

# A GLOBAL COMPACT ON LEARNING

**TAKING ACTION ON EDUCATION  
IN DEVELOPING COUNTRIES**



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*The views expressed in this report do not necessarily reflect the official position of Brookings, its board or the advisory council members.*

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We had to leave behind all of our possessions. The only thing we could bring with us is what we have in our heads, what we have been taught—our education. Education is the only thing that cannot be taken from us.

—*Woman who fled from Darfur to Chad, 2004 (Women’s Refugee Commission)*

## Education Is Essential for Development

The case for education, as expressed in the quotation above from a Sudanese woman in Breijing refugee camp in eastern Chad, is simple. First and foremost, education is a fundamental human right and the birthright of every child. It is also the springboard for human development, creating the conditions for progress in health and gender equity<sup>1</sup> and it plays a key role in helping to tackle some of the world’s other pressing challenges such as climate change, food security, and peace building. Economic growth and poverty reduction depend on an educated and skilled workforce. In developing countries, one additional year of education adds about 10 percent to a person’s earnings.<sup>2</sup> For a woman farmer in Ethiopia, this can mean being able to provide adequate nutrition, health care, and education for her children. There are more young people on the planet than ever before with 1.3 billion of the world’s twelve to twenty-four year olds living in developing countries.<sup>3</sup> Investing in their knowledge, skills, and competencies has been called the “education growth premium” and no developing country has sustained high rates of growth without investing heavily in educating its young people.<sup>4</sup> Improving even the most basic educational outcomes can help. For example, if all children in low-income countries

left school knowing how to read, something which currently does not happen, then 171 million people could move out of poverty.<sup>5</sup> There is broad agreement—and significant evidence—that education enhances people’s ability to lead happier, healthier, and more productive lives.<sup>6</sup>

## Education Is at a Crossroads

A fundamental shift in social norms has catapulted education, and every child’s right to one, into public discourse. In the mid-1900s, schools in developing countries were expected to only serve a small number of elites. Today, however, rarely are the merits of educating all children questioned; parents demand it, community leaders advocate for it, and national leaders proclaim universal schooling as one of the main mechanisms for ushering their countries into the modern era.<sup>7</sup> During the past decade, remarkable progress has been made in getting more children into school. There has been a surge in primary school enrollments, more children are progressing through to secondary school, and gender gaps are narrowing. This progress has been driven by mutual commitments, which has sometimes been referred to as a global compact on education, made in 2000 between developing country governments and aid donors. The poorest countries of the world agreed to



put in place the national education plans and budget strategies they needed to progress toward achieving the goals of the Education for All (EFA) movement, and particularly the education Millennium Development Goals (MDGs); and likewise, the developed countries and other multilateral aid donors pledged that no country would be thwarted in its achievement of these goals by a lack of resources.<sup>8</sup> Many of the poorest countries have increased their public spending on education; collectively, they have raised the share of national income allocated to education from 2.9 to 3.8 percent since 1999.<sup>9</sup> These achievements demonstrate that when the global community joins forces and commits to action, powerful results can be achieved. Globally, of all the MDGs, those focused on education are the closest to being met, prompting some leaders to focus urgent attention elsewhere.<sup>10</sup>

However, such gains should not mask the magnitude of the challenge ahead to address the unfinished global agenda of providing quality education to all. Sixty-four million primary school-age children and 72 million lower secondary school-age children remain out of school in low-income countries and many who do enroll drop out before completing primary school. And though some countries and regions have made significant progress, it has been highly uneven—particularly educationally marginalized girls from poor, rural households and children and youth living in conflict-affected areas. Those children who are in school too often leave both primary and secondary levels without acquiring the basic knowledge, skills, and competencies—such as reading, writing, mathematics, problem solving, and critical thinking—that would allow them to continue to learn, grow into healthy adults, and lead safe and productive lives. Every day, families make enormous sacrifices to send their children to school. But all too often, these sacrifices are rewarded with low levels of learning. By some estimates approximately 200 million children who are in primary school are learning so little that they are struggling to read basic words.<sup>11</sup> This is a serious problem given that recent international evidence shows that learning levels matter more than years in school for individual wages, health outcomes, and national economic growth.

Today the global community is not prepared to address these education challenges. High-level political leadership is missing with education featuring very little in the agendas of the Group of Eight (G-8), Group of Twenty (G-20), and the UN secretary-general. There is no set of internationally agreed upon metrics for tracking the learning progress of young people, an important indication of the quality of education services. Very few developing countries have the policymaking tools they need to assess the effectiveness of their education systems in promoting learning opportunities for those out of school and improving learning outcomes for those in school. For example, in over 190 countries national health accounts give a complete picture of the sources and uses of health financial resources providing decision-makers with invaluable information for improving health systems. National education accounts on the other hand are only used in five countries.<sup>12</sup>

Some developing country governments—including Pakistan, Zambia, and the Central African Republic—allocate less than 2 percent of gross domestic product to education.<sup>13</sup> The developed countries that give aid are falling behind on their commitments to education. The Organization for Economic Cooperation and Development suggests that aid donors are approximately \$19 billion short of their commitment to increase aid to \$50 billion (2004 prices), and UNESCO estimates that there is an external financing gap of \$16 billion a year to support basic education needs in low-income countries, over and above what developing country governments and donors currently resource.<sup>14</sup> The Education for All Fast-Track Initiative, a central feature of the multilateral education aid architecture, has made recent and impressive reforms but to date has failed to mobilize sufficient resources to meet the education needs of developing countries.

The private sector and “mega-philanthropists,” which have been important sources of assistance for global health care, have not yet played a similarly catalytic role in education. In the United States alone, corporations contribute approximately \$500 million annually to education in developing countries—a significant amount, but a stark contrast

to their estimated \$7 billion annual contribution to global health.<sup>15</sup> In addition, corporate giving to education tends to be scattered and uncoordinated, with only a limited focus on the most successful education strategies to improve learning for all. Global education has also not yet appeared to capture the philanthropic imagination of any of the billionaires who have joined Bill Gates and Warren Buffet in pledging a percentage of their wealth to charity.<sup>16</sup> Education has failed to mobilize sufficient public attention, even though expanding opportunities for high-quality education for the world's poorest children and youth should be one of the great public advocacy issues of our time.

### A New Global Compact on Learning Is Needed

These challenges amount to nothing short of a global learning crisis—which affects children and youth who are out of school with limited learning opportunities and those who are in school but not learning the skills they need for their futures. It is time for an expanded education agenda that centers on the goal of learning for all as the new minimum threshold to which the education community must aspire. A global breakthrough is needed to achieve the actual goal of education—that every girl and boy should make the transition to adulthood equipped with the skills, knowledge, and competencies needed to live a healthy, safe, and productive life. Learning, which is not the same as testing, is a lifelong exercise and even the world's poorest children deserve the benefits a quality education can provide. This paradigm shift would build on the tremendous progress of the last decade and fulfill the promise of education that parents, communities, and governments have fought so hard to give to all their children.

No development issue merits more urgent attention—and business as usual will not get us there. Therefore, we propose a new “Global Compact on Learning” that can provide the broad framework to catalyze and sustain targeted, coordinated action among a wide range of actors, including those outside the education sector, on improving learning opportunities and outcomes for all children and youth,

especially the poorest and most marginalized. There is a promising window of opportunity to ensure that collective action can create new synergies and efficiencies that translate into powerful results. There is emerging energy on the importance of learning for all from grassroots organizations in developing countries to new policy directions by major aid donors to increasing interest from private sector advocates and global leaders. It is imperative that these actors work together toward a common goal of improved learning for all and while each can focus on a piece of this broad agenda, a breakthrough will not be achieved if they compete and pull in different directions.

This Global Compact on Learning would call for all actors—developing country governments, developed countries and other aid donors, the private sector, civil society organizations, the research community, and parents, teachers, and communities around the world—to embrace, support, and enact, within their spheres of influence, three priorities to improve learning for all children and youth, including those out of school: (1) help children get an early start on learning in life, (2) ensure that basic literacy and numeracy are learned in school, and (3) equip young people with relevant skills for their lives and livelihoods. Though by no means exhaustive, if done within the larger efforts of education system reform and appropriately for each local context, acting on these three priorities can make an enormous contribution in addressing the learning crisis that affects the world's poorest children and youth.

### This Report's Purpose and Process

This report seeks to help set the agenda for a proposed new Global Compact on Learning. It identifies three key priorities and suggested actions to improve learning outcomes for all girls and boys in the developing world, which have been selected based on a careful review of the latest evidence as well as extensive input from a wide range of global actors. The report's main objective is to provide a broad framework for action that can galvanize attention and bring together the many diverse actors committed to improving education in poor countries. The agenda offered is broader than the education MDGs,

which are necessary but not sufficient for achieving quality learning for all. It is by no means exhaustive but identifies education priorities and corresponding promising strategies that are important across many developing countries for improving learning opportunities and outcomes. Although *what* is to be done is often universal, and certainly must be embedded in larger contexts of national education reform, the *how* it is done is highly context specific. Thus each country must assess the relevance of the key priorities and identify the best ways to pursue an equitable learning agenda for its own citizens.

The case for a new Global Compact on Learning is both urgent and compelling. Education is quite literally a life-or-death issue. A child born to a mother who can read is 50 percent more likely to survive past age five.<sup>17</sup> It also is the key to poverty reduction, economic growth, and greater stability. We cannot afford to wait another generation to ensure that all girls and boys are learning and equipped with the skills, knowledge, and competencies needed to live healthy, safe, and productive lives.





## OVERVIEW

The main arguments presented in this report are summarized in the overview and explored in much more depth in the chapters that follow. Together these arguments present a powerful rationale for redoubling our efforts in education, meeting the education Millennium Development Goals, and most importantly, shifting the global education paradigm toward the goal of learning for all as the new minimum threshold to which the international community must aspire. A Global Compact on Learning would provide both a broad framework and a series of concrete steps for achieving this vision.

**There is a global learning crisis, which is hitting the poorest, most marginalized children and youth particularly hard.** Driven by the Education for All (EFA) movement and the Millennium Development Goals (MDGs), significant progress has been made during the last two decades in getting millions more children into school, ensuring that they stay in school, and narrowing the gender gap in enrollment. Progress, however, has been highly uneven within and across countries, and too many children still drop out before completing primary school—a waste of human potential and investment. Furthermore, going to school has not necessarily translated into learning in school. For example, in some Sub-Saharan Africa countries, children with five years of education had a 40 percent chance of being illiterate. The severity of the learning crisis is even more striking when we consider that “the average child in a poor country learns less than about 95 out of 100 children in rich countries.”<sup>18</sup> The latest data reveal a learning crisis around the world that risks reversing significant gains in access to learning—and indeed in improving lives—in many countries.

**This learning crisis has three dimensions.** First, millions of children and youth still lack access to learning opportunities. Some never enter a classroom and others start school but drop out before they can finish. Most often, children who live in poverty are the most educationally marginalized. Second, those who are in school often do not acquire the foundational skills—including literacy and numeracy—that would enable them to successfully continue in school. Moving from learning to read to reading to learn is a crucial transition that education systems are failing to help millions of children to make. Third, few children make it beyond primary school with secondary education largely benefiting the wealthiest 20 percent of the population. Flexible post-primary education options, including formal secondary school, are both in limited supply and often focus on developing young people’s knowledge and skills in areas that are neither needed in their daily lives nor appropriate for preparing them for the world of work.

**“Learning for all” should be the new goal driving the global education agenda.** The most recent data on education, particularly in low-income countries, show that quality and equity are the major challenges. The right of every child to a high-quality education is affirmed in numerous human rights treaties and recognized by governments, as exemplified in the six EFA goals adopted by 164 nations eleven years ago in Dakar. Although access to both formal and non-formal learning opportunities is essential, evidence around the world has shown that it is not sufficient to meet the actual goal of education—that every girl and boy should make the transition to adulthood equipped with the skills, knowledge, and

competencies, both cognitive and noncognitive, needed to live a healthy, safe, and productive life. Meanwhile, advances in enrollment and completion will only be achieved where there is attention to quality.

**Learning is essential to reap the many benefits of education.** Nurturing a joy of learning in a very young child can lead to lifelong learning that enables children, youth, and adults to continually build their knowledge, skills, and competencies to survive and thrive in the world. Data show that learning levels—not necessarily years in school—are what drive many social and economic returns on investments in education. It is the quality of education (measured by student achievement test scores) that is strongly linked to increases in individual wages and economic growth.<sup>19</sup> Furthermore, there is growing evidence that literacy skills, rather than conventional years in school, are strongly correlated with subsequent lower fertility rates and improved child-health outcomes, including reductions in infant mortality rates.<sup>20</sup> Girls dropping out early can have a negative impact on economic growth; for example, Cameroon, Democratic Republic of Congo, and Nigeria lose \$974 million, \$301 million, and \$1,662 million, respectively, by failing to educate girls to the same standards as boys.<sup>21</sup> Although the number of years in school has been used as a proxy indicator for quality, in the face of the global learning crisis, additional measures are needed that focus on acquiring relevant knowledge and skills needed in a rapidly changing world.

**A focus on equity is needed to achieve learning for all—and gender and conflict merit particular attention.** In both developed and developing nations, income levels are a primary determinant of educational opportunity and achievement. Several other factors, particularly in the developing world, interact with poverty to limit children's learning opportunities including living in rural areas, being a member of an ethnic or linguistic minority, or having a disability. There are two factors—gender and conflict—that particularly stand out as they magnify existing educational disparities in many countries and affect millions of children. In at least 49 countries, being poor and female carries a double disadvantage with

education attainment for girls in the poorest households below not only the national average but also below boys in the poorest households<sup>22</sup>. Despite significant progress toward gender parity in primary school enrollment during the past two decades, there are millions of missing girls in the education systems of some regions. For example, in Sub-Saharan Africa and South and West Asia, more than 54 million girls are not attending primary or lower secondary school, missing out on important learning opportunities.<sup>23</sup> For those in school, learning achievement differs for girls and boys depending on the contexts. In some parts of the world, such as the Caribbean, boys are falling behind girls while in some parts of Sub-Saharan Africa boys are out-achieving their female peers. For example, an early grade reading assessment in three provinces of the Democratic Republic of Congo found that girls' results were alarmingly low, especially in comparison with boys' results. Forty percent of girls in grades 2 and 4 could not read a single familiar word, such as "you," compared with 30 percent of boys.<sup>24</sup> These gender differences have important implications including recent evidence that finds a strong association between math and science skills and increased earnings,<sup>25</sup> subjects where girls typically test more poorly than boys.

In addition to gender, exposure to armed conflict is another important factor shaping educational disparities for millions of children. Almost half of all children who are not in school live in countries affected by conflict.<sup>26</sup> In 2004, a young South Sudanese girl was more likely to die in childbirth than to finish primary school.<sup>27</sup> These countries receive much less funding and are much less equipped to reach the Education for All movement's goals than other low-income countries.<sup>28</sup> The UNESCO 2011 *Global Monitoring Report* estimates that the average per-pupil financing gap in these countries is approximately \$69, compared with \$55 for all low-income countries. Yet low-income, conflict-affected countries receive \$16 per pupil in aid to basic education, compared with an average of \$22 for other low-income countries.<sup>29</sup> In addition to the practical challenges that these countries face, they often lack the basic data needed for education planning. Reaching the remaining children who are out of school is not

only more difficult but can also be more expensive, because these children face multiple disadvantages and may often experience subtle and hidden forms of social exclusion.

**Bold action and investment are required to ensure that all children and youth are learning.** At the current pace, most countries will fail to meet the EFA goals and MDGs by 2015—many by a wide margin.<sup>30</sup> Education must be placed higher on the global policy agenda and must be accompanied by high-level political commitment and action at the national and international levels. Dedicated attention and collective action enabled by increased resources have resulted in significant advances in universal primary education. We now need to build on this success. Similar to the levels of investment and subsequent advances that have been made in the global health sector, improving learning will require bold and innovative action to ensure that children who are still out of school have access to a high-quality education and those who are in school acquire the knowledge and skills needed for healthy and productive lives.

To address this learning crisis for both those in and out of school, this report calls for a new Global Compact on Learning to respond to the changed landscape since the MDGs were set and to breathe new life into the commitments made between poor countries and aid donors in Dakar. This Global Compact would call for all actors to embrace, support, and enact, within their spheres of influence, a set of three priorities to improve learning for all children and youth, including those out of school: (1) early childhood development, (2) literacy and numeracy in lower primary grades, and (3) relevant post-primary education opportunities. Although there are no silver bullets or one-size-fits-all approaches to educational reform, the consensus of those involved in developing this report is that action on these three priorities is crucially needed to address the three dimensions of the global learning crisis.

All actors have a role to play in translating this Global Compact on Learning into action—from developing country governments and aid donors to grassroots organizations and corporations to communities,

parents, and teachers around the world. They must work together to embrace six main principles needed to deliver on the vision of learning for all:

- **Leadership:** Leadership on education is needed at the highest political levels. From leaders of developing and developed countries to heads of foundations, corporations and nongovernmental organizations (NGOs), one message must be consistent and clear: that learning matters and that it matters for all children and youth, even the hardest to reach.
- **Partnership:** The only way to achieve learning for all is to work together. The multiple networks of actors committed to improving learning in the developing world must leverage each other's efforts both to maximize their impact and to ensure they are all pulling in the same direction.
- **Financing:** More resources must be committed to achieve the agenda of learning for all while, at the same time, resources should be used more efficiently.
- **Measurement:** Systematically measuring learning achievement in a way that can track progress against existing disparities and provide useful and timely insight for classroom-level practices is essential to fulfill these goals.
- **Advocacy:** Mobilizing public opinion and sending strong signals to governments on the supreme importance of learning for all is a crucial strategy for catalyzing needed leadership and action as well as holding policymakers to account.
- **Building evidence:** Although data and emerging evidence exist to identify the best strategies for achieving parts of the agenda of learning for all, remaining questions must be answered to scale up proven solutions for all components.

**A Global Compact on Learning—the vision of success.** If all actors commit to embrace the six principles needed to fulfill the Global Compact on Learning, the promise of education will be realized for

hundreds of millions of young people, their families, communities, and nations. Not only will the education Millennium Development Goals be met and all children will be enrolled in primary school but they will be learning and developing while in school and making the successful transition to the most appropriate form of post-primary education. The 67 million children not in primary school and 74 million adolescents of lower secondary school-age who are out of school will have accessed high-quality learning opportunities. Of the more than 600 million children in primary school in developing countries, the hundreds of millions who currently are not mastering foundational skills and on the road to dropping out will have learned to read and in turn begin to read to learn, setting them on a path for continuing their education. The more than 400 million youth in lower secondary school in developing countries

will have developed skills and capacities that will serve them well in daily life, as well as in making the successful transition from school to work. The great asset of a well-educated and young population will drive growth and prosperity for many poor countries.

Important milestones signaling progress toward achieving this vision include developing country governments setting quantifiable and time bound equity-based learning targets and providing the necessary support to meet them; and the international community redoubling and harmonizing its efforts to effectively support developing country governments, including developing shared learning metrics, strengthening and resourcing the multilateral aid architecture, and enshrining the goal of learning for all in the post-2015 global agenda.

Prior to discussing the three main education priorities proposed in the Global Compact on Learning, it is important to answer two questions in detail: Why focus on learning for all? What is needed to ensure learning for all?

