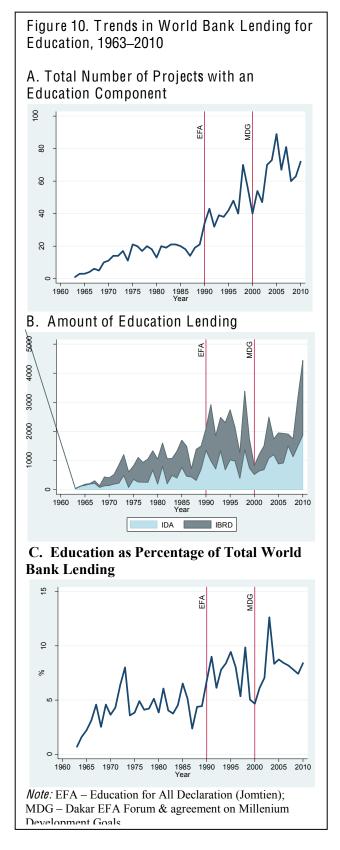
57. The new strategy for 2020 is informed by both the World Bank Group education strategy launched in 2000 (just before the adoption of the MDGs) and its update in 2005 (World Bank 2005a). The 2000 strategy stated that the Bank's mission in education was "to ensure everyone completes a basic education 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 strategy proposed the following operating principles: 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).

Table 2. Focus of World Bank Education Strategies

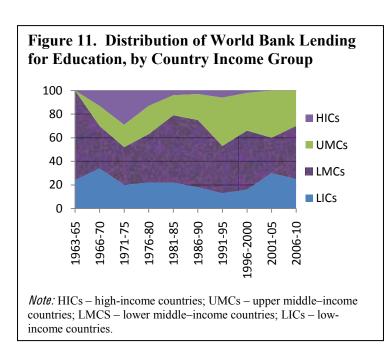
Table 2. Focus of World Balik Education Strategies							
	2000	2005 Update	For 2020				
Objective	Quality education for all	Education for all and education for the knowledge economy	Learning for all				
Priorities or themes	<ul> <li>Basic education (poorest, girls)</li> <li>Early interventions (early child development, school health)</li> <li>Innovative delivery</li> <li>Systemic reform</li> </ul>	<ul> <li>Integrate education into a countrywide perspective</li> <li>Adopt a sectorwide, or holistic, approach</li> <li>Become more results oriented</li> </ul>	<ul> <li>At the country level, strengthen education systems to achieve results</li> <li>At the global level, develop a high-quality knowledge base on education systems</li> </ul>				

- 58. The strategy update of 2005 later affirmed the Bank's commitment to education for all. The update deviated from the 2000 strategy by recognizing explicitly the desired of educational progress—a outcome 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). The emphasis on a holistic approach may be why an increasingly larger share of education lending fell 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 produced a more systematic inclusion of education outcome indicators in all education projects (or in Country Assistance Strategies).
- 59. Elements of the previous strategies are still relevant in the new strategy, but the new strategy offers a system framework for policy reform and investments. 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 greater attention to 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 also explicitly recognizes that the term "educational institutions" applies to



learning opportunities offered by organizations outside of the government sector and formal education institutions.

### A Brief History of Bank Group Finance for Education



60. The World Bank Group has been supporting educational development for 48 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 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 education components), with 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 International Finance Corporation (IFC) has invested \$500 million in 46 education projects with the private sector.

61. 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

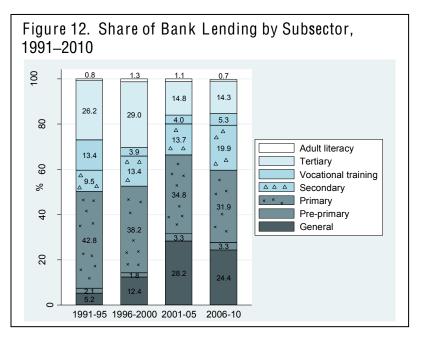
education lending, with IBRD lending showing greater volatility over the years (see figure 10, panel B). About 64 percent of all projects have been funded by IDA credits. In 2009 and 2010, total education lending reached an all-time high of \$3.4 and \$5.4 billion dollars (in current prices), respectively, in response to the economic crisis through a combination of additional financing and approval of large projects in Brazil, India, Indonesia, Mexico, and Pakistan. With economic recovery, alternative financial sources will become more available again for middle-income countries, and IBRD lending is expected to return to more sustainable levels for the Bank's administrative budget.

62. Low- and lower middle-income countries (as measured by per capita GDP) receive the largest share of

World Bank education
financial support rose in
response to the Education for
All challenge, with more
funding going to poorer
countries and those with
more children and youth.

Bank education lending (see figure 11). Moreover, the World Bank has been a steadfast investor and donor in 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.

63. Patterns and trends in the Bank's financial support 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 in countries with larger youth populations (ages 0–14) and to 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) were more likely to have received substantially more resources from the Bank over time (even before EFA FTI was created) than have non-eligible countries.

64. IFC education lending is projected to grow over the next five years, as education is one of IFC's five strategic pillars. Not surprisingly, the distribution of IFC's 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 which is projected to be the growth pillar of the portfolio. Nearly 38 percent of these investments were made in the Latin American region, 28

percent in Sub-Saharan Africa, and 14 in the Middle East and North Africa. The main focus of IFC's education strategy is to provide financing for larger network providers who have the ability to invest across borders and go down-market to reach poorer populations; financing for education to small and medium enterprises which typically target poor populations and to students through partner banks; and advisory services to companies to support quality of education and to banks to ensure responsible lending to the sector.

- 65. A portfolio note by the Independent Evaluation Group (IEG) was prepared to inform the new strategy and point to areas in need of improvement in the education sector. It was submitted
- to the Committee on Development Effectiveness (CODE) of the Bank's Board of Directors on December 29, 2010. The IEG had completed a number of earlier evaluations of education spending, including reviews of support for primary education (2006) and of lending for secondary (2004) and tertiary (2002) education. Among the findings of these evaluations are:
  - Since the last education strategy was adopted in 2000, three-quarters of all education projects that closed during Fiscal Year 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,

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.

- and the efficient use of project resources. There was a decline in the middle of the decade, but the most recent (FY 2009) project exits also had satisfactory ratings of 77 percent, back up from a much 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 at 85 percent, essentially at par with the Bank average, suggesting that the improved performance can be (or are likely to be) sustained.
- Nonetheless, IEG's note raises cautionary flags about the performance of education projects, especially in light of the new strategy. While *Learning for All* is the right goal, learning outcomes have not been easy to improve markedly. Less well-performing Bank projects have been those focused on learning outcomes and on interventions related to governance and management. 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, the response should not be to abandon the learning goal but to ensure that projects' learning objectives are realistic, and to identify important intermediate objectives in the results chain 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. But taking a system approach does not imply trying to reform the whole education system at once. The system approach looks beyond inputs to identify and remove the other barriers to improving education outcomes—barriers such as poor governance, critical information gaps, and a lack of accountability for outcomes throughout the system. 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 policy domains, but focus action on the areas where improvements can 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 cautions 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 usually poorest in the schools serving poorer and more marginalized communities. Indeed, the evidence is that learning outcomes, either on average or among the poorest and least-advantaged students, is the most disappointing. It is precisely in poor communities and schools where a more holistic perspective on teacher policies (recruitment, training, deployment, motivation and incentives for performance) is needed; where public resource allocated to education must reach the classrooms; and so on. Evidence shows that, even in low-income countries, a perception that students are not learning what they should be leads to more dropout or transfers to low-cost private schools that are perceived to be of higher quality.
- 66. The strategy promotes a more equitable and inclusive approach in several ways. Among these are: First, the Bank is allocating substantial, additional IDA resources through 2015 to help achieve the education MDGs, with a focus on the poorest populations. Second, the implementation of the strategy includes the development of a framework and system assessment tools to diagnose countries' policies and programs that address equity issues, build country-specific knowledge on these policies and programs, and provide guidance for policy and investments. A corresponding results framework is being developed. Third, the strategy promotes a multisectoral approach, which will help in removing obstacles to quality education for the poor that lie outside the education sector—such as poor health and nutrition, shortages in clean water and power supply, bad roads and limited transport services.
- 67. In addition, the Bank is taking concrete steps to address the risks to portfolio performance that may arise in relation to the strategy. A Bank-wide working group has been established to monitor and analyze portfolio performance and to provide guidance to task teams to address weaknesses in project design, implementation and supervision. A new core training course for Bank staff related to the strategy is being developed. 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 sector and country level, including careful reviews of Implementation Supervision Reports (ISRs).