## Why Focus on Learning for All?

Driven by the Millennium Development Goals (MDGs) and supported by the global compact on education, more children than ever before have enrolled in primary school in increasingly equal numbers of girls and boys. Globally, of all the MDGs, those focused on education are the closest to being met, prompting some leaders to focus urgent attention elsewhere.<sup>31</sup> Providing quality education to all, however, is an unfinished global agenda and such gains should not mask the magnitude of the challenge ahead. New action is required to ensure all children, particularly the most marginalized, access quality learning opportunities. Nothing short of a paradigm shift is needed to put quality learning at the center of the global education agenda.

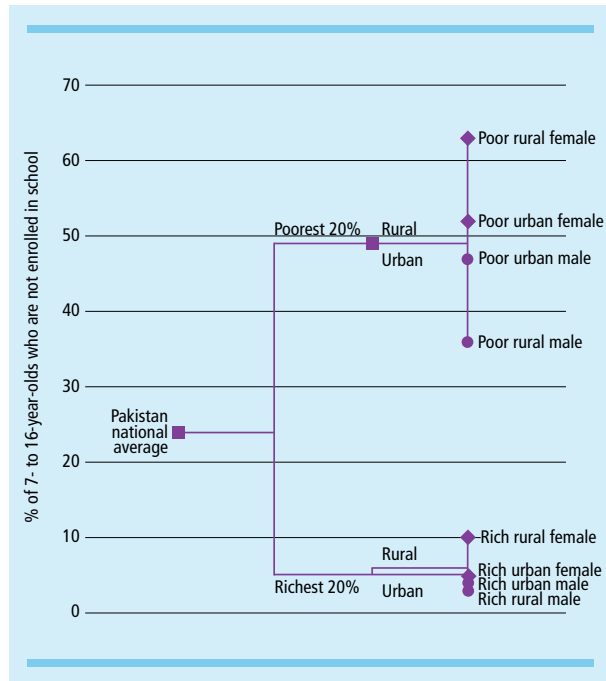
*The access and gender parity agenda—driven by the MDGs—has resulted in substantial education progress.* The number of children of primary school-age not in school has fallen by 39 million since 1999.<sup>32</sup> Even the poorest countries have increased their primary school net enrollment ratios, from an average of less than 60 percent in 1990 to more than 80 percent in 2008, and their primary completion rates, from 44 percent in 1990 to 63 percent in 2008.<sup>33</sup> Gender disparities in primary school enrollment are narrowing, while the share of girls making up the out-of-school population dropped from 57 percent

in 1999 to 53 percent in 2008.<sup>34</sup> More children are making the transition from primary to secondary school than ever before.<sup>35</sup>

*Progress in enrollment, however, has been highly uneven.* National averages often disguise large and even growing disparities within some countries—particularly disparities related to wealth, location, ethnicity, language, disability, age, and gender. The chances of the poorest children being enrolled relative to the richest have generally not improved significantly and in some cases have deteriorated.<sup>36</sup> In most countries, out-of-school girls are far more likely than out-of-school boys to never go to school.<sup>37</sup> Along with gender, a child's household wealth and location reinforce exclusion—poor girls living in rural areas are sixteen times less likely to be in school than boys from the wealthiest households living in urban areas (see figure 1.1).<sup>38</sup> Disabilities serve as another significant obstacle in going to school. In Malawi and Tanzania, having a disability doubles the probability of a child never attending school; and in Burkina Faso, it increases the risk of children being out of school by two and a half times.<sup>39</sup>

*Attendance is often erratic, and too many children drop out before completing primary school or transitioning to lower secondary school.* For those enrolled in school, attendance is often irregular due to a variety of factors, including poor health, high rates of teacher absenteeism, and the opportunity costs of attending school. In India, only a quarter of students in Bihar and less than half in Uttar Pradesh attend school regularly.<sup>40</sup> Poor attendance is usually a precursor to dropping out. In Sub-Saharan Africa, 28 million primary school students drop out each year.<sup>41</sup> Both girls

**FIGURE 1.1. DISPARITIES RELATED TO SEX, INCOME, AND LOCATION, 2007** (percentage of 7- to 16-year-olds not enrolled in school in Pakistan)



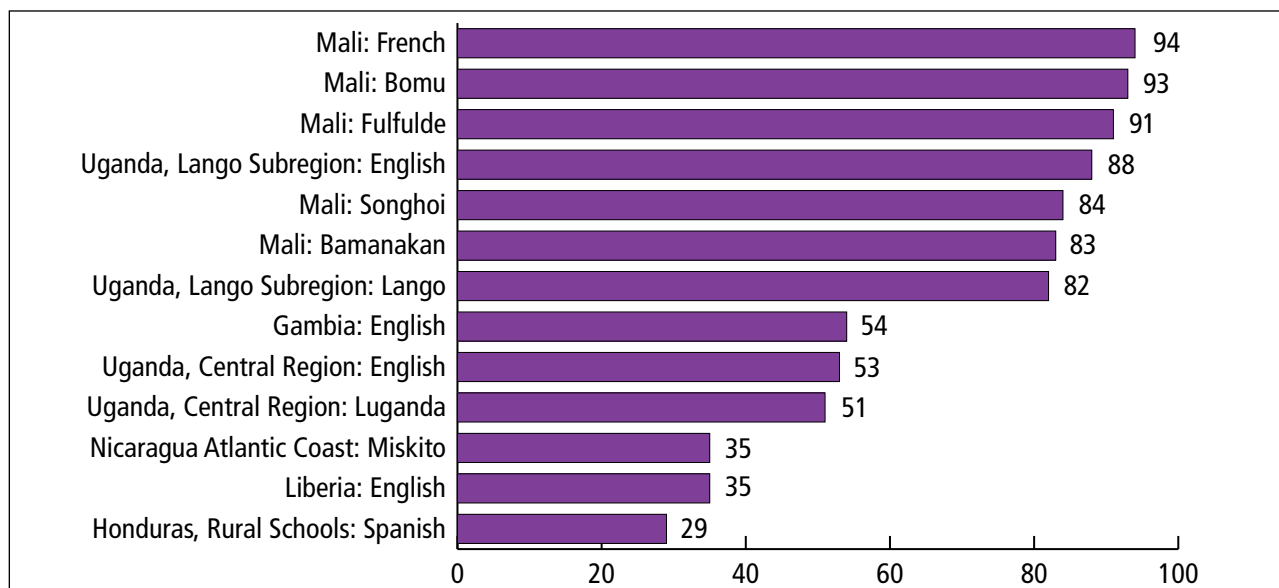
Source: UNESCO, *EFA Global Monitoring Report 2011: The Hidden Crisis—Armed Conflict and Education* (Paris: UNESCO, 2011), 43.

and boys drop out of school for many reasons, including direct and indirect costs related to attending school, poor quality, lack of interest or the low value placed on education, and a lack of transportation.<sup>42</sup>

In Bangladesh, a study identified a number of factors that explain the higher dropout risk for girls, including school safety, pressures to marry, parent’s attitudes toward educating daughters, and perceived low returns on girls’ education.<sup>43</sup> The grades in which children leave school vary by country. In some countries, the largest numbers are in grade 1 (however, this may be a result of repetition, rather than dropping out, because grade 1 can be used as a preschool year), in other countries, grades 2 or 3 or the transition to lower secondary school are where the largest percentage of drop outs occurs. The fact that millions of children are not completing primary school or transitioning to lower secondary school represents an enormous waste of human potential and investment. Recent research in Malawi found that children who drop out of primary school before mastering basic skills experience a fairly immediate loss of the minimal skills previously acquired in school.<sup>44</sup>

*Millions of children leave school without acquiring the most basic skills.* In many countries, learning outcomes have stagnated or regressed during the past ten years.<sup>45</sup> Thanks in large part to civil society organizations, cross-national research studies, and ministries of education working on improving learning in low- and middle-income countries, there is an emerging body of evidence on the scope and scale of the

**FIGURE 1.2 PERCENTAGE OF STUDENTS WHO COULD NOT READ AT GRADE 2 LEVEL**



Source: End of Grade 2 Early Reading Assessments; complete reports available at [www.eddataglobal.org](http://www.eddataglobal.org).

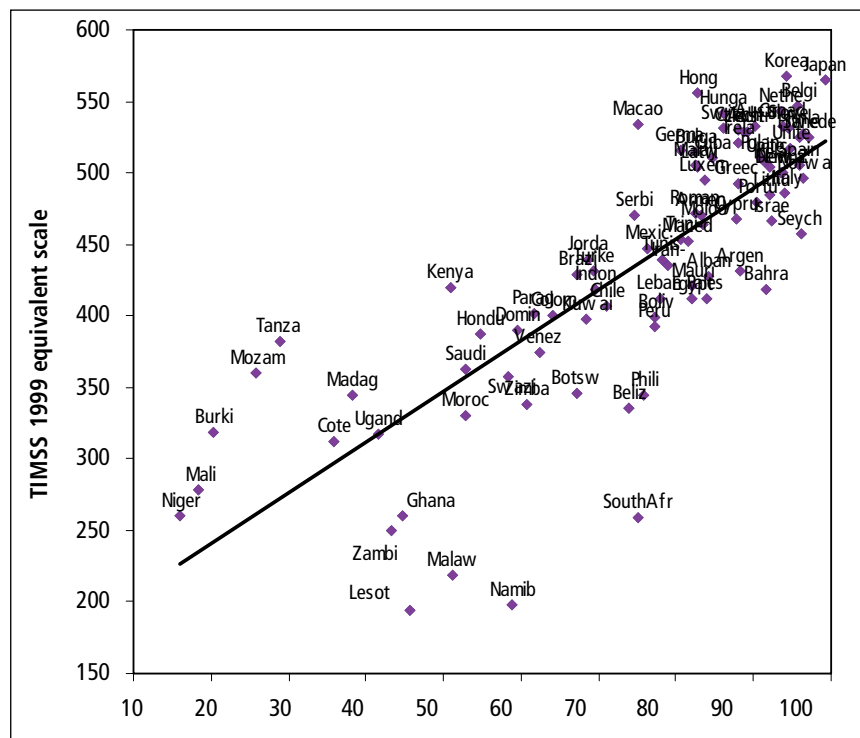


learning crisis (see figure 1.2).<sup>46</sup> In Uganda, more than one-quarter of children in grade 7 could not read and understand a simple story at the grade 2 level of difficulty.<sup>47</sup> In Mali, nine out of ten grade 2 students studying in French could not read a single word of connected text. Three out of ten youth cannot do basic arithmetic in emerging economies.<sup>48</sup> According to the 2010 *Annual Status of Education Report*, which surveyed 750,000 children across rural India, only 53 percent of students in grade 5 could read a class 2 text. Nationally, this number has not gone up in five years. In fact, the ability of children in India to do basic arithmetic has declined.<sup>49</sup> Despite an increase in education expenditures in India, learning outcomes have remained the same or gotten worse.<sup>50</sup> And these problems extend to secondary schools in many countries, where many children—sometimes a majority—perform well below the accepted grade-level standards.<sup>51</sup> For example, in Peru, only 20 percent of fifteen-year-olds were able to identify one piece of information in a text. Learning outcomes for girls in conflict-affected countries are some of the worst in the world.<sup>52</sup>

*Universal primary education will not be achieved without paying attention to learning.* Much discussion in policy discourse has been about expanding access or improving quality. Undoubtedly, providing high-quality education to more learners will cost more than when it was reserved for just the elite. However, there is no real choice between access and quality as a country will not achieve universal primary completion without also paying attention to learning outcomes. Cross-country data show a positive correlation between education coverage and average learning levels (see figure 1.3).<sup>53</sup> In fact, countries that have done well in one respect have also generally tended to do well in the other,

and vice versa;<sup>54</sup> actions that improve learning outcomes help meet attainment goals. Conversely, there is a direct relationship between low learning levels (as measured by test scores) and dropout rates.<sup>55</sup> Impressive gains in access will only be sustained by improving both the developmental status of children before they enter formal schooling and the teaching and learning processes employed during the lower primary years.<sup>56</sup> Although the overall envelope for education spending needs to be bigger, this report seeks to outline where those increased investments should be targeted to better link components of the system across a child’s life span, improve efficiency and effectiveness throughout the education system, and increase the return on investment through higher social, economic, and political benefits.

**FIGURE 1.3. CORRELATION BETWEEN LEARNING LEVELS AND ENROLLMENT, 1990–2003** (average of primary and secondary school net enrollment ratios)



Source: L. Crouch and P. Vinjevold, “South Africa: Access before Quality, and What to Do Now?” *Profesorado: Revista de currículum y formación del profesorado* 10, no. 1 (2006).

*Interventions targeting gender differences have focused on access, not learning outcomes.* Addressing gender gaps in education has mainly been defined in terms of access rather than looking at gender inequalities in educational quality.<sup>57</sup> However, gender

parity in enrollment may not be an adequate measure to see whether men and women have acquired the requisite knowledge and skills for better health, quality of life, work productivity, and full participation in decisionmaking.<sup>58</sup> A recent study found that there has been relatively little research or programmatic attention to those aspects of a high-quality education that have a differential impact on boys and girls—and particularly those approaches that might be most beneficial for girls.<sup>59</sup> For example, a recent review of 39 studies looking at the impact of female teachers on test scores found only one that disaggregated findings by sex.<sup>60</sup> Meanwhile, studies in Kenya and Malawi have shown that girls' learning is disproportionately affected by school-related factors, such as gender bias in classrooms and large student/teacher ratios.<sup>61</sup>

In developed countries, large-scale assessments reveal that girls significantly outperform boys in reading. This disparity calls for policy initiatives to address male underachievement. However, in low-income countries or poorer regions, girls often lose this advantage or perform below boys in reading, the reasons for which should be explored in greater detail (see figure 1.4 and box 1.1). This requires understanding which policies, classroom practices, and household and community-level factors, including differential treatment of girls in home as well as in school, contribute to gender differences in learning outcomes.<sup>62</sup> For example, in Liberia, anecdotal evidence found that the simple act of calling on children randomly increased girls' participation and, as a result, their reading scores.<sup>63</sup>

### What Is Needed to Ensure Learning for All?

Given that there is a learning crisis for those currently both in and out of school, the question is how to ensure that all children and youth have access to high-quality learning opportunities that build relevant skills and knowledge to enable them to live healthy, productive lives and adapt to a rapidly changing world. Although there is no one-size-fits-all approach, and education reforms are most successful when embedded within system-wide efforts, this report identifies three main priorities and

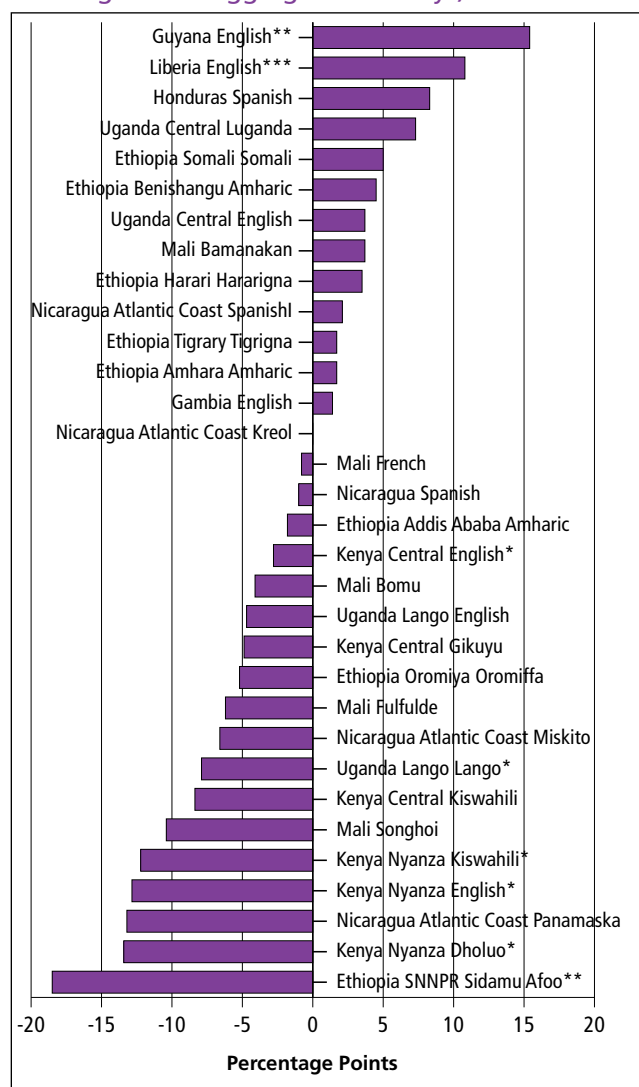
### Box 1.1. GIRLS' LOW LEARNING LEVELS

In September and October 2010, an early grade reading baseline assessment was completed for the PAQUED project in three provinces of the Democratic Republic of Congo (DRC), which was funded by the US Agency for International Development and sponsored by the Education Development Center. Girls' results, in comparison with boys' results, were alarmingly low for all grades assessed (2, 4, and 6). The gender gap is statistically significant for every subtest when looking at zero scores, meaning that a child was not able to respond to one item correctly (e.g., when asked to name a letter or read a word). As an example, for children in grades 2 and 4 reading familiar words, nearly 30 percent of males and 40 percent of females could not read a word (the first of these words, "tu," meaning "you," is very common). Reading comprehension results were even more starkly disparate, with two in three males and more than three in four females unable to answer a single question. As early as grade 2, girls were showing statistically significant differences in content measures, such as letter knowledge.

In countries where girls are more equitably treated, results on early reading assessments match or surpass boys. Results for girls in the DRC are the tragic outcome of their context. These reading results begin to paint the picture of at best neglect, and at worse, systematic abuse. If girls fall behind—whether due to barriers such as chores, being ignored by teachers, or for any other reason—they will also be more likely to drop out. This double jeopardy for girls is particularly concerning given the significant benefits that accrue to girls and their families when girls finish primary school.

Source: B. Piper, C. da Silva, and E. Miksic, Democratic Republic of Congo Early Grade Reading Assessment: PAQUED Baseline Report, 2011, prepared for US Agency for International Development and Education Development Center, Inc., under the Projet d'Amélioration de la Qualité de l'Éducation, Contract AID-623-A-09-00010 (Washington: RTI International, 2011).