### Contributions to the Education Knowledge Base

- 68. The World Bank's investment in education has not only been financial. Consultations for this strategy singled out analytical and empirical work 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, 19 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 in other sectors produced nearly 900 pieces of analytical work that included discussions of education topics. Indeed, many country reports, such as public expenditure reviews and poverty assessments, include a chapter on the education sector.
- 69. Several relatively recent regional reports, for example, have 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.
- 70. Bank-wide reports, such as the yearly World Development Report, have examined

#### Box 6. World Bank Staff have Contributed 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 likes to think of itself as a "knowledge bank" and has aspirations to be both a *generator* of new knowledge and a *synthesizer* of existing knowledge. The 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).

education issues and challenges as they relate to socioeconomic development, including the reports on workers and labor markets (1995); knowledge, information, and technology (1998–89); service delivery (2004); and youth (2007). Through external publications, Bank staff have also been important contributors to both the global knowledge base and policy debates on education (see box 6). All of these knowledge products underpin the Bank's lending and policy dialogue in education. Moreover, over the past decade, the Bank has seen a major shift in its analytical work; while the amount of Economic and Sector Work has not increased, Technical Assistance (TA) has become increasingly prevalent.

71. In addition to monitoring and analysis, the World Bank's global coverage means that it can broker 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. One message from the consultations for the new strategy is that the numerous participants and stakeholders in education, including civil society groups, business enterprises, and academics in the Bank's partner countries, are excellent sources of relevant knowledge and advice. The new strategy will consequently promote more systematic cross-regional and cross-country exchanges.

# Differentiating Priorities According to Need and Capacity

72. The strategy set out in this paper is a framework for World Bank investments in education over the next 10 years. 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 with the country. Thus, there is no single set of investments that the Bank will implement across all partner countries. Given immense differences among countries, it would be unwise to prescribe a one-size-fits-all

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

strategy. 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 10 years. As a result, part of the Bank's strategy is to ensure that there is continuous monitoring, evaluative analysis, and adaptation of Bank work at the country and global levels.

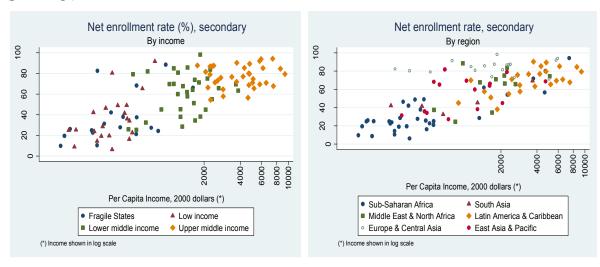
- 73. Per capita GDP levels yield a familiar grouping of countries into low- and middle-income countries. The education systems of countries with similar levels of economic development are likely to be at similar levels of maturity and to have a comparable capacity for reform. For example, in low-income countries that are still working to meet EFA and MDG targets, systems of student assessment are generally in the "latent" or "emerging" stage. 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.
- 74. Another way to categorize 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

#### Box 7. Country Groupings for the New Education Strategy

Past education sector strategies have largely been based on geographical groupings of countries. While useful, regionally based groupings do not fully exploit the World Bank's global coverage and its ability to connect countries with similar levels of economic and educational development across the world. Client 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 lines, closely corresponds to economic development, the Bank will consider 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 below 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.

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



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

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 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).

- 75. Political conflicts and catastrophic events 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" for any educational reform—is fraught with additional political challenges. Ironically, in countries experiencing fragile situations, education can be a powerful, cost-effective tool for speeding up social and economic recovery.<sup>20</sup>
- 76. The strategy therefore 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,

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

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 exchanges, allowing countries to learn from others that face similar challenges. 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 only briefly in the following paragraphs.

77. In countries experiencing fragile situations, the main challenge is likely to address 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. The priorities of the Bank's work in fragile states will be to: (1) help ensure a minimum level of resilience to keep the system running, using local stakeholders as leaders of the transition and institutional change; (2) shift from emergency responses to promoting learning and equality from the outset; and (3) rebuild and strengthen the system as it emerges from the fragile situation. 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.

78. In low-income countries, the main challenge is to achieve a *balanced expansion* of quality learning opportunities at all education levels with universal basic education of 7–9 years. To address this challenge, the priorities will 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 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, especially in countries that have not met the MDGs, and 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.

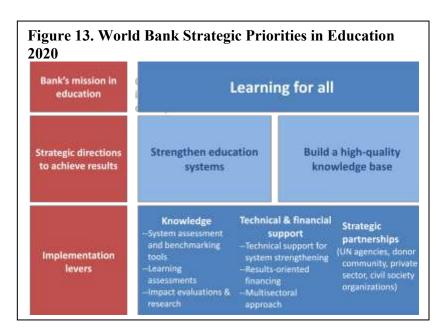
79. In middle-income countries, the main challenges are to improve the education system's capacity to contribute to workforce development and ensure that disadvantaged and low-performing learners have access to quality and relevant learning opportunities. The Bank's priorities in these countries will be to:

In low-income countries, the main challenge is to achieve a balanced expansion of quality learning opportunities for all at all levels, with universal basic education of 7 to 9 years.

- (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 education systems; (4) promote equality in 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 a workforce with the relevant skills and generate innovations that drive economic progress.
- 80. 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 challenges in many areas and useful lessons from past experience, consistent with the emphases of the new strategy, apply across countries.<sup>21</sup> 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 (ECD Community of Practice 2010). 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). Finally, ICT investments in education are a cross-cutting issue that has clear promise for accelerating learning, although much better monitoring and evaluation is needed to assess their impact and cost effectiveness. Investments in 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).

#### PART IV. IMPLEMENTATION LEVERS FOR THE NEW STRATEGY



The World Bank Group contributes to development in three principal wavs: 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 strategic priorities discussed in Part II. Each lever will involve specific actions over next 10 years, summarized in figure 13.

## Knowledge Generation and Exchange

- 82. In the area of knowledge generation and exchange, the Bank will focus its efforts on developing and applying three levers: a system assessment and benchmarking approach, assessments of student learning, and impact evaluations and other research.
- 83. The first knowledge lever consists of applying a system approach in which a conceptual framework, analytical methods, and measurement and monitoring tools are being 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 evaluation. This multiyear program is being implemented in partnership with national researchers, decision makers, external partners, and other actors.

- 84. The approach aims to assess institutional capacity and policies related to specific dimensions of the education system; diagnose its strengths and weaknesses against global standards, best practices, and the performance of comparator countries; and guide reforms aimed at increasing learning for all. The framework, analytical methods and measurement tools will not be applied in a one-size-fits-all manner. Instead, the country diagnostics and performance reports produced by this program will make it possible for stakeholders in a national education system to obtain simple, objective, up-to-date snapshots of how their system is functioning, how well it is performing, and what concretely the system can do to achieve measurably better results. Thus, the approach will be applied contextually, with diagnostics and interpretations that are appropriate to each country's starting point and constraints.<sup>22</sup> 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—teachers
    policies and management, assessments of student learning and achievement,
    education financing, equity and inclusion, monitoring and information, private
    provision, 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 the 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 the system approach involves five key stages. First, for each policy domain, a conceptual framework is elaborated based on the 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 corresponding system assessment tools and to 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 the assessment tools. The fourth stage is to communicate and disseminate the results of the pilots in order to build support for the system approach as a whole, and for the framework and assessment tool for each policy domain. Finally, the fifth stage is about promoting a global application of the system approach; to achieve this, a core competency program is being developed and will be available to Bank Group staff as well as to country and donor partners.