**FIGURE 1.4. GENDER DIFFERENCES IN READING SCORES IN GRADE 2** (negative numbers indicate where girls are lagging behind boys)



Source: Data provided from various early grade reading assessments conducted by RTI International (2008-2010). Note: Statistically significant differences between boys and girls are indicated for each country, region, and language as follows:  $p < 0.10 = *$ ,  $p < 0.05 = **$ ,  $p < 0.01 = ***$

accompanying strategies that the latest evidence indicates are needed to best address the three dimensions of the learning crisis:

1. *Support quality early childhood development and learning opportunities for girls and boys.* High-quality early childhood development activities have long shown to have a lasting impact on learning. These activities—which include health, nutrition, and stimulation—

can also lead to cost-saving efficiencies in primary school by increasing overall retention, reducing attrition, and raising primary school completion rates. These returns are often greatest for children from the most disadvantaged backgrounds. Despite a 30 percent increase in participation in preprimary education programs between 1998 and 2008, a global enrollment rate of just 44 percent shows that many children are excluded from these critical early learning opportunities. Across countries, access to preprimary programs is highly uneven; within countries, attendance patterns typically show that children from the poorest and most marginalized households are least likely to attend preprimary school.<sup>64</sup>

2. *Ensure that children acquire basic literacy and numeracy skills in lower primary grades.* The ability to read, write, and do mathematics are foundational skills for all future learning. It is also the minimum that families expect when they send their children to school. It is crucial to start early as there is a relationship between failure to learn to read and falling further behind each year or dropping out altogether. This link is particularly important for low-income girls and conflict-affected young people who remain the most educationally marginalized. Prioritizing literacy and numeracy in the lower primary grades maximizes investments by ensuring children move from learning to read to reading to learn. Recent evidence identifies actions that can improve literacy and numeracy in the lower primary grades, however more work is needed to understand how essential critical thinking skills can be developed in the process.
3. *Enable young people to make the transition to and complete relevant post-primary education.* Despite considerable evidence of the many social and economic returns from secondary school, too few girls and boys continue beyond primary school; for those who do, many are not learning the skills they

need for their future lives and livelihoods. More young people must be supported to transition to post-primary education while simultaneously addressing serious concerns about the applicability, or relevance, of what they learn to their current and future lives. We already know some aspects of how to do this, but this effort will require taking successful interventions to scale, for instance by addressing financial barriers through well-targeted subsidies and training more female teachers. We also know, however, that business as usual will not suffice. Alternative, flexible models that utilize innovative modes of delivery must be tested and more rigorous evaluations are required, particularly of non-formal programs. Any reform must not only focus on academic skills but also ensure that children are learning the context-specific and health-related skills needed to thrive in the 21st century. All this is particularly crucial for poor girls given the high social and economic benefits of secondary school for these girls and their families and communities—and given the extremely

low number of girls transitioning to post-primary school in many countries.

As important as these three priorities are, none of this will happen without an enabling environment that focuses attention on teachers and students. It is important to move beyond a sole focus on inputs and to also focus on teaching and learning processes and outcomes; on equity-based strategies for reaching those left furthest behind, such as poor girls; on accountability and the participation of local communities; and on the safety and security of children. Figure 1.5 portrays this enabling environment and these strategies in the context of the three priorities, as well as strategies that they all have in common—and all these elements of the Global Compact on Learning are explained in detail in the following chapters.

*Overall system improvement requires targeted approaches to leveling the playing field for least advantaged areas, schools, and children.* While overcoming marginalization in education is different in every country and the optimal approach will depend on local conditions, progress is possible with sustained

**FIGURE 1.5. ELEMENTS OF THE GLOBAL COMPACT ON LEARNING**

PRIORITIES	PRIORITY 1 Support quality early childhood development and learning opportunities for girls and boys		PRIORITY 2 Build foundational skills in literacy and numeracy in the lower primary grades		PRIORITY 3 Support transitioning to and completing secondary school and post-primary opportunities that build relevant life and labor skills	
STRATEGIES	Extend quality early childhood development opportunities, particularly to poor and marginalized communities	Ensure girls and boys start school at an appropriate age	Prioritize literacy and numeracy in the lower primary grades	Provide mother-tongue-based multilingual education in the lower primary grades	Reduce barriers preventing girls and boys from transitioning to secondary school and other post-primary educational opportunities	Ensure that post-primary education prepares young people for healthy lives, productive work, and civic participation
STRATEGIES COMMON TO ALL PRIORITIES	<ul style="list-style-type: none"> <li>• Improve the quality of teaching</li> <li>• Build effective assessment systems linked to teaching and learning</li> </ul>					
<p style="text-align: center;"><b>ENABLING ENVIRONMENT</b> EQUITY – PARTICIPATION – ACCOUNTABILITY – PROTECTION</p>						

political commitment to address the underlying causes of that exclusion, such as gender discrimination, ethnic and linguistic disadvantages, and gaps between urban and rural areas.<sup>65</sup> This requires targeting financial and learning support to the most disadvantaged schools.<sup>66</sup> Almost all countries with high-performing education systems devote equal, if not more, resources to schools facing the greatest challenges.<sup>67</sup> Strong performing post-conflict countries have focused on developing education systems that are more inclusive of girls and other marginalized groups.<sup>68</sup> Western Cape Province in South Africa, for example, has improved grade three and six literacy levels since 2002 while simultaneously narrowing the achievement gap of the poorest and lowest-performing quintiles of students. It achieved this by identifying communities with the greatest learning challenges, understanding the specific needs of these communities, and tailoring its support accordingly.<sup>69</sup>

*Advancing learning for all requires involving students, parents and communities in the teaching and learning process.* Research has consistently identified parental involvement as a strong predictor of student achievement. It is particularly important in efforts to reach excluded children, and specifically girls. This means involving parents, caregivers and communities in the governance of early childhood development services and in schools as well as encouraging parents to provide a supportive home environment in which children can learn.<sup>70</sup> Social accountability initiatives, such as community scorecards and social audits, can provide young people with avenues to hold governments and service providers to account for quality educational programs. In Uganda, Cambodia, and Senegal, student involvement in school management and oversight has led to significant improvements in the school environment and there is emerging evidence that it is contributing to decreased levels of student and teacher absenteeism and improved student performance.<sup>71</sup> When students and parents have reliable information about the quality of education services, they are better able to advocate for and extract better services and/or choose among providers.<sup>72</sup> A program in Madagascar that told parents about average income gains

from spending an additional year in school for children with backgrounds similar to theirs had a significant effect on increasing test scores.<sup>73</sup> In Colombia, Iran, and Thailand, local decisionmaking about supplies and the hiring of teachers led to higher test results in math and science.<sup>74</sup> A large civil society initiative in India, the *Annual Status of Education Report*, uses simple tools to collect data in every rural district in India on children's ability to read and do basic mathematics. The program also has a strategy for dissemination and community mobilization. The annual survey and related advocacy has strengthened accountability in India by involving ordinary citizens in understanding the current situation in primary school and holding education providers and policymakers accountable.<sup>75</sup>

*Advancing learning for all requires ensuring a safe and secure learning environment for girls and boys.* Corporal punishment, gender-based violence, armed conflict, and natural disasters remain a daily reality for millions of girls and boys. Ninety countries out of 197 monitored by the Global Initiative to End All Corporal Punishment of Children permit teachers to legally beat students.<sup>76</sup> In far too many countries, gender-based violence—which can include rape, sexual harassment, and pressure to trade sexual favors for grades, school supplies, or academic support, among other violations—is inextricably linked to education. According to one global study, an estimated 60 million girls are sexually assaulted at or on their way to school every year.<sup>77</sup> In times of crisis, violence against girls and boys often escalates due to a breakdown in law and order, along with an increased presence of armed groups. Safe, high-quality education in the midst of crisis is a crucial life-saving and life-sustaining intervention that has implications for the peace and prosperity of societies. Yet too often, natural disasters—such as earthquakes, floods, and tsunamis—inflict harm on both students and education personnel through the destruction of educational systems, threatening the physical safety and psychological well-being of learners and interrupting educational continuity. With the number and intensity of natural disasters increasing in many countries, schools and communities must prepare to mitigate their impact.



*Specific actions to advance learning for all is dependent on the local context.* The following chapters explain the three priorities and related strategies in detail. Although these strategies are by no means exhaustive, they offer approaches that have been shown to advance learning around the world and are supported by a wide range of education actors. As noted at the outset, though *what* is to be done is often universal, *how* it is done is highly context specific. Thus this report does not intend to provide detailed guidance on how to improve learning outcomes in all contexts. Furthermore, it cannot address the specific and widely varying concerns

encountered in different countries and regions. Governments are addressing learning needs from different perspectives, and their capacities to fulfill their obligations vary enormously. So each strategy needs to be tailored to the institutional cultures, human resources, and other capacities of nations and to particular locations based on the involvement of local communities. Yet each of these three policy priorities and its accompanying key actions are nonetheless relevant in various contexts and can be used by stakeholders to develop appropriate education policies for specific communities.



## PRIORITY 1: FOCUSING ON THE CRUCIAL EARLY CHILDHOOD YEARS

Learning begins at birth. The argument for focusing on early childhood development (ECD)<sup>78</sup> is strikingly straightforward: Early life experiences have a significant impact that persists well into adulthood. Investing smartly in ECD can play an important role in improving learning opportunities for those in and out of school. Quality preprimary education, particularly for marginalized groups, can help bring children into the education system and prepare them to learn well while there. Strong beginnings are essential for addressing the learning crisis.

Research suggests that critical brain development occurs from pregnancy to age three, and well before the age of seven. It is influenced by the nutritional and health status of the mother and child, as well as by interactions with parents, other caregivers, and people and objects in the environment. Better parenting skills and child health, nutrition, and stimulation are linked to more consistent attendance, lower rates of repetition and attrition, better test scores, and higher grade completion.<sup>79</sup> Building children's social and emotional aptitude (i.e., positive coping mechanisms, self-regulation, and interpersonal and decisionmaking skills) at an early age is crucial for future academic success, including improvements in reading and mathematics outcomes.<sup>80</sup>

Some of the strongest evidence on the long-term effectiveness of preprimary programs comes from a set of rigorous evaluations of high-quality initiatives targeting disadvantaged children in the United States, including the Perry Preschool and the Carolina Abecedarian programs. These studies show a positive impact from these early education programs on student learning and achievement,

educational attainment, and work experience.<sup>81</sup> In addition to the demonstrated benefits for children, studies show that investing early has economic and social benefits that extend well beyond the immediate impact of ECD programs. Although much of the evidence comes from programs in the United States and other higher-income countries, the rationale and evidence appear to be readily transferable to other contexts. The cost-benefit analysis of ECD programs should consider the improved internal efficiency of primary school by increasing retention, reducing attrition, and raising completion, reduced crime and social welfare, and increased productivity and tax revenue, benefits that would more than cover the cost of the ECD investments.<sup>82</sup>

In addition to regular daily informal interactions between children and their caregivers, ECD activities can take place in home and community-based programs, as well as in preprimary programs that may already be linked to the formal school system. Research shows successful (and unsuccessful) programs of both types so individual community and country contexts should determine which approach is more appropriate. It should be noted that many countries are considering center-based kindergarten models. Designed and implemented well, these programs can positively impact lower primary achievements, as well as longer-term outcomes for children. Tools such as the Early Childhood Environment Rating Scale–Revised (ECERS-R) have been developed to monitor and improve preprimary education; the use of ECERS-R has been correlated with high-quality outcomes in Bangladesh and East Africa.<sup>83</sup> Evidence-based strategies to support high-quality ECD and learning for girls and

boys, which are detailed in this chapter, are summarized in Priority 1:

*Priority 1: Support quality early childhood development and learning opportunities for girls and boys.*

Figure 2.1 portrays the various aspects of Priority 1, which should be addressed with these two strategies:

- Strategy 1A: Extend quality early childhood development opportunities, particularly to poor and marginalized communities.
- Strategy 1B: Ensure that girls and boys start school at an appropriate age.

This chapter considers the actions needed to pursue each of these strategies.

### Strategy 1A: Extend Quality Early Childhood Development Opportunities, Particularly to Poor and Marginalized Communities

If begun early enough, high-quality ECD interventions can enhance parenting skills and improve child development that overcomes some household deprivations due to poverty and prepares children for

school.<sup>84</sup> Adequate preparation for school can ensure that more girls and boys actually enter primary school—and start on time, which can help to reduce later gender gaps that can be traced back to initial intake into school. Investments in ECD typically far exceed the return on most other social investments.<sup>85</sup> This occurs, in part, by contributing to multiple developmental objectives, including improved outcomes in health and nutrition for infants and young children; poverty reduction and the promotion of gender equality through freeing up time for older girls to attend school and mothers to work;<sup>86</sup> improved civic participation, particularly by young women;<sup>87</sup> and reduced costs to the justice system due to juvenile delinquency and adult criminality.<sup>88</sup>

Studies also show that these returns are greatest for the least advantaged members of society.<sup>89</sup> For example, in Colombia, where one-fifth of the poorest households are headed by single mothers, and 44 percent of poor children aged seven to eleven do not attend school, a community day care program has enabled many girls and women to attend school or join the workforce. A total of 14,000 community-based centers are located in poor neighborhoods and serve about 140,000 children under the age of

**FIGURE 2.1. STRATEGIES AND ACTIONS TO SUPPORT EARLY CHILDHOOD EDUCATION**

PRIORITY 1: Support quality early childhood development and learning opportunities for girls and boys		
OVERVIEW	STRATEGIES	ACTIONS
Quality early childhood development (ECD) activities have long shown to have a lasting impact on learning. Quality ECD interventions, which include health, nutrition, and stimulation, can lead to cost-saving efficiencies in primary school by increasing overall retention, reducing attrition, and increasing primary school completion rates. These returns are often greatest for the most disadvantaged. To date, ECD is still not widely available, especially for the poorest and most marginalized.	Extend quality early childhood development opportunities, particularly to poor and marginalized communities	<ul style="list-style-type: none"> <li>• Invest in nutrition, health, and livelihoods support</li> <li>• Develop comprehensive ECD frameworks and plans</li> <li>• Provide support to parents and caregivers</li> <li>• Strengthen program standards, support, and professional training for ECD educators and caregivers</li> </ul>
	Ensure girls and boys start school at an appropriate age	<ul style="list-style-type: none"> <li>• Encourage on-time entry through public policies, campaigns, and tracking</li> <li>• Develop and support multigrade and multiage teaching approaches</li> </ul>

seven. At these centers, children are provided with 60 percent of their daily nutritional requirements and are supervised by “community” mothers, who are selected from among women in the community. These community mothers are trained in nutrition, health, hygiene, and recreation; they are paid a salary; and they receive assistance in obtaining home improvement loans. After six years, the community day care program reached 1 million children.<sup>90</sup>

Four main actions need to be pursued to achieve Strategy 1A:

- Invest in nutrition, health, and livelihoods support.
- Develop comprehensive ECD frameworks and plans.
- Provide support programs that promote adequate stimulation and good parenting and caregiving.
- Strengthen program standards, support, and professional training for ECD educators and caregivers.

*The first needed action is to invest in nutrition, health, and livelihoods support.* Because learning can (and should) take place continuously throughout one’s life, both in and out of the classroom, interventions to improve cognitive development require investments beyond education policy—such as investments in nutrition, potable water, and livelihood support for families with infants and small children.<sup>91</sup> For example, in Vietnam, a preschool nutrition program was associated with higher test scores in grades 1 and 2.<sup>92</sup> In Bangladesh, the provision of eight fortified biscuits a day to approximately 1 million children in 6,000 primary schools resulted in 28 percent higher mathematics scores after one year than those in control schools.<sup>93</sup> Therefore, improving early learning requires multisectoral coordination and integrated approaches because the business of learning is not just the work of education actors. Although the examples given here come from primary schools, these types of interventions should also, and foremost, be implemented in ECD programs to mitigate the irreversible effects of early malnutrition on children (see box 2.1).

### BOX 2.1. IMPROVING CHILD HEALTH—AND SCHOOL ENROLLMENT RATES—IN BOLIVIA

In Bolivia, poor families tend to have high rates of child mortality and malnutrition, low rates of primary school attendance, and a greater likelihood of repetition and dropouts. The early childhood development program *Proyecto Integral de Desarrollo Infantil*, which provides comprehensive home-based day care for impoverished families, was established to better prepare children to enter and succeed in school, empower women through employment opportunities, and increase community participation in childhood development. Each center serves fifteen children ranging from six months to six years old and is led by a mother or caretaker who is assisted by helpers. Children receive two meals and a snack per day (providing 70 percent of their daily caloric needs), receive basic health care, and engage in games and physical activity to foster cognitive development. Almost all children who leave the program at the age of six enter primary school, a significant increase from the 20 percent enrollment rate for children not in the program. These results are attributed to improved children’s health as well as parents’ participation in the program.

Source: J. van der Gaag and J. Tan, *Benefits of Early Childhood Development Programs: An Economic Analysis* (Washington: World Bank, 1998).

*The second needed action is to develop comprehensive ECD frameworks and plans.* In many countries, ECD is a low priority and the quality of services has been poor and fragmented. In some areas, the private and non-profit sectors have been primarily responsible for providing ECD without adequate resources, regulation, or quality assurance from the government.<sup>94</sup> Governments should develop a comprehensive framework or shared plan of action for ECD that addresses the rights and needs of all children—especially the poorest—and that is supported by information and monitoring systems.<sup>95</sup> This will require collaboration and coordination among ministries and organizations—especially ministries of

planning and finance—working on issues related to young children, parents, nutrition, health, water, housing, and gender.

*The third needed action is to provide support programs that promote adequate stimulation and good parenting and caregiving.* As research has shown, health and nutrition interventions alone are insufficient for ensuring that malnourished children develop well.<sup>96</sup> Children also require adequate stimulation and good parenting, which can often be integrated into existing programs and practices in low- and no-cost ways. ECD programs should be developed in partnership with parents, other caregivers, and the local community to best meet the needs of those they serve.<sup>97</sup> Moreover, around the world and across cultures, there are common times when parents interact with their children—such as feeding, bathing, and prayer times—that, through information provided by public campaigns and existing points of contact, such as health clinics and food distribution centers, can be infused with simple and low-cost cognitive stimulation activities that can best prepare children to learn. Where governments have already invested in health and nutrition programs, cognitive stimulation activities can be integrated; for example, pregnancy classes for soon-to-be-first-time parents can include preparatory activities to increase cognitive stimulation, such as building a colorful mobile or putting together a baby’s first book. Parents and children waiting for long periods of time at clinics and distribution centers are a captive audience for activities that support child development. Given the strong evidence that talking with very young children establishes foundations for language development during early critical periods, community health care workers serving as lactation consultants can include this information in their meetings with new mothers about breast-feeding.<sup>98</sup> When ECD programs engage parents and caregivers, there is a greater likelihood of children entering school as an age cohort and of keeping parents engaged as supporters of children’s learning throughout the school years (see box 2.2).<sup>99</sup>

*The fourth needed action is to strengthen program standards, support, and professional training for ECD*

## Box 2.2. How ECD Programs Can Help Girls

High-quality ECD programs give girls a healthy start on life by building cognitive, social, and emotional skills that help them to do well in school. A girl’s chance of beginning school at an appropriate age, which reduces her risk of dropping out early when domestic responsibilities dramatically increase in adolescence, is increased when she participates in one of these programs. High-quality ECD programs for girls are a cost-effective intervention because they contribute to multiple development objectives, including freeing up time for older girls to attend school and mothers to work. Disadvantaged girls often benefit the most from these programs, which can help overcome household deprivations due to poverty.

*educators and caregivers.* Early childhood educators—whether publicly or privately supported—should be provided with appropriate preparation, ongoing training and support, and adequate compensation. Governments must ensure that both public and private institutions, services, and facilities providing ECD support conform to quality standards and are monitored regularly. Working with young children should be valued and appropriately compensated in order to attract and retain a qualified workforce, including both men and women. Home-based and community-based educators should have a theoretical and practical understanding of children’s rights and development and ongoing access to professional support and resources.<sup>100</sup> This should include time and safe spaces for children to play, be creative, and engage in exploratory learning.

Financing early childhood programs can be a huge challenge in resource-constrained countries. However, not getting children off on the right start is far more costly in terms of poor health outcomes, high repetition and dropout rates, and low levels of learning. Nonetheless, governments face competing priorities to meet the rights and needs of children, and they only have limited human and financial resources to do so. It is nonetheless important that there be sufficient public investment in ECD, given that

children's earliest years are the foundation for their physical and mental health, emotional security, and the development of competencies.<sup>101</sup> Nations should devote at least 0.5 percent to 1 percent of gross domestic product to parent and early childhood education.<sup>102</sup> In particular, relying on all families to cover the costs through user fees is problematic in light of the evidence that children from the poorest households benefit the most from ECD interventions. Existing infrastructure should be utilized to deliver these services at a low cost. Parent and family support programs can be integrated into health services. Governments should also engage the private sector to support ECD programs, which often have a vested interest in healthier, more productive consumers.

In addition to contributions from the government (both national and local), families, community and social organizations, the private sector, and international organizations, one new method for financing ECD is the development of microenterprise projects. Women (typically) who want to begin a home-based care center to earn an income receive seed funding and relevant training to ensure the quality of the service being provided to the children in their communities. Similarly, income-generating projects (i.e., school-based gardens and handicrafts) can allocate a portion of their income to the operation of the center while participating parents earn additional income or reinvest the profit in expanding the project.

### Strategy 1B: Ensure That Girls and Boys Start School at an Appropriate Age

In many developing countries, grade 1 classrooms are highly mixed with children as young as four and as old as eleven. Thus some children may be in a formal school setting at too young an age, which can be linked to the absence of ECD opportunities, while others may have started school too late, missing the opportunity for early learning with all its cumulative benefits. Both underage and overage students present additional challenges for teachers because they are at a different phase developmentally than the six- and seven-year-olds expected to be in grade 1. According to a recent study, no education system with good participation rates and high levels of

achievement on international achievement tests has a high age-in-grade dispersion. Either dispersion should be reduced or carefully planned multigrade teaching and learning approaches should be used, such as modularized curricula, when a single class contains students from more than one grade level.<sup>103</sup>

In addition, when children enroll in school at a later age, the risks of repetition and dropping out are greater.<sup>104</sup> This leads to increased costs for both the family and society. Girls are at a particular dropout risk when they are *not* at grade-for-age because the pressures they face can change drastically once they hit puberty. If they have only reached grade 3 or 5 before there is pressure to marry or work, learning outcomes will be far below expectations. For instance, a recent household survey in Senegal found that survival rates to grade 5 for children who started school two years late were 10 percentage points lower than for children starting on time.<sup>105</sup>

There is general agreement that early learning is highly effective. Children who lose that chance run the risk of never catching up with their more fortunate peers. In many developing countries, girls out-enroll boys for age-in-grade, meaning girls are more often than boys at the appropriate age for their grade, until they reach the age of fourteen to sixteen. Beyond this age in Sub-Saharan Africa, boys almost invariably drop out less. Even when more girls than boys start school on time, girls may face increased risks from being in class with much older boys as they enter adolescence. Age-in-grade has been increasing more often than decreasing, and the poorest groups have experienced greater increases in age-in-grade in some countries. Household wealth remains the strongest predictor of being overage in school.<sup>106</sup> Therefore, addressing dispersion in age-in-grade will only be possible by focusing on the poorest children and ensuring that they enroll at the appropriate age.

Two main actions need to be taken to achieve Strategy 1B:

- Encourage on-time entry through public policies, campaigns, and tracking.
- Develop and support multigrade and multi-age teaching approaches.



*The first needed action is to encourage on-time entry through public policies, campaigns, and tracking.* A number of actions can be taken to reduce age-in-grade variation. National policies should be in place to encourage policies for age of entry at the appropriate age (generally six to seven years, or younger where preschool facilities exist). The availability of high-quality ECD opportunities can also play an important role in age-appropriate enrollment. Public campaigns should educate parents and communities about the importance of starting school on time; and financial incentives, such as cash transfers, should be offered to poor families to enroll children, especially girls, at the correct age. Systems and schools should track grade-specific enrollment rates (such as the percentage of children in an official age group enrolled in grade 1) rather than net or gross enrollment rates that count children across all grades and can conceal the true number of over-age students per grade.<sup>107</sup> Grade-specific enrollment and completion rates should be disaggregated by sex and other relevant characteristics, such as location and ethnicity.

*The second needed action is to develop and support multigrade and multiage teaching approaches.* Where large differences in age-in-grade persist, multigrade and multiage teaching approaches should be implemented by design, rather than by default, and should be supported by in-service teacher training. Evidence has shown that multigrade schooling, when implemented appropriately, can be used to effectively target the different learning needs of children and potentially reduce the dropout rate.<sup>108</sup> In successful multigrade programs, teachers promote self-learning and encourage older children to help younger ones. The teacher increasingly guides and supports the learning process rather than simply imparting knowledge. This requires strong and focused teacher training programs and regular follow-up and feedback from supervisors and trainers.<sup>109</sup> This approach was adopted by Escuela Nueva in Colombia, which uses an “active” learning style, relying upon students to acquire and construct knowledge for themselves, guided by the teacher. In-service training for teachers

throughout the first year and community participation are key elements (see box 2.3).<sup>110</sup> Technology can also assist in allowing students to progress at different rates within the same class. For example, Khan Academy, which has an extensive online presence, has developed open source materials, which include mathematics and science exercises tailored to students’ learning needs by progressively becoming more difficult or easier, as needed.<sup>111</sup> The academy’s approach also includes a diagnostic program for teachers to identify students who are progressing rapidly, and those who need further assistance, so that teachers can spend more time with those who are struggling and/or pair students who are doing well with those needing help.

### BOX 2.3. CHILD-CENTERED, MULTIGRADE TEACHING IN COLOMBIA

The Escuela Nueva program, launched in Colombia in 1975, brings child-centered, community-based education to children throughout the country, specifically targeting those in rural areas. Because classrooms in rural communities often have students of different ages and ability, the program uses a multigrade teaching style with flexible learning options such as self-instructional textbooks and small group work. Teachers go through an extensive in-service training on how to develop curriculum based on the needs of rural communities and guide students, while allowing them to acquire and construct knowledge on their own. Studies have shown that Escuela Nueva students scored significantly higher in third-grade mathematics and Spanish than their counterparts in traditional schools. The program has been adopted by the government for national scale up, as well as expanded to thirteen countries in Latin America and one in Africa.

Sources: P. McEwan and L. Benveniste, “The Politics of Rural School Reform: Escuela Nueva in Colombia,” *Journal of Education Policy* 16, no. 6 (2001): 547–59; Escuela Nueva website ([www.escuelanueva.org](http://www.escuelanueva.org)).



## PRIORITY 2: EMPHASIZING LITERACY AND NUMERACY IN LOWER PRIMARY EDUCATION

The abilities to read, write, and do mathematics are foundational skills for all future learning. Ensuring children master these skills is another essential component of addressing the learning crisis. Not only will it reduce the number of children dropping out and pave the way for their ongoing learning success, it is cost-effective by reducing inefficiencies in the education system.

Literacy skills in the lower primary grades,<sup>112</sup> in particular, have been shown to be a good predictor of later educational success, and children who gain reading fluency during lower primary are unlikely to lose it even if they drop out.<sup>113</sup> Many studies have documented the relationship between failure to learn to read and falling further behind each year or dropping out altogether. Regardless of the specifics of any given language, research shows that the trajectory of a child's reading progress at the end of grade one can predict his or her skills at the end of primary school because reading skills are self-reinforcing (i.e., strong readers acquire double the vocabulary, which builds reading skills, than do weak readers).<sup>114</sup> Early learning success in reading, writing, and mathematics also contributes to higher retention rates because children who are successful early on are more likely to remain in school longer.<sup>115</sup> This link is particularly important for low-income girls, who remain the most educationally marginalized. Evidence-based strategies to build foundational skills in literacy and numeracy in lower primary grades are discussed in this chapter.

Critical thinking—the ability to find and analyze information to inform decisions—is an essential and interlinked component of improving learning outcomes. Reading, writing, and mathematics are tools

for acquiring knowledge and therefore are foundational to becoming a critical thinker; however, critical thinking skills are also expanded through other means, including, but not limited to, promoting citizenship and developing social and emotional competence.<sup>116</sup> In 2010, Pratham's *Annual Status of Education Report* in India introduced critical thinking questions for children in grade 5 and above by asking questions that impact “everyday” living (i.e., work with money, calendars, area, and estimation) based on simple mathematical operations used frequently at that schooling level. Colombia has implemented a policy on national citizenship competencies to promote the development of responsible, active, and peaceful citizens that include conflict resolution, mutual decisionmaking, respect and defense of human rights and understanding of plurality, identify and value of differences. Although attention to critical thinking is evident in pockets of research, it has not been analyzed to the same extent that literacy and numeracy in the lower primary grades have been. Given the smaller research base from which to draw specific strategies and activities to improve learning outcomes, the immediate way forward on elevating a focus on critical thinking to improve learning is through increasing research, particularly at the primary level, of how critical thinking skills are introduced and assessed in a classroom setting.

All these factors lead to Priority 2:

*Priority 2: Build foundational skills in literacy and numeracy in the lower primary grades.*

Figure 3.1 portrays the various aspects of Priority 2, which should be addressed with these two strategies:

**FIGURE 3.1. STRATEGIES AND ACTIONS TO SUPPORT LITERACY AND NUMERACY IN LOWER PRIMARY GRADES**

PRIORITY 2: Build Foundational skills in literacy and numeracy in the lower primary grades.		
OVERVIEW	STRATEGIES	ACTIONS
<p>The ability to read, write and do mathematics are foundational skills for all future learning. It is also the minimum that families expect when they send their children to school. It is crucial to start early as there is a relationship between failure to learn to read and falling further behind each year or dropping out altogether. Prioritizing literacy and numeracy in the lower primary grades maximizes investments by ensuring children move from learning to read to reading to learn. Recent evidence identifies actions that can improve literacy and numeracy; however, more work is needed to understand how essential critical thinking skills can be developed in the process.</p>	<p>Prioritize literacy and numeracy in the lower primary grades</p>	<ul style="list-style-type: none"> <li>• Maximize the amount of time spent on learning</li> <li>• Provide training to teachers in effective methods of reading instruction and numeracy</li> <li>• Provide appropriate-level reading materials to children and communities</li> <li>• Create a culture of literacy and learning</li> </ul>
	<p>Provide mother-tongue-based multilingual education in the lower primary grades</p>	<ul style="list-style-type: none"> <li>• Develop comprehensive language plan in partnership with local community</li> <li>• Address practical constraints, such as shortages of teachers and materials in local languages</li> </ul>

- Strategy 2A: Prioritize literacy and numeracy in the lower primary grades.
- Strategy 2B: Provide mother-tongue-based multilingual education in the lower primary grades.

This chapter considers the actions needed to pursue each of these strategies.

### Strategy 2A: Prioritize Literacy and Numeracy in the Lower Primary Grades

Around the world, primary schools spend proportionally more of their resources on the later grades, in large part to strengthen high-stakes examination results and the subsequent transitions into higher levels of education. The most qualified teachers are placed in these later grades with relatively smaller groups of students. And yet one of the greatest education challenges is supporting children’s learning

experiences in the first four years of primary school, when a strong foundation for learning can be established that will motivate them to succeed in later years. Research on the neurological development of children shows that the evolution of their cognitive capacities and learning styles suggests that more intensive instruction (i.e., in smaller classrooms) is better suited to younger children. The opposite, however, is usually the case, as class size tends to get progressively smaller as a child progresses through the education system due to early dropout in grade one—in part because parents see that their children are not learning to read or count.<sup>117</sup> A system’s most experienced and capable teachers should be recruited and assigned to the lower primary grades. A pattern in Tanzania of using only more experienced teachers for the first three grades was credited as one of the factors responsible for improving access and quality.<sup>118</sup> These kinds of policies are particularly relevant vis-à-vis girls’ education (see box 3.1).

### Box 3.1. HOW FOUNDATIONAL SKILLS DEVELOPMENT HELPS GIRLS

Learning to read, write, and do mathematics in lower primary grades can keep girls in school longer. Preliminary evidence finds that some simple teaching techniques can improve girls' reading levels, such as teachers calling on students randomly to ensure girls' equal participation. Teaching in local language at an early age is particularly important for girls who often arrive to school with much less exposure to the official language of instruction.

Four main actions need to be taken to achieve Strategy 2A:

- Maximize the amount of time spent on learning, including addressing teacher absenteeism.
- Provide training to teachers in effective methods of reading instruction and numeracy.
- Provide appropriate-level reading materials to children and communities.
- Create a culture of literacy and learning.

*The first needed action is to maximize the amount of time spent on learning, including addressing teacher absenteeism.* Children's learning is a function of how effectively time is used in school. Recent comparative research across 50 countries, including 13 developing countries, found that an increase of one hour of instruction per week in mathematics, science or reading improves test scores, with a larger effect for girls and students from lower-income families.<sup>119</sup> In many low-income countries, numerous factors reduce the actual amount of time spent on instruction, such as poor student attendance, teacher absenteeism, and school closures due to strikes and insecurity.<sup>120</sup> One recent multicountry study revealed that after subtracting time lost, the remaining instructional time, as a share of the total days available, only amounted to 31 percent in Guatemala, 34 percent in Ethiopia, and 45 percent in Nepal.<sup>121</sup> This means that little time was available to teach and reinforce reading and mathematics skills, among other subjects. Around the world, there is enormous variability in the length of the school day.

Some education systems do not have a class-specific timetable; and among those that do, not all adhere to it. Class-specific timetables should be mandated and adherence to them, including the specific opening and closing times of school, should be monitored and enforced.<sup>122</sup>

Addressing the root causes of lost instructional time might require giving additional support to teachers who are often overwhelmed by class size, limited materials, and poor facilities. It might also require addressing teacher absenteeism, which in many countries is shockingly high. A study of thirty schools in Northern Ghana found that on average 30 percent of teachers were absent at any given time and the average number of days per week a teacher was absent was three.<sup>123</sup> There are various reasons for high absentee rates, including illness, child care responsibilities, long distances to school, or to collect a monthly salary, and "moonlighting" to hold an additional job. In the Indian states of Bihar and Uttar Pradesh, teachers' absences are significantly lower for those teachers who are on annually renewable contracts and therefore face accountability pressures.<sup>124</sup> Another study in India found that direct monitoring, combined with financial incentives based on teacher attendance, lead to large increases in attendance among para-teachers.<sup>125</sup> Matching teachers with their home communities has also shown to have a positive effect. Motivational programs developed in partnership with teachers—such as bonuses, periodic awards, health allowance, housing allowance, recognition, and job enrichment programs—can also improve teacher attendance.

*The second needed action is to provide training to teachers in effective methods of reading instruction and numeracy.* Even when teachers are motivated and show up to class, they often are not adequately prepared in ways that reflect the knowledge base of how children learn to read. This can take place through pre- and in-service training; coaching, peer, and teacher mentor support networks; and the use of technology, such as videos, and effective instructional materials that supplement standard curricula (see box 3.2). At pre-service training, reading and mathematics teachers need extensive knowledge of

how children learn to read and manipulate numbers. Experienced teachers can become mentors to trainees who learn to teach early reading and mathematics through extensive practicums. The starting point for trainee teachers should be a critical understanding of the early primary classroom rather than distanced, theorized academic knowledge.<sup>126</sup> Additionally, local peer teams and communities of practice can bring together teachers to discuss challenges, share good practices, and provide one another support, which is particularly important for new teachers.<sup>127</sup> Teacher training pilots in several low-income countries have shown improvements in children's reading scores by adapting teaching approaches to address reading deficiencies and providing instruction materials, support, and fully specified lesson plans where needed.<sup>128</sup> In Kenya, the Aga Khan Foundation and the Ministry of Education provided teachers with a lesson-by-lesson, week-by-week instruction plan to teach second-grade reading. The training focused on what, when, and how to teach reading and was supplemented by monthly school visits from trainers to support teachers. After this intervention, second-grade students were reading twice as fluently as they had been at the time of the baseline assessment.<sup>129</sup> Classroom activities should underscore the everyday uses of mathematical techniques and build on the knowledge that children bring to school, such as sorting, sequencing, geometrical forms, matching, and counting.<sup>130</sup>

*The third needed action is to provide appropriate-level reading materials to children and communities.* The availability of appropriate-level reading material at age and developmentally and culturally suitable levels of readability—both within homes and in school—is important for children's educational achievement. A study of primary schools in Francophone Africa found that of all classroom equipment, textbooks were the most important items and have a very strong impact on learning.<sup>131</sup> In many low-income countries, textbooks are in short supply and materials to support learning to read in the language of instruction are even rarer. A recent survey in Mali found that three-quarters of grade 2 students did not have a textbook and no student had supplementary reading books at school.<sup>132</sup> Although

### Box 3.2. IMPROVING LITERACY IN INDIA

In India, Pratham's Shishuvachan early literacy program has shown to be effective in improving performance on basic literacy assessments. Teachers use storybooks and flashcards for word and letter recognition to instruct children. The program aims to help children cognitively attach meanings to words and encourages children to take in whole words and ideas rather than focus on an abstract alphabet chart. A three-year randomized control trial found that the program was most effective when it supplemented an existing preschool or first grade, rather than as a stand-alone program. Greatest gains were among children with the lowest initial performance and whose parents are the least able to provide additional support to their classroom studies.

Source: F. He, L. Linden, and M. MacLeod, *A Better Way to Teach Children to Read? Evidence from a Randomized Control Trial* (Cambridge: J-Pal, 2009)

the quality of reading material is important, it must also be coordinated with the range of reading skills required. An intervention in Kenya to increase textbooks in schools showed no effect on learning outcomes. An evaluation concluded it was because the textbooks were much too advanced.<sup>133</sup> On the other hand, recent research in six African countries found that teachers could teach reading comprehension by writing a short story at an appropriate level on a chalk board or manila paper.<sup>134</sup>

*The fourth needed action is to create a culture of literacy and learning.* A culture of literacy and learning must be encouraged and supported at both the school and community levels. Children and families must not only have access to books; they must also be mobilized to use them (see box 3.3). Assessments of reading achievement at the primary level find that children of parents who engage in early home literacy activities, such as reading books or playing with alphabet toys, scored 40 points higher than children whose parents did not engage in such activities.<sup>135</sup> Save the Children's Literacy Boost program in Malawi and Nepal works with community members to create village-level book banks, trains members

to manage the book banks, and provides a curriculum to conduct reading awareness workshops for parents. After one year, students demonstrated progress in letter identification (Nepal), oral reading fluency (Nepal and Malawi), and comprehending connected text (Malawi), as compared with control schools that started with similar scores.<sup>136</sup> Other examples include the use of e-readers that download reading materials so that children can have access to new reading materials, often at a lower cost. Some e-readers, such as those used by Worldreader.org's iRead pilot in Ghana, operate on the mobile phone networks that are growing rapidly worldwide and require low-levels of energy consumption.<sup>137</sup> Pilots have shown, however, that getting technology into schools alone is not enough; teachers and students need to be trained and supported to ensure that the particular technology is being used as intended. There is still much learning needed when it comes to the use of technology to deliver high-quality and cost-effective education.

### Box 3.3. BUILDING A LIFELONG HABIT OF READING

A key component of increasing literacy is ensuring that children have access to age-appropriate and relevant reading material. The Room to Read initiative has built 11,000 libraries in nine developing countries to give children fun and engaging reading materials and encourage reading. The presence of school libraries, specifically with reading material in the language of instruction, has been shown to significantly increase the time children spend reading. For example, Room to Read found that in Zambia students were 37 percent more likely to read silently when they had access to a library. Furthermore, in Nepal, students with access to a library were 42 percent more likely to read for leisure at school and 86 percent more likely at home. Similar results were seen in Room to Read programs in Laos, stressing the importance of libraries and relevant reading material to students' success.