86. The program is still in its early stages. Efforts are

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.

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 are teacher policies and student assessments; they 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. 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. 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. Each country will, as desired, be able also 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, countries at the leading edge of educational performance).

87. The second knowledge lever is learning assessments. The World 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.<sup>23</sup> The Bank will 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

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.

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 assessments 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, curriculum, 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.

88. Third, research can help reveal the strategic choices for policy and investments—and assess the impact of those choices made. The World Bank recognizes that when human, financial and political resources are limited, how best to allocate and use those resources in order to achieve education goals is a question that deserves serious examination. The Bank has long been a major contributor to research on education issues. Global education research has also expanded, helped by more and better data on many dimensions of countries' education systems, and information technologies that are better able than ever before to store, process, and analyze those data. So 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, there are reasons to support also South-North learning.

89. One type of education research on developing countries that has been growing is the use of experimental and quasi-experimental methods to estimate the impact of policy reforms and investments. To date most such studies

More research is needed on the impact of institutional changes, such as the establishment of national assessments of student learning. 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, or 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 difficult to define the appropriate counterfactual. Fortunately, a number of evaluation approaches are available <sup>24</sup>

90. Beyond strengthening the basis for partnership and action domestically, planned knowledge tools and products will serve as a vehicle for coordinating and harmonizing the efforts of the development community. By identifying the parts of the education system that are weakest or the most critical for progress, the system assessment tools can help the government, aid agencies and other stakeholders identify and agree on priorities for action. Partnerships will help in carrying out the knowledge agenda as well; for example, the system assessment tools are now being piloted in a number of East Asian and Pacific countries through the collaborative efforts of the World Bank and UNESCO.

### Technical and Financial Support

91. To help strengthen education systems, the World Bank will apply three principles to the selection and design of education operations. First, the Bank will apply a system approach when prioritizing 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. This means that financial aid from the World Bank Group will be increasingly geared towards specific measurable results agreed upon with countries. Third, the Bank will respond to opportunities for using a multisectoral approach to achieve education

outcomes. This means working with the other sectors in the World 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 to generate broader policies that lead to employment and economic growth. Each of these principles is reviewed below.

92. First, 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

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

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 the policies would 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 in 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 to 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.

93. Second, the Bank will seek to strengthen the link between financing support and results. The recent global economic crisis has put a spotlight on the need for greater fiscal prudence in the future while addressing large issues of poverty reduction and economic development, 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 is conditional on measurable actions being undertaken" (Musgrove 2010, 1). In education, the Bank is already using different forms of results-oriented

The Bank will seek to strengthen the link between financing and results.

financing, but these efforts have not been widely placed. 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.

A few examples are: In the Bangladesh Secondary Education and Access Project (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 specific choices, such as keeping children in school longer than they would otherwise. The Jamaica Early Childhood Development Project (2008) disburses against predetermined agreed performance targets. Disbursements are made in budget line items that do not necessarily correspond with the budget lines used for buying 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 these providers to increase the access of poor students to upper secondary education. Other examples are cited in box 9.

94. Education outcomes are influenced by policies other than those directly under the purview of education ministries or agencies. That the availability and quality of early child nutrition and

health programs determine the school readiness of children has been mentioned earlier. School health and school feeding programs and safe water supply may be critical interventions for improving student attendance rates and performance. ICT applications in education can make service delivery more efficient. 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 or unemployment benefits and information programs about the skills demanded in the labor market affect expected returns to education and thus also educational choices.<sup>25</sup> 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 education outcomes should look not only at education policies and programs but also at those that pertain to health, social protection, employment, transport, water, public sector governance, and so on. But just the Bank's support for education should consider the policy options outside the realm of education interventions, the Bank's overall effectiveness would be served also by recognizing education's potential contributions to non-education outcomes—less poverty, more innovation and growth, better health, greater resilience to shocks, more effective governance, among others.

- 95. A multisectoral perspective and a system approach to education reform are two facets of the same lens for identifying the policy and investment choices in education. To embed this perspective, it is important to promote knowledge exchanges and operational collaboration across sectors within the Bank Group. Staff should be aware of the evidence about the linkages among the sectors and of 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 made as part of another sector's operation. The ongoing challenge is to raise the performance of those projects that use a multisectoral approach. The approach is made harder by requiring staff to engage the participation of not only education agencies but also non-education agencies. 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. Annex 3 outlines the linkages between the new education strategy and 17 sector strategies developed by other World Bank sectors.
- 96. The World Bank regional strategy for Sub-Saharan Africa is a good example of how the education strategy can put the multisectoral approach in practice. While it recognizes that education is a central element in the 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 in one of their two pillars, increasing *competitiveness and employment*, thus setting a platform for multisectoral analyses and investments. Other areas of alignment between the two strategies are the focus on learning and quality, expansion of coverage at the secondary and tertiary level, emphasis on governance as a foundation for development and linkages with the private sector and labor markets.

#### Box 9. A New Generation of World Bank Projects in Line with the Education Strategy 2020

The WBG will implement the ESS2020 strategy by building on a new generation of projects or programs that embody the system approach:

- 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 ongoing reforms that changed the way municipalities receive their funds to a per capita financing scheme and expanded the decision-making authority of school directors to manage school resources, by encouraging 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 and 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, 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 capacity development to 50 local governments, their education offices, parliaments, education boards, and representatives of school committees and head teachers in *Indonesia*. <sup>26</sup> Under decentralization, local governments have new responsibilities for achieving national education goals. Local governments will each receive a three- year grant to help them implement their Capacity Development Plan (CDP) to better allocate human and financial resources to the education sector, as well as to provide valuable information to external partners (i.e., donors, central and provincial governments) to inform the budget support to local governments.
- ✓ Leverage a greater number of providers and/or 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 will realign the TVET system based on occupational standards.
- ✓ Finance for results and emphasize achievement of learning outcomes: The Foundation-Assisted Schools (FAS) 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 International Finance Corporation (IFC), in partnership with the Islamic Development Bank (IsDB), 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 (E4E). 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 to address this problem and will guide the first joint Bank / IFC strategy in the region.

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

### Strategic Partnerships

97. 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 World 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.

98. 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 2009 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 becoming less dependent on the Bank. During the first years of FTI, the World Bank played multiple roles. This has changed. While the Bank continues

its roles as the trustee for the FTI funds and as the host of the FTI Secretariat for as long as these arrangements benefit the partnership, it no longer chairs the committees that allocated the funds. It fully supports the new governance structure that includes the selection of an independent chair and more representation by various stakeholders on its decision-making body.<sup>27</sup> The World Bank is still the supervising entity of the majority of FTI projects where the local education group designates the World Bank as the best placed institution to support the FTI-funded activities in that country, but it now shares this role with United Kingdom's Department for International Development (DFID), the Netherlands, and UNICEF. Indeed, the World Bank is eager for more partners to

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

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

- 99. 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, 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 4 for details on the education strategies of multilateral and bilateral agencies).
- 100. Bilateral development agencies tend to support particular aspects of 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 ensuring equality in providing quality education for all, with special attention to girls' education and states with fragile situations. In Asia-Pacific countries, the Australian Agency for International Development (AusAID) aims to help disadvantaged students to 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 access to basic education for underserved groups and enhancing overall educational quality to increase knowledge and productivity.
- 101. 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 for disadvantaged populations (Ferreira et al. 2009), and in Ethiopia the Bank has partnered with the United Kingdom's Department for International Development (DFID), the Netherlands, Italy, Finland and Russia to improve education quality and increase learning through system-wide reforms including teaching and teacher recruitment, the national assessment system, and the EMIS 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 analyses, 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 (PED), with Russia through the Russia Education Aid for Development (READ), and with Korea through the Korean Education Fund are focused on building the system diagnostic and benchmarking tools necessary for implementing the new Bank education strategy.