Sources: Room to Read website ([www.roomtoread.org](http://www.roomtoread.org)); Juarez & Associates Inc., *Reading Room Cross-National Evaluation: Year 1: Findings from Zambia, Nepal, and Laos*. San Francisco: Room to Read, 2009.

### Strategy 2B: Provide Mother-Tongue-Based Multilingual Education in the Lower Primary Grades

Fifty percent of the world's out-of-school children live in communities where the language of instruction in school is rarely, if ever, used at home.<sup>138</sup> The language of instruction obviously has profound effects on children's ability to access and learn effectively in school. Research indicates that having a strong foundation in a first language, especially during the early years of school, is crucial to a child's educational success.<sup>139</sup> Using a language of instruction that children do not understand leads to increased repetition and dropout rates and poor educational achievement for those who stay in school.<sup>140</sup> In one study, analysis of data from twenty-two developing countries and 160 language groups revealed that children who had access to instruction in their mother tongue were significantly more likely to be enrolled and attending school. Conversely, a lack of education in a child's first language was a significant reason for children dropping out.<sup>141</sup>

Children aged five to six years have, on average, a working vocabulary of 2,500 to 5,000 words by the time they enter the classroom.<sup>142</sup> This knowledge is essentially wasted when they are unable to use and build upon their skills. Rather than impeding children's ability to learn the official language, studies show that schooling in a child's mother tongue is a strong predictor of achievement in a second language.<sup>143</sup> For example, children learning under the "mother-tongue-based multilingual education" approach in Lubuagan, the Philippines (in English, Filipino, and Lubuagan), outperformed their peers who learned in English and Filipino not only in their mother tongue but also in English and Filipino.<sup>144</sup> There is also growing evidence that early bilingualism can provide children with benefits that go beyond knowing more than one language, including cognitive flexibility and the ability to transfer knowledge across languages earlier and better than their monolingual peers.<sup>145</sup> Additionally, the use of home language in school can increase parents' participation in their children's education. Mother-tongue-based multilingual education may be even more



important for girls, who often have less exposure to non-home language outside the classroom.<sup>146</sup>

Although implementing a mother-tongue-based multilingual policy requires additional resources for start-up, the costs per primary school completer may be much lower due to increased learning, reduced repetition and dropout rates, and increased completion rates. For example, in the case of a bilingual program in Mali, costs per primary school completer were reduced by 27 percent and resulted in higher academic achievement.<sup>147</sup> It is far more costly for a country to have children miss out on years of education or sit in a classroom not learning at all. A study in Guatemala found that despite higher costs for bilingual teachers and supplementary materials, bilingual education produced a cost savings of \$5 million due to lower repetition rates.<sup>148</sup> A recent analysis shows that an increase in a country's education budget of 4 to 5 percent would cover the immediate costs associated with mother-tongue instruction and reduce education costs in the long run.<sup>149</sup>

Two main actions need to be taken to achieve Strategy 2B:

- Develop a comprehensive language policy in collaboration with stakeholders, followed by information programs that explain the policy.
- Address practical constraints, such as teacher deployment, teacher preparation, curriculum (including language transition), and materials development.

*The first needed action is to develop a comprehensive language policy in collaboration with stakeholders, followed by information programs that explain the policy.* Countries should undertake an analysis of how their language of instruction policy—and how it is implemented—is affecting children's participation and success in education, and determine which language(s) would be most likely to increase enrollment, retention, and learning for girls and boys. The analysis should focus on how best to recruit, deploy, and train teachers, along with securing the necessary materials.<sup>150</sup> Findings should be shared and discussed among communities to determine

promising approaches to providing education as long as possible in the children's home language.<sup>151</sup> The benefits of educating children in their mother tongue should be shared with families, which may feel that their child will fall behind if not taught solely in the official language.<sup>152</sup> A plan should be developed that includes transitioning students to the official language(s), in contexts where that is required, which research shows is most effective after a number of years of schooling in a child's mother tongue.<sup>153</sup> In other settings, teaching foreign languages as a subject could be more effective than bilingual programs, to achieve national objectives. In situations where children are required to take exit and/or entrance examinations in official languages at the end of primary school, programs must be designed to respond to that and prepare students for these high-stakes exams.

*The second needed action is to address practical constraints, such as teacher deployment, teacher preparation, curriculum (including language transition), and materials development.* In implementing mother-tongue-based multilingual education, low-income countries face practical issues, such as an absence of teaching materials in any language and centralized teacher recruitment and deployment policies. To address the latter challenge, governments can pursue a more concerted effort to recruit teachers from diverse language areas and/or to recruit community-level teacher's assistants for minority language groups or as an interim measure. With respect to the former challenge, community-based, innovative approaches can address the absence of materials in local languages. For example, Room to Read's "Local Language Publishing" program increases the quantity and diversity of children's books in local languages by selecting local writers and illustrators to develop culturally relevant children's books. Some stories are adapted from local folktales; others are sourced from various writing competitions and writers' workshops sponsored and facilitated by Room to Read.<sup>154</sup> In India, Pratham has published more than 200 original titles in eleven Indian languages and provided them to a mobile library that travels between schools distributing books to children. This includes books to reach visually impaired



children by creating “talking books” as well as partnering with local radio stations to translate books into multiple languages (see box 3.4).<sup>155</sup> Technology can also play a role in the provision of local language materials. SIL International, for example, has developed software to accelerate the production of primers appropriate for beginning readers in clusters of related African languages.<sup>156</sup>

### Box 3.4. GETTING A BOOK INTO EVERY CHILD’S HANDS IN INDIA

In India, the 2006 *Annual Status of Education Report*, a nationwide assessment facilitated by the nongovernmental organization Pratham, found that 65 percent of children in grades 2 through 5 enrolled in government primary schools could not read a simple paragraph. Pratham has taken bold steps to address the learning crisis through its Education Initiative, which has reached more than 1 million children in thirteen Indian states. As part of the Education Initiative, Pratham Books has published more than 170 high-quality children’s books in more than a dozen Indian languages. A mobile library, the Pustak Car, travels between schools in the district of Ankola and has distributed books to more than 4,000 learners. By forming partnerships with local governments, citizens, and corporate publishing companies, Pratham Books has been able to record some of its books in multiple languages and air them on local radio programs. Visually impaired children have benefited from these radio programs and recorded books, furthering Pratham’s mission to get “a book in every child’s hand.”

Sources: Pratham, *Annual Report 2009* (Mumbai: Pratham, 2009).

## PRIORITY 3: PROVIDING POST-PRIMARY EDUCATION OPPORTUNITIES

There is clear evidence that a high-quality, relevant secondary school education<sup>157</sup> has measurable, positive effects on young people’s health, improved child mortality rates, reduced population growth, and greater economic growth.<sup>158</sup> Too few young people, however, are making the transition from primary to post-primary learning and those that do often encounter poor quality where they do not acquire the knowledge, skills, or capacities they need in their daily lives and future work. Helping young people transition into high-quality and relevant post-primary learning opportunities is an important element needed to address the learning crisis.

Progress in universal primary education has led to an increased demand for secondary education. Part of the motivation for increasing enrollment in primary school is the belief that it will lead to further education. This increased demand for high-quality and relevant post-primary education is occurring against the backdrop of a demographic explosion within the secondary school-age population. In South Asia and Sub-Saharan Africa, where poverty rates are among the highest in the world, an average of 1 and 2.2 million young people, respectively, are expected to enter the labor market every year between 2010 and 2015.<sup>159</sup> If properly addressed, this youth demographic window can translate into high economic growth—like like East Asia experienced during during the 1970s and 1980s.

Secondary and post-primary education is particularly important for girls at this age in enabling them to make informed life choices that can prevent pregnancy, early marriage, and other negative health outcomes.<sup>160</sup> It also can equip girls with skills to ex-

pand their choices, increase decisionmaking in the home, and participate in social and economic life.<sup>161</sup> Post-primary education is especially critical in post-conflict situations, where there is often a lack of the skilled labor force necessary to rebuild the affected countries and support the return and reintegration of demobilized militia and displaced populations.

Increasing the number of girls and boys who receive a high-quality, relevant post-primary education requires ensuring that children complete a primary education of good quality and are able to pass exit examinations, reducing demand- and supply-side barriers that prevent young people from transitioning to secondary school, improving the relevance of services so that young people are prepared for future livelihoods and further education, and ensuring equal opportunities—between girls and boys, the rich and poor, urban and rural areas, and within and between countries (see box 4.1). This chapter describes strategies to support transitioning to—and completing—secondary school and other post-primary opportunities that build life and labor skills, as summarized in Priority 3:

*Priority 3: Support transitioning to and completing secondary school and post-primary opportunities that build relevant life and labor skills.*

Figure 4.1 portrays the various aspects of Priority 3, which should be addressed with these two strategies:

- Strategy 3A: Reduce barriers that prevent girls and boys from transitioning to secondary school and other post-primary educational opportunities.

- Strategy 3B: Ensure that post-primary education prepares young people for healthy lives, productive work, and civic participation.

This chapter considers the actions needed to pursue each of these strategies.

**FIGURE 4.1. STRATEGIES AND ACTIONS TO SUPPORT POSTPRIMARY EDUCATION OPPORTUNITIES**

PRIORITY 3: Support transitioning to and completing secondary school and other post-primary opportunities that build relevant life and labor skills.		
OVERVIEW	STRATEGIES	ACTIONS
<p>More young people must be supported to transition to post-primary education while simultaneously addressing serious concerns about the applicability, or relevance, of what they learn to their lives and livelihoods. Ensuring a larger number of young people receive a quality secondary education requires that they complete a primary education of good quality, reducing demand- and supply-side barriers, and improving the relevance of education so that young people are prepared for local work opportunities and to make a healthy transition to adulthood. We need to build on lessons learned and take successful interventions to scale. Additionally, alternative, non-formal models that utilize innovative modes of delivery are needed, many of which require more rigorous evaluations.</p>	<p>Reduce barriers that prevent girls and boys from transitioning to secondary school and other post-primary educational opportunities</p>	<ul style="list-style-type: none"> <li>• Provide well-targeted, appropriately structured subsidies for educationally marginalized groups</li> <li>• Provide a safe environment and girl-friendly school policies</li> <li>• Build social support structures to encourage ongoing learning for girls and boys</li> <li>• Offer second-chance learning opportunities</li> <li>• Provide flexible post-primary models utilizing innovative modes of delivery, including technology</li> </ul>
	<p>Ensure that post-primary education prepares young people for healthy lives, productive work, and civic participation</p>	<ul style="list-style-type: none"> <li>• Strengthen the link between post-primary education and improved life and labor opportunities</li> <li>• Teach transferable skills, such as critical thinking and information and communication technologies (ICT)</li> <li>• Facilitate school-to-work and school-to-lifelong learning transitions</li> </ul>

**Box 4.1. ENSURING MORE GIRLS RECEIVE A QUALITY POST-PRIMARY EDUCATION**

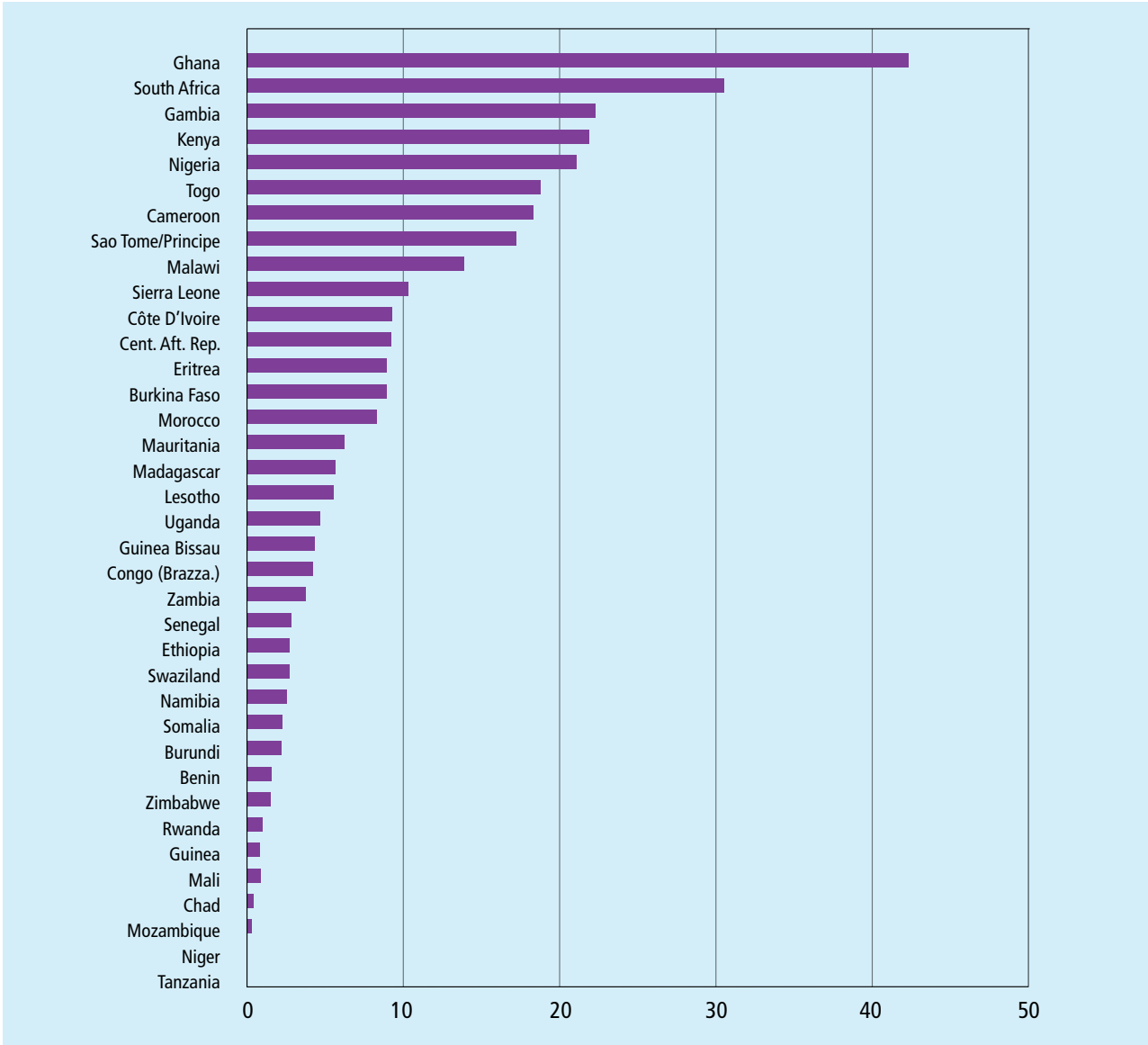
Many adolescent girls in low-income countries are not making the transition to secondary school, despite clear evidence of the large social and economic benefits—including improved health, delay of early marriage and pregnancy, increased wages and economic growth, and an enhanced role in decisions that affect their lives. Non-formal post-primary programs, which are often the most appropriate option for adolescent girls who have missed out on years of school, must be linked to the formal education system, provide clear pathways back to school or work, and offer recognized credentials. Post-primary education should be flexible in delivery to accommodate girls’ work and domestic responsibilities. Post-primary education should teach a range of academic and transferable skills—such as critical thinking, communications, and financial literacy—that prepare girls for healthy transitions to work, marriage, motherhood, and civic participation.

**Strategy 3A: Reduce Barriers That Prevent Girls and Boys from Transitioning to Secondary School and Other Post-Primary Educational Opportunities**

Worldwide, about 74 million adolescents of lower secondary school age are out of school, either because they have not completed primary school or because they have been unable to make the transition to lower secondary school. Although there are exceptions, in most countries today, girls who have completed primary school are as likely to transition

to secondary school as boys.<sup>162</sup> In some cases, differences in enrollment rates at the secondary level between girls and boys can be traced back to initial intake into primary school or are the result of fewer girls completing primary school. Once in secondary school, dropout rates are often higher for girls due to the compounding forms of disadvantage and discrimination that they face—including domestic labor, early marriage and pregnancy, and real or perceived low returns from educating them (see figure 4.2). The situation for girls is particularly acute in conflict-affected areas, and in South and

**FIGURE 4.2. SECONDARY SCHOOL COMPLETION RATES FOR GIRLS, AGE 19, SUB-SAHARAN AFRICA (%)**



Note: Secondary school completion is relatively rare in most African countries. Countries are ranked high to low, by percentage who have completed secondary school.  
 Source: C. Lloyd and J. Young, *New Lessons: The Power of Educating Adolescent Girls* (New York: Population Council, 2009).

West Asia and Sub-Saharan Africa. Only 36 percent of girls enroll in lower secondary school in Sub-Saharan Africa, and the gender gap in secondary enrollment has actually grown wider since 2000.<sup>163</sup> Even more than gender, poverty and rural residence are strongly associated with low enrollment in secondary school.<sup>164</sup> Issues of equity play a particularly important role when it comes to secondary education because it is increasingly the key determinant of subsequent life chances. Participation in secondary education, however, tends to be regressive with income thereby reinforcing disparities.<sup>165</sup> In Sub-Saharan Africa, children from the richest 20 percent of households have on average more than eleven times the chance of reaching grade 9 than those from the poorest 40 percent.<sup>166</sup>

Although access helps children get through the door, it does not guarantee good learning outcomes. Therefore, any approach to improving learning must address barriers that prevent girls and boys from continuing their education as well as targeted measures to improve the quality of the teaching and learning process. Many of the approaches discussed below are not new but either have not been prioritized, appropriately implemented and resourced, or taken to scale. Although individual barriers are discussed separately below, a holistic approach of addressing multiple barriers has been found to be most effective in increasing enrollment, attendance, and achievement in secondary school.<sup>167</sup>

Generating the financial resources required to expand secondary and post-primary educational opportunities is a major challenge facing most developing countries. In low-enrollment countries, the per-student unit cost of post-primary learning is significantly more expensive than at the primary level.<sup>168</sup> Expanding post-primary education also requires achieving cost-efficiencies in deploying and utilizing existing resources, such as through prioritizing measures discussed here. In some cases, student/teacher ratios and teaching time can be increased where they are low.<sup>169</sup> Additionally, expanding post-primary education requires mobilizing increased resources and working with nongovernmental partners, including the private sector, nongovernmental organizations

(NGOs), and civil society groups. This approach includes various forms of public–private partnerships, which are particularly helpful to mobilize additional resources, provide professional support services, and stimulate creative and innovative thinking.<sup>170</sup> The state, while maintaining ultimate responsibility for the provision of basic education for all young people, frequently needs to partner with nongovernmental actors to deliver high-quality post-primary learning opportunities.

Five main actions need to be taken to achieve Strategy 3A:

- Provide well-targeted, appropriately structured subsidies for educationally marginalized groups.
- Provide a safe environment and girl-friendly school policies.
- Cultivate community support and encouragement for ongoing learning for both girls and boys.
- Offer second-chance learning opportunities.
- Provide flexible post-primary models utilizing innovative modes of delivery, including technology innovations, where appropriate.

*The first needed action is to provide well-targeted, appropriately structured subsidies for educationally marginalized groups.* High direct and indirect costs are the principal reason that children who complete primary school do not make the transition to secondary school. Therefore, lowering or eliminating financial barriers through well-targeted and structured scholarships, stipends, or other forms of subsidies has been shown to improve young people's school enrollment and retention rates. Even in countries that include lower or junior secondary school as part of basic education (generally eight to ten years), households often have to pay school fees or other costs associated with going to school (see box 4.2). In Sub-Saharan Africa, this household contribution amounts to 30 to 60 percent of the cost of secondary schooling.<sup>171</sup> As children grow older, the opportunity cost of attending school is even larger because there are increased pressures (and abilities) for young people to earn an income.



## Box 4.2. LOWER AND UPPER SECONDARY SCHOOL

In many developing countries, there is a delineation between lower and upper secondary school. In some countries, lower secondary is considered part of the primary education system and is provided without fees and is compulsory. Sub-Saharan Africa has the lowest rate of compulsory secondary education in the world, with just twenty-two countries designating lower secondary as compulsory. Lower secondary school varies in length from two to four years, whereas upper secondary school is generally two to three years. Lower secondary school generally consists of basic academic and life skills, whereas upper secondary school includes more specialization and workforce development skills. As young people progress from lower to upper secondary school, generally through a national examination process, enrollment rates fall even further.

Sources: UNESCO, *EFA Global Monitoring Report 2011: The Hidden Crisis—Armed Conflict and Education* (Paris: UNESCO, 2011); C. Beggs, *Report to MacArthur Foundation: Girls' Secondary Education in Sub-Saharan Africa*. (Washington, DC: AED, 2010).

In Bangladesh, the Female Secondary School Assistance Project provided tuition assistance and monthly stipends for poor, rural girls provided that the girls remained single, maintained a 75 percent attendance rate, and achieved at least 45 percent on their final examinations.<sup>172</sup> The program provided girls with small bank accounts so that they had control over the stipends, which not only empowered them to handle their own money but also familiarized them with the banking system. The program resulted in dramatic improvements in attendance, while comparable improvements in learning outcomes were not achieved.<sup>173</sup> Large-scale conditional transfer programs in Latin America, where families receive cash or food based on meeting certain conditions, have resulted in improved school attendance as well as enhanced health and nutrition (i.e., Progresá/Oportunidades in Mexico, Bolsa Familia in Brazil, and Red de Protección Social in Nicaragua).<sup>174</sup> A study of a conditional cash transfer program in Colombia found that the program had a positive effect on graduation rates and matriculation into tertiary school when cash transfers were

tied to children finishing high school.<sup>175</sup> A pilot program in Kenya found that providing girls with merit-based scholarships upon completing grade 6 not only improved the academic performance of girls eligible for the scholarships, gains that persisted one full year following the competition, but also the performance of other boys and girls with knowledge of the program.<sup>176</sup> A recent follow up study found that five years later, girls who participated in the merit scholarship program had fewer arranged marriages and were less likely to accept domestic violence than young women who had attended schools that had not participated in the program.<sup>177</sup>

Although subsidy programs can increase enrollment and retention, more needs to be done to ensure that the intended target population benefits, that program costs are sustainable, and that interventions are structured to have a positive impact on learning outcomes. Unintended consequences must also be investigated and avoided, such as shifting work responsibilities within the family to a sibling who does not receive the subsidy, which happened in the case for girls in Colombia.<sup>178</sup> Findings from the merit-based scholarship program in Kenya suggest, for example, that parent and community support might be a necessary condition for the success of student incentive programs.<sup>179</sup> In Morocco, the Quality Girls' Dormitory model demonstrated that providing scholarships and lodging does not necessarily translate into success in school, especially for girls coming from disadvantaged backgrounds. The program empowered community-based organizations and local volunteers to provide targeted academic and psychosocial support. As a result, girls in the fourteen pilot programs performed better in school, as evinced by significant increases in grade point averages, progress to higher grades, and dropout rates that significantly decreased.<sup>180</sup> Lessons from large-scale subsidy programs have shown that how incentives are structured matters. In Malawi, a randomized trial of a cash transfer program found improvements in school enrollment for adolescent girls whether or not the cash grants were conditioned on school attendance but attendance and test scores only improved for those whose grants were conditioned on school attendance.<sup>181</sup> Furthermore,

if the quality of service is poor, learning outcomes will also be poor. Therefore, complementary interventions are also needed to improve the quality of learning.

*The second needed action is to provide a safe environment and girl-friendly school policies.*<sup>182</sup> Often, young people, especially girls, are unable to attend secondary school due to security and safety concerns. Secondary schools are usually further away from home than primary schools; and as girls enter puberty, they face increased risks, including sexual and gender-based violence. A recent study in Nigeria found that for boys and girls combined, living 20 minutes or more from the nearest secondary school reduces the odds of school attendance by 52 percent, with girls being disproportionately affected by school distance.<sup>183</sup> Strategies that have shown to enhance the safety and security of girls in particular, and promote a more girl-friendly environment include: the presence of female teachers; the proximity of schools to girls' homes; the availability of boarding facilities and transportation where schools are long distances from communities; and clearly communicated and enforced codes of conduct for students, teachers, and school personnel.<sup>184</sup> Uganda has had some success in reducing tolerance for sexual harassment in school through public campaigns and raising awareness of the issue of sexual harassment by prominent women and men, along with threatening harsher punishment for violations, including imprisonment.<sup>185</sup> Teachers, both male and female, should receive gender-sensitive training so that they have equal expectations of boys and girls in the classroom and give equal class time and support to both. This includes working with teachers to end stereotypes and practices that discourage female students from certain areas of study, such as mathematics and science. School curricula should be reviewed to remove harmful stereotypes that reinforce unhealthy and discriminatory practices and replace them with positive examples of gender equality. In Malawi, the Ministry of Education, Science, and Technology established the Gender Appropriate Curriculum unit to make primary and secondary textbooks more gender sensitive and to portray girls and women in more

positive roles. Training has also been provided for school textbook writers and editors and for some teachers to make their work gender sensitive.<sup>186</sup> Schools and teachers should also be linked with community-based initiatives to combat gender-based violence, given that much work is being done at community levels in many countries that are generally not well linked with schools.

*The third needed action is to cultivate community support and encouragement for ongoing learning for both girls and boys.* Community mobilization and support networks can also play an important role in ensuring that young people make the transition to and complete secondary school. The media, religious leaders, and other influential community members can communicate with parents and caregivers about the importance and benefits of education, especially for girls. This may require gender sensitization and girls' education awareness programs with the community to challenge social norms that are biased against girls learning. For example, in Malawi, which faces high dropout and absenteeism rates among adolescent girls, a Save the Children project established Bright Future Committees to help keep girls in school. The committees, comprising equal male and female representatives—including students, teachers, parents, PTA, school management, and influential community members—led community-wide discussions on the importance of sending girls to school and established guidelines to respond to absenteeism and sexual violence and abuse. The committees actively followed up on children, especially girls, when they dropped out of school to discuss with families the barriers to keeping the girl in school and problem solve with them on how they can address these barriers. As a result, there was an increase in parent-teacher and parent-student communication about girls' progress, and the girls received greater support throughout their education careers.<sup>187</sup>

High-quality mentoring programs have also been associated with keeping more girls in school, with girls most disadvantaged or at risk benefiting most. Some studies reveal, however, that even when positive effects are found, mentoring programs

do not necessarily translate into higher academic performance.<sup>188</sup> A recent literature review of mentoring programs found that positive outcomes from mentoring programs depend upon several critical factors, including closeness and compatibility between mentor and mentee, sustained mentoring relationship for at least six months, and contextualizing the mentoring approach to the developmental stage and needs facing young people.<sup>189</sup> In five countries in Africa, Camfed provides social support to girls through a network of trained mentors, usually a female teacher at school. If a girl experiences a problem, a mentor provides counseling and will involve Camfed staff when necessary. More than 90 percent of girls in the Camfed program stay in school (see box 4.3).<sup>190</sup>

#### **Box 4.3. COMMUNITY-BASED SUPPORT FOR GIRLS FROM PRIMARY SCHOOL THROUGH COLLEGE**

Operating in 3,139 schools throughout Ghana, Tanzania, Zimbabwe, Zambia, and Malawi, the nongovernmental organization Camfed provides community-based support to girls from primary school through college. Because dropout rates have been shown to increase substantially for adolescent girls in secondary school, Camfed established mentoring programs for at-risk students. Teachers go through three-day training sessions that instruct them on how to mentor female students who face a higher likelihood of dropping out. Girls get the support they need to stay in and complete schools and the teachers become community-wide advocates for vulnerable children. Additionally, a “Safety Net Fund” was established and is administered by mentors to provide emergency financial support to girls who need to pay tuition or for uniforms. The program has seen great success: Almost 5,000 teachers have been trained throughout its five country programs; in Tanzania, dropout rates have declined by 37 percent between 2005 and 2007, and more than 90 percent of girls enrolled in Camfed’s program stay in school.

Sources: Camfed website ([www.camfed.org](http://www.camfed.org)); G. Papadopoulos, “The OECD Approach to Education in Retrospect: 1960–1990.” *European Journal of Education*, Vol 36, No 1, (March 2011).

*The fourth needed action is to offer second-chance learning opportunities.* For many young people in low-income countries, formal secondary school is not a viable option. These young people, especially those affected by conflict, lack the basic skills to progress through to secondary school and require second-chance or catch-up programs. Remedial education is critical for marginalized, lower-performing students who are still in school but require supplementary instruction. Improvements in general school quality will not make a difference if young people lack the basic skills to take advantage of opportunities offered. Although it is more cost-effective to “get it right” from the beginning (which also requires attention to Priority 1 and Priority 2 discussed above), well-designed remedial programs have proven to be successful in improving school outcomes for at-risk children and youth in a variety of settings.<sup>191</sup> In India, Pratham’s Balsakhi Program provides tutors hired from the local community to help marginalized younger children attain basic mathematics and reading skills. A randomized evaluation found remarkable improvements at low costs. After two years in the program, 8 to 13 percent more of the marginalized children were able to do simple word problems, multiplication, division, subtraction, and addition.<sup>192</sup> Although this program was implemented in primary school, in many low-income countries the majority of adolescents are still in primary school and require additional support to progress through to secondary school.

For the millions of young people who are out of school, equivalency, literacy, and market-driven job-training programs can provide opportunities to (re)enter the formal school system or participate in the workforce. Examples include accelerated learning programs, which often combine six years of primary school into three to four years, allowing more young people to reenter the school system. These programs have been particularly important for youth in countries affected by crisis who too often have missed out years of school and are considered overage for formal primary school or uncomfortable sitting in class with much younger children. Other non-formal programs are important to prepare young people for the workforce. In ten conflict

and post-conflict countries, the Norwegian Refugee Committee's Youth Education Pack provides out-of-school youth with a comprehensive package of basic academic, life, and market-driven vocational skills, with a focus on young mothers (see box 4.4).

#### Box 4.4. PROVIDING OUT-OF-SCHOOL YOUTH WITH A COMPREHENSIVE SKILLS PACKAGE

Burundi has seen years of conflict internally and throughout Central and Eastern Africa, resulting in large numbers of refugees and young adults who have been severely affected by war. With 30,000 Congolese refugees living in Burundi, 17,000 Burundian refugees in the Democratic Republic of Congo, more than 300,000 Burundian refugees in Tanzania, and hundreds of thousands of internally displaced persons throughout the region, many adolescents have had limited or no schooling due to displacement. The Norwegian Refugee Council established a Youth Education Pack to address the learning needs of fourteen- to eighteen-year-olds through a holistic one-year training program that focuses equally on literacy and numeracy, life skills, and vocational skills. The program specifically targets young single mothers, youth heads of households, and those with the lowest levels of education. Vocational skills training included carpentry, welding, and baking. A comprehensive evaluation of former trainees showed that they were able to satisfy their basic food, clothing, and shelter needs and that young women were significantly less likely to turn to prostitution. Many voiced future professional aspirations.

Source: Norwegian Refugee Council, "Evaluation Report," June 2008.

In any second-chance program, the reasons why young people dropped out must be taken into account, and gender differences and corresponding learning needs should be included in the design and implementation. There should also be clear pathways back to school or work, which requires that graduates receive recognized qualifications upon completing a program. A national system to validate learning should be developed, such as a national qualifications framework in education and vocational training that

focuses on learning outcomes.<sup>193</sup> A greater number of learning options, however, will require enhanced coordination, regulation, and quality control. Governments, while promoting diversity in learning opportunities, must also play a stronger coordination role between the various ministries and actors responsible for the delivery of post-primary education. Although many of the above-mentioned practices have shown to be promising, there is an urgent need for more rigorous evaluations of non-formal, alternative education programs.

*The fifth needed action is to provide flexible post-primary models utilizing innovative modes of delivery, including technology innovations, where appropriate.* Education should be flexible in delivery to allow for young people's work and domestic responsibilities, which for girls increases with age. Schooling times, for example, might be adjusted during peak harvest periods or when local economic activity is highest to allow children to both work and go to school. Evening classes and shift systems might also be introduced, where schools are used for longer days to allow more children to attend at different times.<sup>194</sup> Originating in Colombia, FUNDAEC (The Foundation for the Application and Teaching of the Sciences) has spent over 35 years implementing innovative education programs that integrate a secondary school curriculum into the reality and needs of rural life and livelihoods.<sup>195</sup> Graduates have knowledge of both traditional rural vocational skills, like agriculture and animal husbandry, and skills that link to a globalizing world, such as creating a microenterprise. Rural youth who might have migrated to urban centers to find work are able to stay within their community to set up small businesses or run vital public services for the community.<sup>196</sup> Success of the program is evident in the tens of thousands of students enrolled in Colombia and the expansion and the expansion to seven other countries, including Kimanya-Ngeyo's Preparation for Social Action program in Uganda.

The use of information and communication technology—such as electronic learning (e-learning), mobile-learning (m-learning), or open and distance learning—can be another approach to reach young people who are unable to attend face-to-face



learning facilities. For example, in Mexico, a television-based educational program, Telescundaria, started more than 30 years ago to target rural teachers and students with a complete package to support teaching and learning. The program allows schools to deliver a full junior secondary curriculum at costs comparable to those in more populated urban areas.<sup>197</sup> Although technology has the potential to transform particular aspects of education, more research is needed on the effective use of technology in resource-constrained environments. In each context, it is also important to investigate if there are gender differences in access or use of the necessary technology before incorporating it into education systems.<sup>198</sup>

### Strategy 3B: Ensure That Post-Primary Education Prepares Young People for Healthy Lives, Productive Work, and Civic Participation

Historically, secondary education has been primarily academic in nature, with the goal of preparing the youth of the small elite class for higher education. In Africa, however, less than 10 percent of young people in secondary school will go on to attend a university.<sup>199</sup> In other countries, secondary school has been used primarily to prepare young people for government jobs, of which fewer are now available as public sectors shrink in many countries. Meanwhile, vocational and technical education has traditionally focused on training young people in a narrow vocation, thus limiting job opportunities and threatening livelihoods because job-specific skills are no longer in demand or quickly become obsolete in today's rapidly changing world. In many low-income countries, vocational training has also remained largely a provision for boys, leaving millions of girls with few options in their post-primary years. It has become increasingly clear that in far too many countries, secondary school and other forms of post-primary education are not adequately providing young people with higher-level skills and competencies to participate in the 21st century's knowledge-based economy. For those young people who are able to attend secondary school, they are leaving ill prepared for jobs that are in demand and for higher education and training. This also affects completion rates

because perceptions of how education will prepare young people for higher education or employment opportunities have been shown to be important factors in young people staying in school.<sup>200</sup>

Three main actions need to be taken to achieve Strategy 3B:

- Strengthen the link between post-primary education and improved life and labor opportunities.
- Teach transferable skills.
- Facilitate school-to-work and school-to-higher education transitions.

*The first needed action is to strengthen the link between post-primary education and improved life and labor opportunities.* Too often, there is a weak link between post-primary education, including vocational training, and the local labor market. As a result, young people are ill prepared for the available job opportunities, which in many developing countries are in the informal economy (agriculture and non-agriculture). To help adolescents meet the challenges of the 21st century and develop into productive, responsible citizens who are well equipped for healthy lives and work, the learning outcomes of post-primary education in most developing countries need to be reviewed. During primary and junior secondary school, children should attain the basic knowledge and generic (vocational and life) skills for a productive and healthy life and the ability to participate in their communities. This should include comprehensive sexual and reproductive health education, which has been shown to improve young people's knowledge and positive behavioral practices related to early pregnancy and HIV/AIDS infection, as well as increased gender equity.<sup>201</sup> After completing eight to ten years of basic education, all young people should be ready for lifelong learning. Young people continuing to upper secondary education and training can then gain the specialized job skills and knowledge necessary for the labor market.<sup>202</sup> Lloyd and Young offer an "Education Manifesto" that recommends where girls at various ages should be in the education cycle and what they should be learning (see box 4.5). This can include training for teachers, health care workers, and others professionals who are in short supply but are



urgently needed in many developing countries. Schools can do this through practical cooperation with local enterprises and other relevant partners in establishing skills standards and developing demand-driven curricula.<sup>203</sup> In Brazil, the Projovem program prepares rural youth to manage small farms or agribusinesses, increasing the productivity and standards of living of rural families. This is an example of a vocational education program that provides young people with relevant, worked-related skills, such as conducting diagnostic studies and market research, as well as basic skills learned in formal school settings.<sup>204</sup>

#### Box 4.5. AN EDUCATIONAL MANIFESTO FOR ADOLESCENT GIRLS

##### **Early adolescence—age 10 to 12 years.**

Where every girl should be: Formal primary school or accelerated complementary school.

What every girl should be acquiring: Literacy, numeracy, critical thinking skills, basic health knowledge, knowledge about their communities and the world.

##### **Middle adolescence—age 13 to 15 years.**

Where every girl should be: Post-primary formal school or accelerated complementary school.

What every girl should be acquiring: Reading and writing fluency for lifelong learning, critical thinking skills, fluency in an internationally spoken language, computer skills, proficiency in mathematics and science, health and reproductive health knowledge, financial literacy, skills for social and civic participation, knowledge about social systems and local and global issues.

##### **Late adolescence—age 16 to 19 years.**

Where every girl should be: Formal secondary school or alternative education with a vocational or livelihoods focus.

What every girl should be acquiring: Marketable skills, information-gathering skills and habits for lifelong learning, financial knowledge and skills.

Source: C. Lloyd and J. Young, *New Lessons: The Power of Educating Adolescent Girls* (New York: Population Council, 2009).