102. As mentioned above, the World Bank Group 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 contributes directly as providers of education services at different levels, while in others they partner with governments on service provision or to push for education system reforms. The private sector includes users of the skills produced by the education sector so it also can help sharpen the relevance and quality of curricula and of the

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

modes of delivery. For example, the spread of ICT use in jobs is one reason why schools and students are eager to be ICT literate or ICT proficient. Private donors, such as the Hewlett, MasterCard, and Qatar foundations, among others, also 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

103. How will the success of the 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 World Bank Group reaffirms its commitment to working together with the global community 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 farthest behind the targets. In addition, 2020, the success of the World Bank's education strategy will be assessed by the extent to which the Bank has implemented these priorities and contributed to *learning for all* in the developing world.

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

104. 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, which 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 5.

- Each *performance indicator* is associated with specific actions to be taken by the Bank and so are under the control of Bank staff. For example, one performance indicator will pertain to the number of core education policy domains (e.g., teacher policies) for which a system framework and assessment 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 the 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 the country, change in the way information from student assessments are used in training and deploying new teachers, and a greater availability of data about the scope and quality of the private sector at different education levels.
- 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 conflict can derail well-planned education reforms.
- 105. 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.
- 106. 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, and political will. Yet learning for all is the right agenda to guide the World 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

107. To achieve *learning for all* requires aligning the interests and priorities of stakeholders, policymakers 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 the surrounding political and economic environment in which policy decisions are made. It is not enough simply to get the technical details right; reforms must also navigate the challenges of a nation's capacity to implement and its 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 are made; and the historical legacies that affect a society's culture and ideology (Barrera-Osorio et al. 2010). An education policy or program may not directly benefit all participants and stakeholders in the system, and the local capacity to take the actions implied by policies and investments may be limited or concentrated in a few parts of the government and society. Yet, for reforms to be successful and durable, broad-based ownership and support, active or tacit, are valuable, if not essential.

108. Another aspect of political economy is to identify and take advantage of the windows of opportunity for significant reform. Reforms are easier to introduce when there is a new government or when there is a demand for broader change as is the case during crises and so 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 et al. 2009). These are barometers of an education system's readiness for change.

109. Within the World Bank group, two areas for concrete actions are: First, to provide Bank Group staff with incentives, knowledge, and tools to adopt and apply a system approach to educational progress. As mentioned earlier, a new core training program for Bank education staff for applying a system approach is being developed. The greater deployment of staff to country offices implies using different communication or training modes for carrying out this capacity development program. Also, a more multisectoral approach means both that education staff should be more knowledgeable about broader development issues and that non-education staff should be more informed about specific education issues. Second, to continue to develop the framework and system assessment tools for more policy domains, to pilot them in developing countries, to engage with experts and stakeholders to validate and garner support for them, and to 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 Bank Group 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 note, this means strengthening the results framework in education projects in support of learning for all; integrating portfolio tracking and reporting and increasing management oversight at sector and country levels; choosing the operational instruments that are appropriate to the development objectives of the project; using the practical know-how among staff to improve the design and implementation of projects; and sustaining country policy dialogue and engagement.

#### Box 10: How the Strategy's Education System Approach Will 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 it currently has 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 an objective roadmap for reforms that countries can implement to improve performance in a particular policy domain, which over the medium term can lead to improvements in the education system as a whole.

A systems approach would consider three aspects of a reform in any policy domain or across the education system:

- (1) the enabling environment for reform: 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 instruments and processes needed for it to succeed

A review of a highly successful World Bank Group-financed operation – as determined by ex-post evaluation - exemplifies the value of using a systems approach in the formulation of projects or reforms. The Secondary Education project in Chile, initiated in the mid-1990s, aimed to improve the quality at secondary level by applying a system approach.\* The project financed a total revamp of Chile's national assessment system and its alignment with 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 this 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 openended questions to promote problem-solving skills, regular evaluation of 10th grade student performance, results reporting that specified the percent of students' reaching 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. The university entrance exams were also aligned to the new curriculum, and Chile started to participate regularly in international assessment programs (TIMSS, PISA).

\* Project P006673, Secondary Education Project, IBRD, financed with a \$35 million loan, approved May 9, 1995, June 30, 2001, ICR Report No. 22979

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

#### Performance indicators

## Changes in Bank Group actions to support countries

- Knowledge development to strengthen country education systems
- a. Number of education system tools developed and launched <sup>a</sup>
- b. % of Bank knowledge products that use system tools in the analysis
- % of knowledge products that use learning outcomes in analyses of basic education.
- Organizational development to strengthen country education systems
- % of Education Sector staff who have completed a competency program on the education system approach and tools and on Monitoring & Evaluation (M&E) methods
- 3. Technical and financial support to strengthen country education systems
- % 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
- % of education projects or programs that have a 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 non-lending) from the Bank Group
- e. % of education projects or programs that finance outputs/outcomes

#### **Outcome indicators**

# Changes in policy and programs of countries receiving Bank Group support

- 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 Millennium Development Goals (MDGs) that have taken new steps since 2010 to addressing the obstacles to attaining those goals

#### Impact indicators

Ultimate goals monitored in countries receiving Bank Group support

- a. % of countries (or beneficiaries in countries) with increases in measured learning or skills since 2010 (or since the earliest available baseline)
- % of countries that have reduced schooling or learning gaps for disadvantaged populations (e.g., income groups, gender, ethnolinguistic groups, disability) since 2010 <sup>c</sup>
- % of countries furthest from reaching the education MDG 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. One system tool, "Teacher Policies Around the World," 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 Bank will commit US\$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 to support innovative interventions in these countries. Lessons from some countries indicate that demand-side interventions such as girls' scholarships, conditional cash transfer programs, and school grants can successfully address obstacles to school enrollment and 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.

## ANNEX 1: EXTERNAL CONSULTATION MEETINGS

Region	Number of countries represented		Number of countries that hosted a consultation meeting	
-	Phase I	Phase II	Phase I	Phase II
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: FREQUENTLY ASKED QUESTIONS ON THE WORLD BANK GROUP'S EDUCATION STRATEGY 2020

This Frequently Asked Questions (FAQ) annex of the World Bank Group's Education Strategy 2020 (ESS2020) focuses on a set of questions that were asked more frequently than other questions during the consultations on the strategy. There were two consultation phases that engaged stakeholders representing about 90 countries. This annex aims to distill and summarize, in one place, what the strategy has to say about specific topics, and thus allow the main text of the strategy to be as succinct as possible.

#### 1. What is the "strategic" component of ESS2020?

The strategic component of ESS2020 is its focus on strengthening education systems as a means to improve education outcomes. The strategy has two overarching goals: (1) system reform beyond the provision of inputs and (2) building the knowledge base for reform. First, while inputs are crucial, the system approach focuses attention on increasing accountability and results as a complement to providing buildings, schools, teacher training, and textbooks. Strengthening education systems means aligning their governance arrangements, financing, incentives, accountability mechanisms, and management tools with the goals of improving access, equity, and learning. It also means establishing a clear feedback cycle between financing and results. These efforts must cover the entire education system—formal public schooling as well as the full range of learning opportunities available in a country, both public and private, from preschool through tertiary education and the labor market. Second, the Bank will help develop a high-quality knowledge base to underpin policy, innovations, and investments in the education sector. These efforts will include impact evaluations, learning assessments, and new System Assessment and Benchmarking tools. Aligning the Bank's efforts with these two strategic directions will help make both government resources and international aid for education more effective.

2. How does ESS2020 address the Millennium Development Goals (MDGs) and support countries to reach the two education MDGs?