*The second needed action is to teach transferable skills.* Secondary school and post-primary education should overcome the historical academic/vocational divide and move from being either purely academic or occupation-related skills to building a range of basic skills and “core competencies” needed to produce a flexible, adaptable, multi-skilled, and trainable youth cohort prepared for employment in both the formal and informal sectors of the economy and higher education and training.<sup>205</sup> Today’s labor market is demanding workers who have strong thinking and interpersonal skills, such as critical thinking, communications, teamwork, and strong work ethics. Young people need these skills not only to succeed in the labor market but also to make a healthy transition to adulthood, participate as active citizens, and care for their families. Although it is important to integrate life skills into the national curriculum, beginning in primary school, it need not overwhelm an already full curriculum. Life skills can be incorporated through teaching methods, such as interactive learning, applying knowledge to real-life problems, integrating teamwork and peer tutoring into the learning process, and inviting student input into daily lessons.<sup>206</sup> In Uganda, Kimanya-Ngeyo’s Preparation for Social Action program has trained fifteen- to twenty-four-year-olds to undertake community action in the areas of primary health care, the environment, and early childhood education. Youth not only gain important skills for future employment and parenthood but they also gain considerable respect in the community.<sup>207</sup>

In addition to life skills, several new subject areas and practical skills are increasingly in demand. Information and communication technology (ICT), the fastest-growing industry in the world, provides a wide variety of job opportunities.<sup>208</sup> Young people must have early access to ICT training, including computer literacy, to take advantage of these opportunities. As ICT has become more and more sophisticated, gender gaps have widened in some countries, and there is now a risk that girls will be left further behind.<sup>209</sup> In Indonesia, for example, young women fifteen to twenty-four years old were half as likely to use the Internet as boys the same age.<sup>210</sup>

Girls must be encouraged to take scientific and technical courses, families must be educated about the importance of so-called STEM (science, technology, engineering, and mathematics) education for both girls and boys, role models of women scientists and engineers must be promoted, and negative attitudes must be confronted that prevent girls and young women from pursuing ICT education. In addition to ICT, proficiency in an international language, such as English, can also be important in expanding employment opportunities.<sup>211</sup> Financial literacy is another important skill, particularly for girls and young women. Financial management can be taught through experiential learning, such as through offering actual savings accounts to young people.<sup>212</sup> The education sector also offers a currently untapped opportunity to combat climate change and the risks associated with it (see box 4.6).

#### Box 4.6. COMBATING CLIMATE CHANGE THROUGH QUALITY EDUCATION

The education sector offers an untapped opportunity to combat climate change and the associated risks. The way that people are educated and the content of education provide communities with the knowledge and skills needed for making informed decisions about how to adapt individual lives and livelihoods in a changing environment. Global experience shows that investments in climate change education, including disaster risk reduction, can change human perceptions and patterns of behavior that reduce the risks and costs of disasters. For example, schools can implement school disaster management involving students, teachers, and community members in practicing early warning, simulation drills, and evacuation for expected and recurring disasters. At an individual level, this requires relevant education content, such as climate literacy, environmental education, green technical and vocational training, and disaster risk reduction, as well as critical thinking skills to equip learners with the necessary skills to deal with future uncertainty.

Sources: A. Anderson, *Combating Climate Change through Quality Education* (Washington: Brookings, 2011); Plan International, *Education Strategy 2010–2013: Children and Young People’s Right to Education* (New York: Plan International, 2010).

*The third needed action is to facilitate school-to-work and school-to-higher education transitions. Linking post-primary education directly to local work and educational opportunities is necessary to improve graduates’ employment and higher education prospects. Traditional apprenticeships and on-the-job training are often the most successful route to skills development, especially to prepare young people for work in the informal economy. In Benin, Togo, and Mali, apprenticeships have been restructured as part of a partnership between the national authorities and trade organizations and includes three important elements: (1) young apprentices acquire a certain level of theory and practice so that they can receive recognized certification at the end of their apprenticeship; (2) trades people who teach or take on apprentices have the opportunity for upgrading their skills; and (3) all training providers—public, private, formal, non-formal—are integrated into a comprehensive vocational training systems.<sup>213</sup>*

The use of role models and business mentors can be another effective strategy to help young people find work, especially female mentors for girls. Students often need more information on how to translate learning and skills acquired into remunerative employment and how to navigate different workforce challenges that girls and boys may face. Possible strategies include career counseling or community-based seminars on livelihood options, including in the informal sector; creating business networks; mainstreaming entrepreneurial education in the school curriculum; and expanding access to financial services.<sup>214</sup> In Latin America, Entra 21 prepares disadvantaged youth for jobs requiring ICT by offering technical and life skills training as well as job placement services, internships, and advice in developing self-employment initiatives. Forty percent of the targeted youth were placed in jobs, and the employment rate in six Entra 21 projects rose from 15 percent at the start to 54 percent after six to twelve months.<sup>215</sup> Skills certification systems are also needed for graduates to signal their skills and competencies to potential employers or institutions of higher learning.

It is important to note that improving the relevance of education is necessary but not sufficient for increasing employment opportunities for youth. Many low-income countries are plagued by small formal markets and few job opportunities. Although outside the scope of this report, broad-based economic growth is essential. Additional research is also needed to identify effective interventions to address constraints faced by young people in entering the

labor market. This includes examining labor market policies to address gender disparities, including the need to increase young female entrepreneurs' access to investment resources, suppliers, and customers. Although the gender gap in education is closing, the gender gap in labor force participation is not.<sup>216</sup> This warrants closer inspection and highlights the need to address larger social and cultural discrimination in labor practices.

## STRATEGIES COMMON TO ALL THREE PRIORITIES

Good teachers and assessment systems are fundamental for making progress on each of the three policy priorities discussed in the previous three chapters. For this reason, these two factors are discussed in detail here as two specific strategies that apply equally to improving early childhood development, to literacy and numeracy in the lower primary grades, and to relevant post-primary learning. Investing in teachers, particularly female teachers, and improved measurement are also essential elements of ensuring that the most marginalized children, especially poor girls, share in the benefits of learning (see figure 5.1).

### Common Strategy 1: Improve the Quality of Teaching

Many studies identify how teachers teach and how much time they spend teaching as the most powerful determinants of children's achievement in low-income countries. Studies have shown that the quality of teachers is not necessarily defined as holding an advanced teaching degree but instead as being adequately prepared, supported, motivated, and compensated to teach. This goal also extends to other educational personnel, particularly including head teachers and principals, who are critical in leading and managing schools.

To improve the quality of teaching, four actions should be taken:

- Recruit and train more female teachers, particularly at the secondary level.
- Adequately prepare teachers.
- Motivate and support teachers.
- Strengthen school leadership and management.

*The first needed action is to recruit and train more female teachers, particularly at the secondary level.* The presence of female teachers has been shown to not only boost enrollment and reduce dropout rates but also improve learning outcomes for girls.<sup>217</sup> This can be particularly important for adolescent girls. In Sub-Saharan Africa, female teachers rarely exceed 25 percent in secondary school, with far fewer teachers in rural areas.<sup>218</sup> In Bangladesh, having female teachers in local schools was found to increase girls' enrollment,<sup>219</sup> and increase the percentage of correct answers in secondary-level mathematics.<sup>220</sup> In a five-country African study, fifth-grade girls' knowledge gains were larger when taught by a female teacher, whereas boys benefited more from a male teacher.<sup>221</sup> However, female teachers also require gender sensitive training; one study in Kenya found that they can be even more biased against girls.<sup>222</sup> In some countries, quotas might be necessary to increase the number of female teachers, especially in positions of leadership. Kenya increased the number of female head teachers from 10 to 23 percent during a ten-year period by requiring that one out of two head teachers being trained be a woman.<sup>223</sup> Given the low literacy rates of women in many countries, finding qualified female teachers can be difficult. However, studies have found that even very young women can teach programmed curricula effectively as long as they are properly trained and supported.<sup>224</sup> Tanzania successfully expanded the number of teachers by licensing secondary school graduates who are deployed to schools after one month's training on the condition that they enroll in a degree program with the Open University of Tanzania while they continue teaching.<sup>225</sup> Other effective strategies to recruit more female teachers to rural areas include deploying

**FIGURE 5.1. STRATEGIES COMMON TO ALL THREE PRIORITIES**

Improve the quality of teaching and build effective assessment systems linked to teaching and learning.		
OVERVIEW	STRATEGIES	ACTIONS
<p><b>Common Strategy 1: Improve the quality of teaching</b></p> <p>Teachers matter. The interaction that takes place in the classroom is one of the most important factors affecting how much children learn. Quality teaching isn't defined by the number of years of service or acquisition of advanced degrees but teachers who are adequately prepared, supported, motivated, and compensated. In many low-income countries, many more teachers must be recruited, appropriately trained, and deployed, especially to rural areas. More female teachers at the secondary level, in particular, are needed, as they can help to boost enrollment, reduce dropout rates, and improve learning outcomes for girls. Head teachers and principals play a critical role in enforcing and overseeing improvements in teaching and learning practices and providing ongoing support to teachers.</p> <p><b>Common Strategy 2: Build effective assessment systems linked to teaching and learning</b></p> <p>Simple, low-cost assessment systems are needed that provide regular information at individual, school, and system levels. This requires schools and governments to have the capacity to collect, analyze, interpret, disseminate, and use the data to make improvements. Equity-based learning targets for each grade level should be developed in partnership with teachers, parents, and community members. Curriculum should be closely aligned around the targets and assessment exercises should measure progress on a continuous basis starting in early grades. Data collected should be disaggregated by sex, age, ethnicity, and other relevant characteristics. Measuring learning should generate timely information that is useful for policy, planning, and classroom purposes but does not structure education around testing.</p>	<p>Improve the quality of teaching</p>	<ul style="list-style-type: none"> <li>• Recruit and train more female teachers</li> <li>• Adequately prepare teachers</li> <li>• Motivate and support teachers</li> <li>• Strengthen school leadership and management</li> </ul>
	<p>Build effective assessment systems linked to teaching and learning</p>	<ul style="list-style-type: none"> <li>• Set clear learning targets</li> <li>• Monitor teaching and learning processes early and regularly</li> <li>• Ensure that examinations promote national education excellence and equity goals</li> <li>• Involve teachers, parents, local communities, and schools to understand and use information</li> </ul>

teachers with their families and providing free housing and education for their children.<sup>226</sup>

*The second needed action is to adequately prepare teachers.* This requires sufficient initial preparation and continuous professional development, including flexible, in-service training to impart effective, practical teaching skills that teachers can put

immediately into practice. Across the board, countries with high-performing education systems have teacher-education programs that focus less on the theoretical and more on preparing professionals in clinical settings, in which they receive ongoing support throughout the teaching process.<sup>227</sup> Training should be linked to school curricula; emphasize learner-centered, participatory methods of



teaching; and focus on specific skills that match students' needs, such as reading. It should also include effective strategies to work with vulnerable populations and youth at risk for exploitative child labor, gangs, armed forces, trafficking, and so on.

Where connectivity is available, the Internet offers access to virtual training courses, instructional materials, assessment exercises, and online support. Under the right conditions, teacher training institutions and ministries of education could provide teachers in remote rural areas and urban slums with support that connects them to the global information highway.<sup>228</sup> Additional, low-technology approaches to provide ongoing training on-the-job include training clusters, mentoring, and education communities of practice where teachers practice and employ new methods and materials. In Bangladesh, a Save the Children program that emphasized active teaching methods was highly successful in one out of three districts, with little to no impact in the other two. In the successful area, teachers lived together close by the school, which allowed them to practice and consolidate their new learning, as well as encourage community support for the new methods.<sup>229</sup> In providing training and professional support, possible differences in needs among male and female teachers should be assessed and incorporated into training plans.<sup>230</sup> Training should focus on teaching gender-responsive methodologies that are effective in engaging and supporting both girls' and boys' learning.<sup>231</sup> This might include simple, inexpensive techniques, such as systematically calling upon students randomly to ensure the participation of more timid students.

*The third needed action is to motivate and support teachers.* Teachers must also be motivated to show up for class and to provide a high-quality education for their students. Incentives will vary depending on location and community as well as gender. Often it is as simple as showing teachers respect and appreciation for their efforts. In some communities, motivating teachers might require raising their status in the community through radio or TV campaigns, reducing class size, providing continuous training and professional career paths, or increasing

compensation.<sup>232</sup> Evidence is mixed on the impact of financial incentives on improving teacher performance; some studies show a positive relationship, but others show less encouraging results (i.e., teachers' may adapt their teaching to test scores).<sup>233</sup> In Kenya, the Uwezo survey conducted in 2009 found that simply paying for teacher attendance or examination scores had mixed results. But a program that enabled schools to hire additional teachers on short-term contracts, and gave local school committees authority over these teachers, was successful in increasing student achievement.<sup>234</sup> Granting teachers greater autonomy and control over their classrooms and working conditions also has helped to raise the status of the teaching profession in some countries.<sup>235</sup> Strategies to specifically support female teachers include establishing links between female teachers and community-based women's organizations, providing mentoring opportunities between an older and more experienced female teacher with a younger and newer teacher, and recruiting and deploying female teachers in pairs.<sup>236</sup> Similarly, communities that offer teachers' housing and integrate them into the community are less likely to be absent.<sup>237</sup> In each context, it is important to understand the different barriers to attracting and retaining good teachers—and work with teachers and teachers' unions to address these barriers.

*The fourth needed action is to strengthen school leadership and management.* Changes in teaching practices must be supported and enforced by qualified head teachers and principals who are equipped to lead and oversee the administration and management of schools. This should include training principals, head teachers, school management committees, and parent-teacher associations on curriculum and pedagogical reforms, teacher professional development and evaluation, and gender-sensitive pedagogy, among other topics. Training for head teachers and principals should focus on supporting, evaluating, and developing teacher quality as a core responsibility. Training should be adaptive to the particular skills gaps, roles, and needs of teachers, rather than the mandated, one-size-fits-all programs often used by ministries of education.<sup>238</sup> Reciprocal links should also be established between

head teachers and teacher training institutions to support progressive approaches to teaching and other quality improvements. A study looking at the effectiveness of teacher education in Pakistan highlighted the importance of head teacher support in sustaining improvements in the quality of classroom teaching and learning.<sup>239</sup> School leaders should work closely with teachers to establish learning objectives, implement appropriate assessment systems to monitor progress, and hold teachers accountable to these standards. Changing gender norms should be reflected in school leadership and management, where inequalities often remain. School systems that have been effective in improving learning for their students have actively cultivated the next generation of education leaders and ensured a smooth transition of leadership and continuity in sustaining long-term reforms.<sup>240</sup> This requires providing new principals with ongoing support, such as by pairing them with more experienced principals in mentoring programs.

### Common Strategy 2: Build Effective Assessment Systems Linked to Teaching and Learning

We cannot improve what we do not know. Simple low-cost assessment systems are needed that provide regular information at individual, school, and system levels.<sup>241</sup> Empirical research shows the benefits of assessments, when used correctly, on student learning.<sup>242</sup> Assessment systems are made up of different types of activities that serve multiple purposes: *classroom assessments* (primarily continuous or formative in nature) that provide real-time information to support teaching and learning in classrooms; *examinations* (primarily summative and high-stakes in nature) to make decisions about a student's progress through the education system at distinct decision points; and *large-scale, system-level assessments* for providing policy and programmatic information on overall performance levels in the system.<sup>243</sup> Assessment exercises should include a gender analysis and require sex-disaggregated data in order to adequately track the impact of teaching and learning on boys and girls, respectively. Measuring learning should be done in a smart way that generates timely,

useful information for policy, planning and classroom purposes but does not structure education around testing.<sup>244</sup> It is important that learning not be reduced to that which can easily be measured.

To build effective assessment systems linked to teaching and learning, four actions need to be taken:

- Set clear learning targets.
- Monitor teaching and learning processes early and regularly.
- Ensure that examinations promote national education excellence and equity goals.
- Involve teachers, parents, local communities, and schools to understand and use information.

*The first needed action is to set clear learning targets.* An important component of an effective assessment system is to work with key stakeholders up front—including teachers, parents, and communities—to develop clearly articulated learning targets, preferably for each grade level. It is important to ensure that these targets are widely known by all key stakeholders. Just articulating these goals can provide policymakers with grounds for prioritizing what needs to be done. In resource-constrained environments, targets preferably should be localized to inform teaching and learning practices at the school level rather than relying on international benchmarks for learning.<sup>245</sup> The curriculum should be closely aligned to the desired learning outcomes, and teachers should be involved as much as possible in designing any standardized assessment exercises that will be used to measure progress toward these outcomes. The current status of learning (if data exist) should be compared with expected levels, and should be analyzed to ensure that expected levels of learning, as exemplified by textbook content and the national curriculum, realistically reflect what a country is able to achieve in the short run. Unreasonable expectations often drive processes in education systems rather than the needs of children, the capabilities of teachers, and the aspirations of parents.<sup>246</sup> To reduce variability in school performance, countries should adopt time-bound, equity-based targets for achieving national education goals, such as halving education disparities based on wealth,

location, disability, and gender, as called for in the *EFA Global Monitoring Report*.<sup>247</sup> Disaggregating data by sex, age, and ethnicity is critical to identifying excluded social groups and regions and monitoring their progress.

*The second needed action is to monitor teaching and learning processes early and regularly.* Teachers should conduct their own regular classroom assessment activities, starting in primary school, to continuously assess students' performance against learning targets. Research shows a strong link between high-quality, formative assessment activities carried out by teachers in their own classrooms, and improved student learning outcomes as measured by performance on standardized tests, with the largest gains realized by low achievers.<sup>248</sup> This has important implications for the closing of achievement gaps among student groups, including between male and female students. Technology has a role to play in improving the efficiency of analyzing and responding to data. Companies in developed countries, such as Wireless Generation, have developed handheld devices that allow teachers to conduct assessments and adapt classroom materials to each student's individualized learning style. Teachers are able to assess each child's comprehension level and provide targeted help to students most in need. Evaluations have shown that giving teachers the opportunity to focus on the specific learning needs of students through this technology has resulted in significantly improved student outcomes.<sup>249</sup> Adapting such technologies to resource and energy-constrained environments should be explored using pilot programs.

Periodic system-level assessments allow education leaders to identify whether student outcomes are improving and to determine where to allocate attention and resources. These assessments, however, do not need to be major endeavors but only robust enough to answer key policy questions at the national and local levels.<sup>250</sup> In addition to monitoring overall progress and identifying areas of strengths and weaknesses, large-scale, system-level assessments can serve as advocacy and accountability tools to mobilize communities (i.e., the *Annual Status of Education Report* in India, and *Uwezo* in Africa), high-

light challenges in the education system, and place the quality of student learning more prominently on the national agenda. Cross-national differences in the size of gender gaps on international large-scale assessments—such as TIMSS, PIRLS, and PISA—have helped to highlight the nonuniversality of these gaps, which vary from nonexistent in some countries to substantial in others, and to mobilize countries to focus on closing them. These types of learning data, as well as other forms, can also serve to provide an important picture of the effectiveness of education resources. Ensuring that basic policy-making tools, such as national education accounts, can capture the wide range of education resources as well as their uses and outcomes can greatly help decisionmakers in addressing the learning crisis.<sup>251</sup>

*The third needed action is to ensure that examinations promote national education excellence and equity goals.* Examinations are a crucial part of the education system in most countries, and particularly so in low-income countries, where they often are used as the sole basis for allocating scarce educational opportunities at the next level of the education system. The high-stakes nature of examinations means that they exert a backwash effect on the education system in terms of what is taught (i.e., “teaching to the test”) and what is learned. This in turn, for better or worse, has an impact on the skills and knowledge profiles of graduates. It is important to carefully monitor and avoid unintended consequences of examinations. High-stakes examination systems can lead to a focus on test preparation at the expenses of learning, to the development of a private tutoring industry that favors the wealthy, and to incentives for cheating.<sup>252</sup> Furthermore, the gatekeeper nature of many examinations, with students who do not pass the examination being required to leave the education system, can result in certain student groups (i.e., those that have had less exposure to the content or language of the test, such as girls and ethnolinguistic minorities) being systematically excluded from further learning opportunities.<sup>253</sup> It is important for countries to carefully review and monitor their national examinations and to ensure that they not only test accumulated information but also the application of broader knowledge and skills

(academic and personal) that prepare all students to succeed as they progress through and out of school into society and the workplace. Challenges related to cheating and corruption can be mitigated by external grading of examinations, whereby students and parents know that teachers and schools are not in a position to change the grade.

*The fourth needed action is to involve teachers, parents, local communities, and schools to understand and use information.* Feedback on assessment exercises should be provided to students, parents, teachers, and schools about what has been learned to stimulate discussion on how to improve.<sup>254</sup> More information alone, however, is not enough. Schools and governments must have the capacity to collect, analyze, interpret, disseminate, and use the data for instructional and personnel improvements. This may require building institutional capacity to analyze and respond to information.<sup>255</sup> Data systems are also needed to chart students' and schools' progress. Technology can play a role in designing instructional methods tailored to address specific learning gaps (i.e., Khan Academy, Wireless Generation). Gender differences

that emerge in assessment results and are reflected in feedback exercises must consider that different interventions may be required for boys and girls and inform communities and families accordingly.

In many developing countries, parents or caregivers have not been to school themselves or are non-literate, and therefore it is difficult for them to engage in their children's learning both conceptually and in practice. Regardless of their education level, parents and caregivers must be respected and empowered to understand the learning goal for their children for the year, how they can assess whether their child is getting there, and what they can do to help. This requires clear communication between school and home that takes into account each parent's level of literacy. For example, in Liberia, EGRA uses color-coded pens when marking children's homework so that even non-literate parents can understand if the child is doing generally well (lots of blue) or needs more help (lots of red). In Kenya, Tanzania, and Uganda, Uwezo provides each family visited with a poster with pictures that show what parents can do to support their children at home.<sup>256</sup>

# CONCLUSIONS AND POLICY RECOMMENDATIONS

The education community has demonstrated its capacity for powerful and collective action during the past decade as more girls and boys enroll in primary school than ever before in history. However, there is an unfinished agenda: Progress has been highly uneven, with poor girls and conflict-affected young people especially left behind; recent data show that even for those in school, millions are failing to master the most basic skills, including those at the post-primary level. It is time for an expanded education agenda that centers on the goal of learning for all as the new minimum threshold to which the education community must aspire.

A new Global Compact on Learning is needed to catalyze and sustain collaborative action to achieve quality education for all, building on the success of the past and fulfilling the promise of education that parents around the world have now come to expect for their children. Even the poorest children have a right to access learning opportunities and reap the benefits of a quality education.

A diverse array of vibrant networks is required to realize this vision, including those in education, health, technology, agriculture, climate change, and economic development. The broad framework of the Global Compact on Learning is needed to harness the commitment, energy, and innovation of multiple actors to ensure that while each actor focuses on a piece of the learning for all agenda they complement and leverage each other's efforts in pursuit of a common goal. To move this Global Compact from aspiration to action, all actors must work together to embrace six principles needed for change:

- **Leadership:** Leadership on education is needed at the highest political levels. From leaders of developing and developed countries to heads of foundations, corporations and nongovernmental organizations (NGOs), one message must be consistent and clear: that learning matters and that it matters for all children and youth, even the hardest to reach.
- **Partnership:** The only way to achieve learning for all is to work together. The multiple networks of actors committed to improving learning in the developing world must leverage each other's efforts both to maximize their impact and to ensure they are all pulling in the same direction.
- **Financing:** More resources must be committed to achieve the agenda of learning for all while, at the same time, resources should be used more efficiently.
- **Measurement:** Systematically measuring learning achievement in a way that can track progress against existing disparities and provide useful and timely insight for classroom-level practices is essential to fulfill these goals.
- **Advocacy:** Mobilizing public opinion and sending strong signals to governments on the importance of learning for all is a crucial strategy for catalyzing needed leadership and action as well as holding policy-makers to account.
- **Building evidence:** Although data and emerging evidence exist to identify the most promising strategies for achieving parts of the learning for all agenda, remaining



questions must be answered, including to scale up proven solutions.

Realizing the vision set forth in the Global Compact on Learning will fulfill the promise of education for hundreds of millions of young people, their families, communities, and nations. By 2020, not only will the education Millennium Development Goals be met by having all children complete primary school, but those children will be learning while in school and making the successful transition to the most appropriate form of post-primary education. The 67 million children not in primary school and 74 million adolescents of lower secondary school-age who remain out of school will have accessed high-quality learning opportunities. Of the more than 600 million children in primary school in the developing world, the hundreds of millions who currently are not mastering foundational skills and on the road to dropping out will have learned to read and in turn begin to read to learn, setting them on a path for continuing their education. The more than 400 million youth in secondary school in developing countries will have developed skills and capacities that will serve them well in daily life, as well as in making the successful transition from school to work and lifelong learning. The great asset of a well-educated and young population will drive growth and prosperity for many poor countries.

We call upon all actors to commit to the Global Compact on Learning. We specifically recommend that the following actors take concrete actions to fulfill the agenda of learning for all:

- developing country governments,
- multilateral actors,
- developed country governments and the G-20, and
- the business community and civil society.

### Actions for Developing Country Governments

Ultimately it is the responsibility of governments to ensure that all their citizens benefit from high-quality learning opportunities. Acting on this responsibility will require an increased prioritization of

education, focused policies on improving learning, and better attention to reaching the most marginalized groups. Leadership at the highest political levels—including heads of state, ministers of finance and education, and legislative champions—is needed to set a strong vision of high-quality learning for all and to ensure that the necessary reforms and data management systems are in place to effectively use education resources. In particular, governments will need to work toward the following:

- **Better learning targets and strategies.** Establish by December 2012 clear equity-based learning targets for all children and youth, including time bound and quantitative targets for ensuring access to high-quality learning opportunities for those who are out of school. Select strategies for achieving these targets based on existing evidence demonstrating their effectiveness and ensure that among the range of priorities addressed, three in particular are emphasized: early childhood development, literacy and numeracy in the lower primary grades, and transition to and completion of relevant post-primary education.
- **Better data.** Systematically collect and use the most important data for tracking progress against learning targets, adjusting policies, and ensuring that resources are used efficiently. This will include data on the sources of education finance—public, household, external—and their uses, together with learning process and outcomes data disaggregated based on both education level and existing disparities, such as income, gender, ethnicity or linguistic status, and location.
- **More resources used effectively.** Ensure that these policy priorities are matched by adequate financial provision that is then channeled to effective strategies for improving learning for all. Although there is no hard-and-fast rule for determining what sufficient resources for education are, successful governments in low-income countries typically spend 5 percent or more of their gross domestic product on education. Often existing resources can be used more effectively

by supporting promising and proven actions, such as those described in Chapters 2 through 5, that improve the quality of teaching and learning in the classroom.

### Actions for Multilateral Actors

United Nations agencies and the World Bank can play an important role in supporting developing country governments as they work to achieve their goals. High-level leadership is needed within these agencies to ensure that the shared international agenda and the multilateral aid architecture aligns with and supports developing country governments' efforts to improve learning for all. In particular, the five agencies participating in the EFA movement—UNESCO, UNICEF, the UN Development Program, the UN Population Fund, and the World Bank—must lead in this effort. These agencies need to ensure that individually their programs reflect a commitment to improving learning for all, including marginalized groups such as poor girls. Through the EFA Task Force, they must also work collectively to shape the post-2015 global development agenda and strengthen the core of the multilateral aid architecture, both of which will require close collaboration with other important partners such as the UN secretary-general's office, UN Women, and the UN Girls' Education Initiative. In particular, the five EFA agencies will need to work toward the following:

- **Post-2015 Global Development Agenda.** Ensure that education, and particularly high-quality learning for all, features prominently in the next global agenda as a foundational pillar enabling and reinforcing a range of development outcomes, such as shared and greener growth and better health. Steps needed to accomplish this include:
  - Develop a shared vision and concrete plan by December 2012 for advancing the goal of learning for all as central to the post-2015 global agenda.
  - Develop by December 2012 a small set of internationally comparable, widely accepted indicators to measure learning. A systematic dialogue is needed to select or develop shared indicators that will be

used by, among others, developing country governments, developed country governments and other donors, and multilateral agencies. The indicators should be at a minimum based on a nationally representative sample capturing all children, including those enrolled and not enrolled in formal school; objective and not self-reported; and disaggregated by sex, age, wealth, location, and other relevant characteristics of disparity. At least one indicator should capture early learning progress.

- **Stronger multilateral aid architecture.** Strengthen the core of the multilateral aid architecture by ensuring that the EFA Fast-Track Initiative (FTI) builds on its existing reforms to serve as a centerpiece for international cooperation in education. Other options, such as investing in the EFA High Level Working Group or developing a new institution, would take considerably more resources and time. Significantly more financial resources are needed to ensure that the FTI's pooled "Education for All Fund" is able to meet education needs, particularly if it is to play an important role in catalyzing needed government reforms to improve learning, including for the hardest to reach children such as poor girls and conflict-affected young people. FTI will need to find ways to bring new actors to the table, including those interested in developing innovative financing for education, and facilitate their coordination with developing country national education plans. Several steps are needed to achieve this:
  - *A new name.* Rename the FTI by September 2011. In May 2011, the FTI board agreed that a new name is needed, but one has not yet been chosen. A new name, such as, "Partnership for Global Education" would signal the scope and scale of this new centerpiece of the multilateral aid architecture and help garner the support necessary to make it happen.

- *New financing windows.* In addition to the FTI's existing EFA fund, it will need to develop new mechanisms by January 2012 to facilitate private sector investment in education, such as large-scale innovative financing initiatives, particularly to improve learning for the most marginalized children. Direct and daily management of these mechanisms will need to sit outside the World Bank and the existing FTI board to ensure the necessary level of flexibility and efficiency to effectively engage with private sector actors. This will serve to increase private sector resources for education, better align them with developing countries' plans, and ensure complementarities with initiatives undertaken by other actors.
- *An empowered secretariat.* To accomplish these steps, the FTI secretariat leadership must be empowered to engage at a senior international level. Additional staff with diverse skill sets, including in all three core priorities for improving learning, must be engaged to support FTI's expanded role.

### Actions for Developed Country Governments and the G-20

High-level political leadership within developed countries is needed to ensure that learning for all becomes a reality. Bilateral donors play a crucial role in incentivizing education reforms, both within the multilateral aid system and with developing country governments. Strong statements backed by action, particularly from the G-8 and G-20 countries, on the importance of learning, especially for the most marginalized children, will be needed to ensure that sufficient attention is given to the issue. Aid donors must also prioritize learning for all within their own education assistance strategies, including focusing on the three priorities articulated in this Global Compact for Learning and their respective strategies. Specific actions include:

- **G-8 and G-20.** Prioritize education, specifically improved learning for all, as an

important component of the G-8 and G-20 shared growth and development agendas. Proposals for improved learning will need to be immediately and seriously considered in upcoming meetings, particularly because high-quality education is a global public good that can sustain shared and balanced growth as well as improve maternal and child health—two important and existing goals. The G-8 and G-20 should act on specific recommendations proposed to them by former UK prime minister Gordon Brown in his recent report *Education for All: Beating Poverty, Unlocking Prosperity*.<sup>257</sup>

- **Better evidence and data.** Bilateral donors should invest in building the evidence base on what works for improving learning for all, including rigorous and long-term research to answer outstanding questions in the field. This effort will also need to include incentivizing developing country governments to improve their data tracking and analysis capacity—including better understanding the sources and uses of education finances as well as progress on learning achievement. Bilateral donors will need to collaborate on a shared framework or set of frameworks, such as national education accounts, for doing this in order to minimize the number of different data and measurement requests to developing countries and maximize the existing capacity of ministries of education.
- **More resources used more effectively.** To achieve learning for all and at a minimum meet the estimated external financing gap, bilateral donors will need to make a steep increase in their resources for education and find more effective ways of using their aid by focusing on results-based financing. At a minimum, developed country governments will need to generate an additional \$4.1 billion annually from two sets of actions: First, by finally fulfilling the Gleneagles commitment of increasing total aid by \$50 billion by 2010, they could expand education aid by \$1.9 billion; and second, if all

donors spent at least 60 percent of their aid to education at the basic level, it would produce another \$2.2 billion.<sup>258</sup> This increased funding should be used to improve learning for all, particularly for the most marginalized, such as poor girls and conflict-affected young people, by investing in early childhood development; literacy and numeracy in the lower primary grades; and relevant post-primary opportunities. At a minimum, \$3 billion of this should be channeled annually to the FTI's EFA pooled fund, with designations for the three priority areas of funding listed above.

### Actions for the Business Community and Civil Society

Foundations, corporations, NGOs, research institutions, teachers unions and parent and community groups all are important actors in ensuring that the goal of learning for all is translated into action. They all should play an important role in advocating vis-à-vis governments and multilateral institutions to prioritize and invest in learning for all; in monitoring progress and holding governments accountable for their commitments; and in investing in innovative approaches and effective evaluations to build the field's understanding of what strategies work to improve learning. Specific actions needed include:

**Foundations.** Maximize their unique ability to push forward the learning agenda by collaborating with others to seed innovation, catalyze new thinking and policy analysis, and support strong advocates. In particular, foundations should:

- Devote more of their resources to education in the developing countries. There are many foundations around the world that support education globally but resource levels are relatively low. Among US foundations alone, only 4 percent of international giving went to education with 55 percent going to health and 22 percent to democracy and governance programming.<sup>259</sup> Foundations that support important issues such as maternal

and child health, population and migration, food security, and economic development should include improving learning for all as a necessary strategy for achieving success in these other arenas.

- Devote at least half of education portfolio resources to improving learning for all, with a focus on reaching the marginalized, including groups such as poor girls, the disabled, and conflict-affected young people. Grant-making strategies should include supporting one or more of the following three priorities: early childhood development, literacy and numeracy in the lower primary grades, and transition to and completion of relevant post-primary learning.
- Devote a minimum of 10 percent of their education portfolio resources to monitoring and evaluating progress toward achieving the goals of learning for all, including capturing and sharing learning from testing promising strategies. Partner closely with other foundations and research institutions, among others, to leverage resources, share knowledge, and ultimately to seed innovation based on research findings.

**Corporations.** Leverage their expertise in marketing and product design, as well as their direct connection to economic opportunities in developing countries, to advance the goal of improved learning for all, including for the most marginalized. CEOs should advocate strongly for the importance of the learning for all agenda both because a well-educated population is good for business but also because it is the right thing to do. Support innovative financing schemes for education by building on corporate expertise and global networks of employees and consumers. Essential to this effort is the need for better collaboration and coordination with education actors. In particular, corporations should:

- Devote at least half their philanthropic education resources to improving learning for all, including reaching marginalized groups, with a focus on one or more of the following three priorities: early childhood development, literacy and numeracy in the

lower primary grades, and transition to and completion of relevant post-primary learning.

- Leverage marketing skills and global networks to advance the cause of improved learning through cause marketing or corporate-wide initiatives that harness the energy, talent, and resources of employees and consumers in developed and developing countries.
- Utilize product design capacities to innovate and produce better, low-cost technology for improving learning in low-resource environments.
- Increase coordination with other education actors to ensure that investments are meeting the greatest need, leveraging existing initiatives, and aligning with the education plans of developing country governments.

**NGOs and other civil society actors.** NGOs, teachers unions, and parents associations, among others, have long been supporting and delivering important education services on the ground. Often working hard to improve learning for poor communities around the globe, these civil society actors play an important role in speaking out to governments and multilateral agencies on the importance of quality education for all. They should work together to utilize their unique advocacy expertise, grassroots networks, and ability to hold governments

accountable for their actions to create a global movement for improving learning, including for those both in and out of school. All civil society actors, particularly developing country NGOs, have a role to play in advancing this agenda. Close collaboration on three key priorities is needed:

- Mobilize public opinion on and send strong signals to developing and developed country governments on the supreme importance of learning opportunities and outcomes for all children and youth, especially those furthest left behind, such as poor girls.
- Build support among governments and multilateral agencies for interventions that enhance learning achievement, including teacher professional development and support.
- Strengthen the core of the multilateral aid architecture to effectively support developing country learning goals.

All children and youth deserve a quality education. The benefits that come from learning the knowledge, skills, and competencies needed for a safe, healthy, and productive life are immense. In an increasingly young world, investing in the learning for all agenda is needed now. Today's well-educated children and youth are our best hope for a peaceful and prosperous future. We urge all actors to come together behind a Global Compact on Learning to make this vision a reality.



# APPENDIX A: CHART SUMMARIZING PRIORITIES, STRATEGIES AND APPROACHES

PRIORITY	STRATEGY	HOW TO ACHIEVE
1. Support quality early childhood development and learning opportunities for girls and boys	1A: Extend quality early childhood development opportunities, particularly to poor and marginalized communities	<ul style="list-style-type: none"> <li>Invest in nutrition, health, and livelihoods support</li> <li>Develop comprehensive ECD frameworks and plans</li> <li>Provide support to parents and caregivers</li> <li>Strengthen program standards, support, and professional training for ECD educators and caregivers</li> </ul>
	1B: Ensure girls and boys start school at an appropriate age	<ul style="list-style-type: none"> <li>Encourage on-time entry through public policies, campaigns, and tracking</li> <li>Develop and support multigrade and multiage teaching approaches</li> </ul>
2. Build foundational skills in literacy and numeracy in the lower primary grades	2A: Prioritize literacy and numeracy in the lower primary grades	<ul style="list-style-type: none"> <li>Maximize the amount of time spent on learning</li> <li>Provide training to teachers in effective methods of reading instruction and numeracy</li> <li>Provide appropriate-level reading materials to children and communities</li> <li>Create a culture of literacy and learning</li> </ul>
	2B: Provide mother-tongue-based multilingual education in the lower primary grades	<ul style="list-style-type: none"> <li>Develop comprehensive language plan in partnership with local community</li> <li>Address practical constraints, such as shortages of teachers and materials in local languages</li> </ul>
3. Support transitioning to and completing secondary school and post-primary opportunities that build relevant life and labor skills	3A: Reduce barriers that prevent girls and boys from transitioning to secondary school and other post-primary educational opportunities	<ul style="list-style-type: none"> <li>Provide well-targeted, appropriately structured subsidies for educationally marginalized groups</li> <li>Provide a safe environment and girl-friendly school policies</li> <li>Build social support structures to encourage ongoing learning for girls and boys</li> <li>Offer second-chance learning opportunities</li> <li>Provide flexible post-primary models utilizing innovative modes of delivery, such as technology</li> </ul>
	3B: Ensure that post-primary education prepares young people for healthy lives, productive work, and civic participation	<ul style="list-style-type: none"> <li>Strengthen the link between post-primary education and improved life and labor opportunities</li> <li>Teach transferable skills such as critical thinking, communications and ICT</li> <li>Facilitate school-to-work and school-to-lifelong learning transitions</li> </ul>
Common Strategies	1: Improve the quality of teaching	<ul style="list-style-type: none"> <li>Recruit and train more female teachers</li> <li>Adequately prepare teachers</li> <li>Motivate and support teachers</li> <li>Strengthen school leadership and management</li> </ul>
	2: Build effective assessment systems linked to teaching and learning	<ul style="list-style-type: none"> <li>Set clear learning targets</li> <li>Monitor teaching and learning processes early and regularly</li> <li>Ensure that examinations promote national education excellence and equity goals</li> <li>Involve teachers, parents, local communities, and schools to understand and use information</li> </ul>

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