By including MDG-focused indicators, the Bank Group's new education strategy reaffirms its commitment to helping countries meet MDG 2 (universal primary education) and MDG 3 (gender parity in primary and secondary education). In September 2010, at the UN MDG Summit, World Bank President Robert Zoellick pledged that the World Bank would step up its support to help low-income countries achieve the education MDGs by committing an additional \$750 million in IDA financing for education through 2015, an increase of more than 40 percent in IDA support for basic education compared to the previous five-year period. To ensure that these additional IDA resources yield high impact, the Bank will work closely with development partners, in particular with the Education for All Fast Track Initiative global partnership. The ESS2020 indicators will be used to measure the Bank's success and the progress of partner countries over the coming decade. The indicators require the development of relevant knowledge, targeted technical and financial support, and strategic partnerships to help all countries achieve these two MDGs. The Bank realizes that

business as usual will not suffice to meet the MDGs. As the world gets closer to universal primary completion, it will be tougher to reach the remaining out-of-school children and ensure quality learning for all. Innovative approaches to raising enrollment rates, primary completion, and learning outcomes that have had results in other countries need to be examined and scaled up. Additional funding from the Bank should prioritize innovative policies, approaches, interventions, and support in areas where evidence indicates that they will have the highest impact.

3. How does ESS2020 relate to the Education for All Fast Track Initiative (EFA FTI)? In 2002, the Bank played a pivotal role in founding the Education for All Fast Track Initiative (EFA FTI), a global compact that aims to help low-income countries formulate credible education sector plans to accelerate their achievement of the education MDGs. It has provided financial support to 36 countries since 2004 to implement their plans. The Bank is a proud member of this strategic global partnership and supports the major reforms that EFA FTI has undertaken to strengthen its governance, effectiveness, and impact. ESS2020 reaffirms the Bank's support for EFA FTI as part of its commitment to help low-income countries achieve Education for All goals and the education MDGs. The Bank also sees EFA FTI as a strategic mechanism to implement the Paris Declaration of 2005 and the Accra Plan of Action of 2008, helping it harmonize and align its programs with those of other development partners at the country level.

#### 4. Is expanding access to education still a key priority for the World Bank?

Yes. Universal access to a quality education is critical and the World Bank remains committed to achieving the EFA goals and the education MDGs. The new thrust of Learning for All implies that all children should both attend school and receive a quality education that provides them with the knowledge and skills to enable them and their families to lead healthy, productive lives. At the same time, the new strategy enables the Bank to differentiate and respond to the specific and varied needs, capacities, and demands of its partner countries. In low-income countries and fragile states, for example, the demographic pattern indicates a great need to continue expanding learning opportunities for children and youth under 15 years of age, while simultaneously improving the quality of those opportunities and expanding post-basic education services to accommodate the graduates who want to attain more education. In middle-income countries, where the demographic profile is generally older and basic education is already universal, the most pressing demands are frequently expanding access to secondary and tertiary education, improving the learning and skills outcomes of those levels of education, and reducing disparities in these outcomes. Middle-income country data indicate that demand for education at these levels is growing rapidly.

## 5. How will ESS2020 address disparities and disadvantages suffered by marginalized populations?

Learning for All is about reducing inequalities in access to quality education. Leaving low-income youth, girls, people with disabilities, ethnolinguistic minorities, or other disadvantaged or marginalized groups at the fringes of the education system will impede a

country's ability to achieve educational progress and socioeconomic development. The newly released PISA 2009 results suggest that countries that have seen the greatest advances in learning outcomes are those that have addressed the barriers to learning of low-performing students and have focused on the distribution of educational outcomes in the system. ESS2020 promotes a more inclusive, equitable approach to learning opportunities by going beyond the educational services delivered by the public sector and traditional formal programs to take advantage of a larger, more innovative menu of programs—such as those run by civil society organizations—that can be used to reach marginalized populations, often with greater results. The new strategy also encourages a multisectoral development approach, recognizing that the obstacles to education among marginalized populations go beyond those addressed by education programs to include, for example, bad roads and limited transport services, poor health and nutritional deficiencies, and shortages in clean water and power supply.

## 6. How does ESS2020 address gender disparities and promote girls' and women's education?

Although most developing countries have achieved considerable progress in reducing the gender gap in school enrollment, significant gender gaps remain in particular regions and at particular levels of education. At the primary and secondary levels, 28 percent and 22 percent, respectively, of low- and middle-income countries are off-track or seriously offtrack from meeting MDG 3 by 2015. The Bank is committed to helping countries reduce the barriers to girls' and women's education. Depending on the context, priority actions may include building more schools and classrooms; hiring more female teachers; or providing families with a subsidy in the form of an unconditional or a conditional cash transfer to send their girls to school. ESS2020's system approach reveals not only which interventions are likely to be most effective in lowering the barriers to girls' education, but also whether an education system has the capacity to undertake those specific programs. For example, in places where a conditional cash transfer (CCT) program might otherwise be the most promising intervention, low government capacity to implement and monitor CCTs without excessive leakage may make a program too costly. Another example is that increasing the number of female teachers in remote areas may be difficult to implement unless the families of female teachers are offered sufficiently attractive incentives to migrate to the targeted areas.

#### 7. What does ESS2020 imply for investments in ICT in education?

Given the much wider use of ICT in the workplace, a person's facility for using technology is fast becoming a basic competency. The use of ICT in education offers a clear promise for accelerating learning, especially if countries draw on the global lessons highlighted in the ESS2020 background note on ICT and education. At present, because ICT initiatives in developing countries have been focused much more on supplying schools with computers and Internet connectivity than on integrating technology into curricula at all education levels, ICT has so far largely failed to realize its promise as a twenty-first–century pedagogical tool. Moreover, the potential uses of ICT in education are not limited to the classroom. ICT can also allow much better and more timely monitoring of the various dimensions of a national

education system and is therefore a valuable tool for implementing a system approach to education reform. For example, ICT can lower the cost of implementing student learning assessments and can better link those assessment results to both teacher development and the allocation of education resources. ICT can also make it much easier to supply up-to-date information on teacher professional development programs to prospective trainees, as well as enable learning opportunities outside of formal school settings.

#### 8. How does ESS2020 address education beyond formal schooling?

Learning is not only about schooling. The strategy emphasizes that an education system includes the full range of formal and nonformal learning opportunities available to children, youth and adults in a country—whether those opportunities are provided and/or financed by the state or nonstate entities (e.g., private individuals, private enterprises, community organizations, faith-based organizations). Evidence clearly points to the benefits of investing in early childhood nutrition and development programs, as brain development happens before age 6. Evidence also shows that youth who drop out of school early are more vulnerable to unemployment, poverty, teen marriage, pregnancy, and delinquency, so it is critical to prevent school dropouts and provide second-chance learning opportunities that take into account the reasons why youth are not in school (e.g., income poverty, gender, other sources of disadvantage, and perceived low market returns to education). The challenges are to help children get an early start in life, consolidate basic knowledge and competencies learned in school, and equip young people with technical, vocational, and lifelong learning skills.

## 9. ESS2020 proposes grouping countries by their economic and educational development levels. How will this affect the World Bank's regional organization structure?

The World Bank will continue to provide support to countries through its current regional groupings. However, ESS2020 proposes to explicitly recognize the significant commonalities across countries that have similar levels of economic development (as measured by GDP per capita) and a similar maturity of their education systems. This maturity will be measured by system assessment and benchmarking tools that the Bank is currently developing with education experts, governments, and donor partners. Analyses that use these alternative country groupings are expected to yield lessons that can inform the design and implementation of Bank technical and operational support to partner countries. Additionally, these commonalities can be used as a basis for more knowledge exchange between countries that are facing similar challenges, regardless of their geographical location. One repeated message from the strategy consultations is that education's multiple participants and stakeholders, including CSOs, business enterprises, and academics in the Bank's partner countries, are excellent sources of relevant knowledge and advice. The new strategy will thus promote more systematic, evidence-based, cross-regional, and cross-country exchanges.

### 10. How does ESS2020 support countries' own education strategies?

ESS2020 is country driven. Because the consultation process drew on the experiences and insights of participants representing many countries, their concerns and demands strongly inform the priorities and strategic directions laid out in the strategy paper. The strategy

proposes to equip World Bank team leaders with the core skills and resources necessary to meet country demands, using new tools and a clear vision of an education system approach. Dialogue, and especially technical exchange, will be enriched through this new approach. Moreover, the strategy is informed by the System Assessment and Benchmarking for Education Results (SABER) Program, which is producing system assessment and diagnostic tools in conjunction with the Bank's partner countries.

11. Why does ESS2020 emphasize links between education and other sectors, such as social protection and health?

ESS2020 emphasizes a multisectoral approach in recognition of the fact that education outcomes are greatly influenced by factors beyond education policy and services. For example, a person's cognitive development is affected by their brain development, nutritional and health status, and early childhood stimulation. During schooling years, a child's ability to attend classes regularly and do well depends on whether that child suffers from hunger, malnutrition, and disease, so nutrition programs, health care services, and water and sanitation facilities are relevant to education. For poor and disadvantaged youth, cash transfer programs that compensate households for out-of-pocket expenditures associated with schooling can increase their attendance. For youth in remote rural areas, especially girls, the availability of transport facilities and roads can make the difference between being enrolled in school or not. For youth who are in the process of deciding to proceed to tertiary education, the availability of information about alternative training programs and the returns to education in the labor market can directly help their decision making. The affordability of computers and Internet connectivity are likely to affect the use of these technologies in pedagogy. Finally, the state of public sector management and the civil service system has a direct effect on the recruitment, compensation, and promotion of education personnel.

- 12. How does ESS2020 address the links between education and the labor market? Education should provide the tools that enable individuals to lead healthy, productive lives and excel in the labor market. These foundational skills are gained in a person's first 24 years, and education plays a crucial role in laying that foundation. The competencies that individuals should acquire go beyond learning; they include the capacity to solve problems, think critically, and interact effectively with others. Currently many young people are leaving school and entering the workforce without the knowledge, skills, or competencies necessary to adapt to a competitive and increasingly globalized economy. These youth will need remedial, second-chance, and job training programs to fill those gaps. ESS2020 will address these needs through an assessment that measures the skills and competencies necessary to compete effectively in the labor market. The Bank's new SABER Program will develop tools to help countries make this measurement possible.
- 13. How does ESS2020 address governance, corruption, and community empowerment? The World Bank believes that improving governance and accountability is essential to an effective education system, a process than includes empowering students and their families to hold the education system accountable for providing quality education. ESS2020 is based on

the proposition that to strengthen an education system means to reform the mechanisms that connect the various parts of the system (specifically, governance, management, financing rules, and incentive mechanisms) so that functions, authority, and relationships of accountability within the system are clear and consistent. The effectiveness of these mechanisms in producing learning and skills outcomes must then be measured and monitored at all levels. Two powerful mechanisms for improving the accountability of providers in an education system are transparency of information and school-based management. Strengthening a system also involves establishing a clear feedback cycle between aid financing and results, as well as to ensure that resources are allocated effectively, efficiently, and transparently. These concepts build on the framework elaborated in the World Bank's *World Development Report 2004* on service delivery.

### 14. How is the ESS2020 aligned with the Bank Group's recent strategy paper, New World, New World Bank Group: Post-Crisis Directions?

The education sector strategy echoes and implements several of the World Bank priorities outlined in the Post-Crisis Directions paper:

- "Target the poor and vulnerable": The "For All" part of "Learning for All" goal is strongly oriented toward this priority, and the strengthened knowledge base will help identify ways to remove the barriers that prevent the poor and vulnerable from learning.
- "Create opportunities for growth": The productivity and growth effects of schooling depend on students (especially girls and women) acquiring useful knowledge and skills, which the Learning for All goal will promote. By contrast, schooling without learning is likely to be a drag on growth, by consuming budgetary resources with no return. And the SABER work on education finance and other areas is aimed squarely at the "improving public finance" thrust of this priority.
- "Promote global collective action": SABER and other knowledge work under the strategy are global public goods: the Bank is innovating and creating new multicountry assessment frameworks, tools, and benchmarks that can be widely used by others, but that no country will have enough incentive to create on its own.
- "Strengthen governance": The system approach, SABER tools, and impact evaluations will focus attention and collect data on the quality of governance—the essential link between more inputs and better education outcomes—and will provide good-practice examples for strengthening governance. Specifically, the ESS is entirely about "Improving results and capacity for effective service delivery in critical sectors", which the Post-Crisis Directions paper stresses.

### 15. How will the Bank help countries implement the system approach called for in the strategy?

To implement the system approach, the Bank will concentrate its support in three areas: knowledge generation, technical and financial support, and partnerships (see figure 13). 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 education systems to improve learning outcomes;
- assessments of student learning and achievement that cover the basic competencies of reading and numeracy, as well as other skills, such as critical thinking, problem solving, and team skills; and
- *impact evaluations and other research* that can inform policies and interventions, together with *knowledge exchange* and debate that facilitate effective use of existing knowledge by partner countries and organizations.

Knowledge generation is an essential tool for increasing the effectiveness of *all* spending in a country's education sector, not just Bank financing. In turn, the Bank will use this knowledge to guide technical and financial support for partner countries, including:

- technical and operational support for system strengthening, prioritized on the basis of their expected contribution to advancing learning goals;
- results-oriented financing; and
- a multisectoral approach to educational development that provides the right incentives, tools, and skills to Bank staff to work across all sectors that impact education outcomes.

Finally, the Bank will continue to forge *strategic partnerships* in the development community at both the international and country levels to improve education systems in ways that promote learning.

16. How will the World Bank hold itself accountable for successful strategy implementation and improving educational opportunities in partner countries? Success of the strategy will be measured against 17 proposed indicators. These include *performance* indicators; outcome indicators; and impact indicators. Performance indicators are specific Bank actions that help countries strengthen their education systems. Examples include the percentage of education projects that use learning or skills assessments. Outcome indicators consist of specific Bank actions combined with country actions, knowledge-based advocacy, and strategic partnerships. Examples include the number of countries that have applied learning or skills assessments or have improved their education systems. Impact indicators are the Bank's ultimate goals, which require multiple actors working together, in addition to sufficient knowledge, resources, political will, and leadership, among other factors. Examples include the percentage of students that have increased measured learning or skills or countries that have reduced learning disparities or have improved the skills level of their labor forces. Table 1 of the strategy lays out the full set of indicators. Progress against these indicators will be reported on a periodic basis in a transparent manner. With this tiered results chain, the Bank will hold itself accountable with respect to its direct interventions under the strategy, as well as share accountability with its country and global partners for achieving the goal of Learning for All, which requires collective action.

# ANNEX 3: MULTISECTORAL APPROACHES: LINKAGES BETWEEN EDUCATION STRATEGY 2020 AND OTHER BANK GROUP STRATEGIES

Sector (in alphabetical order)	Strategic priorities	Linkages to the Education Strategy 2020
Agriculture Action Plan 2010–2020	<ol> <li>Raise agricultural productivity</li> <li>Link farmers to markets and strengthen value chains</li> <li>Reduce risk and vulnerability</li> <li>Facilitate agricultural entry and exit and raise rural nonfarm incomes</li> <li>Enhance environmental services and sustainability</li> </ol>	Education contributes to agriculture Higher-order skills:  Support technology adoption  Improve the relevance and effectiveness of agricultural advice to farmers  Support regional clustering of economic activity (e.g., territorial development)  Agriculture contributes to education: Higher rural productivity and incomes:  Make education more affordable  Raise demand for agricultural technical skills
Climate Change (strategic framework)	<ol> <li>Support country-led climate action</li> <li>Mobilize additional concessional and innovative, market-based finance</li> <li>Leverage private sector resources</li> <li>Accelerate development and deployment of new technologies</li> <li>Step up policy research, knowledge, and capacity building</li> </ol>	<ul> <li>Education contributes to climate change: Higher-order skills:</li> <li>Improve access to appropriate information and technologies</li> <li>Ensure adequate capacity to plan and prepare for projected changes in climate</li> </ul>
Energy Strategy Approach Paper	<ol> <li>Improve the operational and financial performance of the energy sector</li> <li>Strengthen governance</li> </ol>	<ul><li>Energy contributes to education:</li><li>Educational institutions need a reliable and low-cost supply of power</li></ul>
Environment Strategy 2001 (new strategy still in progress)	<ol> <li>Improve the quality of life</li> <li>Improve the quality of growth</li> <li>Protect the quality of the regional and global commons</li> </ol>	<ul> <li>Education contributes to environment:</li> <li>Environmental education increases environmental awareness and capacity</li> <li>Environmental technical training supports preparation for and response to climate change</li> </ul>
Gender Equality as Smart Economics: A World Bank Group Gender Action Plan (Fiscal years 2007- 10)	<ul> <li>Goal: Advance women's economic empowerment by enhancing women's ability to participate in land, labor, financial and product markets.</li> <li>1. Engender operations and technical assistance in economic sectors</li> <li>2. Implement results-based initiatives (RBIs)</li> <li>3. Improve research and statistics</li> <li>4. Undertake a targeted communications campaign</li> </ul>	<ul> <li>Education contributes to gender empowerment:</li> <li>Skilled women will have better chances to participate in productive markets</li> <li>Eliminating gender disparities in education (MDGs 3) is a highly effective way to empower women</li> <li>Gender empowerment contributes to education:</li> <li>Children of empowered women have better education and health outcomes.</li> </ul>
Governance and Anti-Corruption 2007	<ol> <li>Recognize that a capable and accountable state creates opportunities for the poor</li> <li>Country-driven governance and anticorruption policies and implementation</li> <li>Support even poorly governed countries</li> <li>Engage with a broad array of stakeholders</li> </ol>	<ul> <li>Education contributes to governance:</li> <li>System approach is consistent with better accountability and transparency</li> <li>Governance contributes to education:</li> <li>Empowers community/civil society groups to improve system performance</li> </ul>

5. Harmonize and coordinate approach with
governments, donors, and other actors at
country and global levels

- Supports improved transparency and accountability in education system
- Supports adequacy, efficiency, and equity in education financing

## Health, Nutrition, and Population Results 2007

- Improve level and distribution of HNP outcomes (e.g., MDGs), outputs, and system performance
- 2. Prevent poverty due to illness (by improving financial protection)
- 3. Improve financial sustainability of sector and its contribution to macroeconomic and fiscal policy and country competitiveness
- 4. Improve governance, accountability, and transparency of sector

#### Education contributes to health:

- Girls'and women's education improves knowledge and use of health care
- Mothers' education reduces child mortality HNP contributes to education:
- Pre- and post-natal nutrition ensures healthy early child development
- School health services improve attendance and school performance

#### Information and Communications Technology 2010

- 1. Connect: expand affordable access to ICTs
- 2. Innovate: across the economy and promote the growth of IT-based service industries
- Transform: support ICT applications to transform efficiency and accountability of services

#### Education contributes to ICT:

- Develops ICT-related skills and promotes use
- Creates capacity for content development ICT contributes to education:
- 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

#### Private Sector Development 2002

- 1 Extend the reach of markets: sound investment climate for poor areas to create jobs and entrepreneurial opportunity.
- Basic service delivery: where it makes sense, new entry of private providers, including small- or medium-scale local entrepreneurs.
- 3. PSD and environmental sustainability

#### Education contributes to PSD:

- 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

#### PSD contributes to education:

- Increases supply of learning opportunities
- Continues IFC investments in private education projects
- Enterprise training facilitates school-to-work transition

#### Science, Technology, and Innovation Action Plan 2009

- 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

#### Education contributes to STI:

- Trains the next generation of scientists, engineers, technicians, and policy makers
- •Strengthens the capacity of local scientific and engineering institutions to conduct R&D STI contributes to education:
- •Creates knowledge for content development
- •Creates demand for science education at all levels

Social Development Strategy 2005	Improve macro-level analysis that incorporates social development into poverty reduction and/or development strategies     Promote efficient mainstreaming of social development into projects     Improve research, capacity building, and partnerships	<ul> <li>Education contributes to SD:</li> <li>System approach supports inclusion and accountability</li> <li>Strategy emphasizes inclusion and equity in country and global analyses</li> <li>SD contributes to education:</li> <li>Social analyses help identify factors affecting demand for education and consequences of policy options</li> </ul>
Social Protection and Labor Strategy: Emerging Issues for 2012	<ol> <li>Build prevention against income shocks</li> <li>Build protection from destitution and catastrophic losses in human capital</li> <li>Promote improved opportunities and livelihoods, notably through access to better jobs and opportunities</li> </ol>	<ul> <li>Education contributes to SP+L:</li> <li>More education, especially for poor and disadvantaged people, supports prevention, protection, and promotion goals</li> <li>Skills provide competencies that respond to changing labor market demands</li> <li>SP+L contributes to education:</li> <li>Targeted cash transfer programs have education incentives</li> <li>Labor market information improves educational choices and relevance of services</li> </ul>
Transport Business Strategy 2008–2012	<ol> <li>Create conditions to increase support for transport investment</li> <li>Deepen engagement in the roads and highways and urban subsectors</li> <li>Diversify engagement in transport for trade</li> <li>Transport and climate change: control emissions and mitigate impact</li> </ol>	<ul> <li>Transport contributes to education:</li> <li>Better transport services increase access to learning opportunities</li> <li>Reduces risks of travel, especially for young children, women, and girls</li> </ul>
Urban and Local Government Strategy 2009	<ol> <li>Focus on core elements of the city system: management, finance, and governance</li> <li>Make pro-poor policies a city priority</li> <li>Support city economies</li> <li>Encourage progressive urban land and housing markets</li> <li>Promote a safe and sustainable urban environment</li> </ol>	<ul> <li>Education contributes to urban strategy:</li> <li>Knowledge helps people improve living conditions, even in slums</li> <li>Affordable schools and training programs improve urban life and livelihoods</li> <li>Urban strategy contributes to education:</li> <li>Encourages public and private investments in education, health, water, and sanitation services</li> </ul>
Water Resources Sector Strategy 2004	<ol> <li>Focus on management, together with connections between resource use and service management</li> <li>Develop and improve management of infrastructure</li> <li>Recognize political economy of management reform</li> </ol>	<ul> <li>Water contributes to education:</li> <li>Reliable water supply needed in educational facilities</li> <li>Education contributes to water:</li> <li>Knowledge of hygiene increases demand for reliable water supply</li> </ul>
World Bank Post- Crisis Directions Paper 2010	Goal: Overcome poverty 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	<ul> <li>Education contributes to post-crisis strategy:</li> <li>Strengthens multidonor partnerships (Fast Track Initiative)</li> <li>Improves service delivery through greater school autonomy and parents' associations</li> <li>Invests in impact evaluations</li> </ul>

• Expands economic opportunities for girls and

 Helps countries respond to demand for secondary and tertiary education

• Cushions short- and long-term impacts on most vulnerable through CCTs and school grants

*Sources:* Mandell and Watkins 2010; World Bank 2001, 2002, 2004, 2005b, 2007a, 2007b, 2008, 2009a, 2009b, 2009c, 2009i, 2010a, 2010b, 2010g.

# ANNEX 4: EDUCATION STRATEGIES OF MULTILATERAL AND BILATERAL AGENCIES

Development agency	Education strategy priorities
Asian Development Bank (ADB)	<ul> <li>Increase and continue to align its support in the education sector</li> <li>Emphasize strengthening quality, inclusiveness, and relevant skills</li> <li>Adjust subsector priorities while recognizing major differences in education needs across countries</li> <li>Utilize new and innovative models of service delivery and financing</li> <li>Promote regional cooperation and cross-border collaboration</li> </ul>
Inter-American Development Bank (IADB)	• 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> <li>Reform and transform higher education systems in Africa by:         <ul> <li>Strengthening national and regional centers of excellence for training in selected priority areas</li> <li>Building and/or rehabilitating existing science and technology infrastructure</li> <li>Linking higher education to the workplace</li> </ul> </li> </ul>
U.K. Department for International Development (DFID)	<ul> <li>Strategic priorities to help realize the vision of quality education for all:         <ul> <li>Access to a basic cycle of primary and lower secondary education, with an emphasis on states with fragile situations</li> <li>Quality teaching and learning, particularly for basic literacy and numeracy</li> <li>Skills that enable young people to benefit from opportunities, jobs, and growth</li> </ul> </li> </ul>
Alliance Française de Développement (AFD)	<ul> <li>Complete universal enrollment by 2015 and achieve equity between boys and girls</li> <li>Enhance access to productive and decent employment and adaptability to changing needs in labor market through apprenticeships</li> <li>Provide capacity building and technical assistance to governments</li> </ul>
Danish Development Policy	• 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> <li>Improve the functioning of national education systems to enable more girls and boys to complete primary school and progress to higher levels of education</li> <li>Improve the relevance and quality of education, including in vocational and technical education</li> </ul>
New Zealand Aid (NZAID)	<ul> <li>Assist core bilateral partner countries to achieve the Education For All goals</li> <li>Support post-basic and tertiary education, with a particular emphasis on achieving gender equality at these levels of education by 2015</li> </ul>
U.S. Agency for International Development (USAID)	• Promote equitable access to quality basic education and enhance knowledge and skills for productivity

#### Ministry of Foreign Affairs of Japan

- 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

- 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

Sources: EC 2010, DFID 2010, IADB 2010, Ministry of Foreign Affairs of Denmark 2010, Ministry of Foreign Affairs of Japan 2010, New Zealand Agency for International Development 2004, USAID 2005.

## ANNEX 5: STRATEGY INDICATORS WITH MEASURES, BASELINES, AND TARGETS

	formance Indicators tions to support partner countrie	is)	
Indicator	Means of verification	Baseline	Target 2015/2020
1. Knowledge development to strengthen country edu	ication systems		
(a) Number of education system tools developed and launched <sup>a</sup>	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) (b) When education sector analyzed (CEMs, PERs, other formal sector studies)	(a) 0 (b) 0	(a) 25/75 (b) 10/25
(c) Percent of knowledge products that use learning outcomes in analyses of basic education	(a) In the education sector (ESWs) (b) When education sector analyzed (CEMs, PERs, other formal sector studies)	(a) 20 (b) 5	(a) 30/70 (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	The World Bank's Learning Management System	0	30/90
3. Technical and financial support to strengthen cour	ntry education systems	<u> </u>	•
(a) Percent of education projects or programs that have learning- or skills-related key performance indicators (KPI)	Project appraisal documents (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 <sup>c</sup>	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*: 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 Around the World," 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.

(Continued ...)

b. All subsequent mentions of "online databases published on the World Bank Web site" refer to the online SABER database. c. System tool mentioned in the Quality Enhancement Review (QER) of the PADs.

Outcom	e and Impact Indicators		
Indicator	Means of verification	Baseline	Target 2015/2020
Outcomes: Changes in policy and programs of country	ies receiving Bank Group suppor	t <sup>c</sup>	
(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 Web site, 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 <sup>d</sup>	Education online databases published on the World Bank Web site, 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 Web site, 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 addressing the obstacles to attaining those goals	Education online databases published on the World Bank Web site, updated periodically; World Bank projects database	0	70/90
Impact: Ultimate goals to be monitored in countries re	eceiving 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 Web site, updated periodically	0	25/40
(b) Percent of countries that have reduced schooling or learning gaps for disadvantaged populations (e.g., income groups, gender, ethnolinguistic groups, disability) since 2010 <sup>e</sup>	Education online databases published on the World Bank Web site, 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 Web site	0	5/15

*Notes:* c. Includes both technical and financial support.

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

e. Beginning in 2010, the Bank will commit US\$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 to support innovative interventions in these countries. Lessons from some countries indicate that demand-side interventions such as girls' scholarships, conditional cash transfer programs, and school grants can successfully address obstacles to school enrollment and 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.

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#### ENDNOTES

- <sup>7</sup> See CNE, PHARE, and RTI International (2009). The assessment was carefully adapted to the Malian context by local and international experts, using locally developed passages and word lists (not translations from an English assessment). It should be noted that French is not a mother tongue in Mali and that grade 2 is a very early grade in which to test a student in a language that is not his or her mother tongue.
- <sup>8</sup> 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).

  <sup>9</sup> The global financial crisis that struck in 2008 has weakened the growth prospects of rich countries in the near
- <sup>9</sup> 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).
- <sup>10</sup> 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.
- <sup>11</sup> 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 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 new donors. Funding has been channeled through existing bilateral and multilateral channels and also through the FTIs Catalytic Fund and the Education Program Development Fund, although these two funds will soon be replaced by one FTI Fund. (EFA FTI 2009; also see the EFA FTI Web site at http://www.educationfasttrack.org.)
- <sup>12</sup> "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).

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> See, for example, Hanushek and Woessmann (2008), Krueger and Lindahl (2001), and Pritchett (2001).

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> In Latin America and the Caribbean, gender inequality tends to derive from boys having significantly lower enrollment or completion rates than girls.

<sup>&</sup>lt;sup>5</sup> 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).

<sup>&</sup>lt;sup>6</sup> 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 (forthcoming) on the negative impact of disability on schooling attainment.

See references in Barrera-Osorio, Fasih, and Patrinos (2009).

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.

Examples of projects that have been evaluated include demand-side interventions, such as conditional cash transfers (CCTs). 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 lowincome countries (Fiszbein and Schady 2009). On the supply side, projects that have been evaluated include publicprivate 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).

This figure includes funding from both the World Bank's own resources and Trust Fund resources.

- <sup>20</sup> 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 Principe, Sierra Leone, Solomon Islands, Somalia, Sudan, Tajikistan, Timor-Leste, Togo, Tonga, West Bank and Gaza, Republic of Yemen, and Zimbabwe.
- <sup>21</sup> For details, see the background notes prepared for this strategy.
- <sup>22</sup> The set of system tools being developed by the Bank is entitled the System Assessment and Benchmarking for Education Results (SABER).
- <sup>23</sup> As part of this effort, the Bank Group will continue to help countries improve their education management and information systems (EMIS) as a tool for management and planning. The Bank Group will identify best practices for country EMIS, produce best practice guidelines, and develop appropriate training modules for users. The Bank Group is already partnering with UNESCO's Institute of Statistics (UIS) 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).
- <sup>24</sup> Examples include the strategies applied to measuring the impact of the green revolution in India (Foster and Rosenzweig 1996) and the optimization of school network policy on dropouts in Bulgaria (Schady et al. 2009).
- <sup>25</sup> Indeed, there are numerous linkages with the social protection sector. First, 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).
- <sup>26</sup> This trust fund is funded by the Netherlands government and the European Commission.
- <sup>27</sup> See Combridge Education, Mokoro and Oxford Policy Management, 2010.

<sup>&</sup>lt;sup>13</sup> Some of these staff teams produced the Background Notes listed under References. Working groups of staff around the issues that pertain to middle-income countries, low-income countries, and fragile states prepared presentations based on several discussions held throughout the year.

<sup>15</sup> 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).

<sup>&</sup>lt;sup>16</sup> Skills/TVET Community of Practice (2010). For more details, see the background notes prepared for this strategy.

<sup>&</sup>lt;sup>17</sup> The Commission on Growth and Development (2008, 38, 40) criticizes the sector strongly for inadequate measurement of learning: