TODAY’S CHALLENGES FOR GIRLS’ EDUCATION

Background paper for the Oslo Summit on Education for Development

Executive Summary

Elizabeth King and Rebecca Winthrop
The Brookings Institution
Elizabeth King is a nonresident senior fellow in the Center for Universal Education at the Brookings Institution.

Rebecca Winthrop is a senior fellow and director of the Center for Universal Education at the Brookings Institution.

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EXECUTIVE SUMMARY

“If only I can get educated, I will surely be the president.”
—A teenage girl in rural Malawi

“There is no more valuable investment than in a girls’ education.”
—Ban Ki Moon, secretary-general, United Nations

Educating a girl is one of the best investments her family, community, and country can make. We know that a good quality education can be life-changing for girls, boys, young women, and men, helping them develop to their full potential and putting them on a path for success in their life. We also know that educating a girl in particular can kick-start a virtuous circle of development. More educated girls, for example, marry later, have healthier children, earn more money that they invest back into their families and communities, and play more active roles in leading their communities and countries.

Over the last 25 years, there have been large gains in girls’ education, and we as a global community can congratulate ourselves for the real progress that has been made. This demonstrates that with shared goals and collective action—among governments, international organizations, civil society, media, and the private sector—we can change the educational prospects for girls around the world.

Despite this progress, our research shows that there are hotspots in the world where girls are not getting a quality education. While there certainly are places where boys are behind, we have focused on understanding how and where across the world girls are behind. The message is that many countries have work to do to improve girls’ education, whether related to the gender gap in primary or secondary enrollment or learning.

There are about 80 countries where progress on girls’ education has stalled. These countries are not meeting the education Millennium Development Goals. They are stuck in an education bog—still struggling to enroll all girls and boys in primary school and close the gender gaps between boys and girls at both the primary and secondary levels. There are an additional 30 countries that have successfully enrolled girls and boys in primary and secondary education but are trapped in low-quality learning. They are struggling to ensure that girls and boys master foundational skills such as basic literacy, numeracy, and science concepts. Quality learning is important for the future lives of girls and boys, but it is also an especially important ingredient in the virtuous circle of development that comes from girls’ education. Finally, there are another 30 countries where children are successfully enrolled and learning. However, girls are behind boys in math. In some ways, we can think of girls in these countries bumping up against an educational glass ceiling.

In this report, we review in detail the progress in girls’ education, the work that remains to be done, and strategies for success. Governments, international development agencies, and civil society organizations have supported a variety of programs that have made a difference in both large and small ways. There are valuable lessons to learn from them—but more progress is needed, especially in the poorest countries and among the disadvantaged populations in most countries. Ultimately we recommend renewed collective action for advancing girls’ education in hotspots around the world, especially in the 80 countries where progress on girls’ education has stalled. We recognize the powerful contribution that girls and women themselves can make to achieve this. Our first recommendation is to
lean in with girls' and women's leadership by investing in two initiatives that could go to scale in a short time frame and rally support from a range of actors, especially civil society and the private sector. The first initiative aims to build strong girl and women leaders by cultivating their skills and capacities to be agents of their own lives. The second initiative aims to put girls and women at the center of a data revolution on gender, one that would fill the critical information gaps about their status, what support they need to succeed, and which interventions have been the most and the least effective. Throughout the world today, it is possible to put mobile technology to work catalyzing a major girl-generated big data initiative.

Our second recommendation is for governments and the partners supporting them to do the long-term work needed to focus systemic reform with a gender lens. This includes strengthening education systems so that they work for girls (and boys). To do this, governments and their international partners must increase their investment in accelerating change in girls' education hotspots, especially to help countries stuck in an education bog where progress on basic education achievement and gender parity has stalled. Governments and their partners also must ensure that gender analysis is regularly used in developing education policy, especially in national education plans that underpin most of the systems in developing countries.

A detailed analysis underpins these recommendations. The report reviews data on six major questions:

- Why do we care about girls’ education?
- What progress can we build on?
- What do we face today in the effort to educate girls?
- Why are girls behind?
- What is working to address obstacles to girls’ education?
- What should we do to accelerate progress on girls education?

A summary of the key findings for each question are presented below.

Why we care: Seven main benefits of girls’ education to society

We have identified seven main reasons why countries—from governments to civil society to the private sector—should care about educating girls. Ultimately, girls’ education is a powerful force for catalyzing a virtuous circle of positive development outcomes.

1. More educated girls and women aspire to become leaders and thus expand a country’s leadership and entrepreneurial talent. One of the pernicious features of gender inequality is that it feeds on itself; parents may have lower aspirations for their daughters than for their sons, and so their daughters too have lower aspirations for themselves. Yet, if given the chance, girls and women can have the confidence and skills to be change-makers. A recent review of the literature on women’s leadership found that most women leaders started early, engaging in education and leadership activities as adolescents (O’Neil, Plank and Domingo, 2015). A number of cases—from India to Rwanda—have shown that having women leading in their communities can make a difference, driving policies and programs that improve family and community well-being (Abbott, 2008).

2. It is the quality of schooling that really counts; economic growth is faster when girls (and boys) learn. Empirical research finds that more gender equality in education is correlated with higher economic growth. In addition, research concludes that years of schooling is not an adequate measure of educational progress. Instead, it is the quality of schooling that matters. Hanushek and Woessmann
(2008) find that an increase of one standard-deviation in average reading and math scores is associated with a substantial two percentage-point increase in annual GDP per capita growth, even holding constant the average years of schooling. In other words, a big portion of the benefits of girls’ education come from not just being in school but learning well while there.

3. **More equal education means greater economic empowerment for women through more equal work opportunities for women and men.** Education opens doors of opportunities for young women, especially when they cannot count on family wealth, property, or business connections. Women with more years of schooling are more likely to find employment, own and operate productive farms or firms, and earn higher wages. In Kenya, for example, more education (and more inputs) for female farmers relative to male farmers increases farm yields by as much as 22 percent (Quisumbing, 1996).

4. **More educated girls and young women are healthier—and as adults they have healthier children.** A child whose mother can read is 50 percent more likely to live past age five. Indeed, the global decline in child mortality has been traced to increases in mothers’ schooling, even after controlling for household income. Gakidou et al. (2010) estimate that, of the 8.2 million fewer deaths of children aged 5 years and below around the world between 1970 and 2009, one-half of the decrease can be attributed to the global increase in the schooling of women of reproductive age.

5. **More educated mothers have more educated children, especially daughters.** Numerous empirical studies have shown that mother’s education is critical for investments in the human capital of the next generation. For example, in India, children of more literate mothers study nearly two hours more a day than children of illiterate mothers in similar households (Behrman et al., 1999).

6. **More educated women are better able to protect themselves and their families from the effects of economic and environmental shocks.** More educated mothers are able to protect their children’s welfare during economic or environmental crises through a higher quality of care and their greater ability to mitigate adverse shocks, such as food price changes, that might reduce food intake.

7. **Education is valuable for girls in and of itself.** Finally, in the words of Urvashi Sahni, an Indian girls’ education activist, “even without all of the ‘developmental and economic goodies’ that come from girls’ education, we should care about educating girls because it is inherently valuable to them and is their right” (Sahni, 2015).

**Progress we can build on**

Globally, there are more girls getting educated than ever before and the gender gap in education has narrowed considerably. This progress reflects another type of progress that is worthy of celebration and one we can build on—the emergence and consolidation of political and programmatic support for gender equality in education by civil society, national governments, the media, private sector and international development organizations. Any work today in accelerating progress in girls’ education can build on very strong foundations. In particular:

- **Aggregate education expansion around the world.** Education levels have risen in most countries around the world. In 1950, the (population-weighted) average number of years of school completed by individuals aged 25 and over was 6.1 in advanced countries and only 1.4 in developing countries; 60 years later, average schooling levels had risen to 11.1 years in advanced economies and 6.9 years in developing countries. Current enrollment rates for children and years of schooling completed for adults still show gender gaps, but overall, women in developing countries have gained relative to men with respect to education.

- **Building on civil society and political momentum.** Girls themselves, their parents, teachers, and
communities have for decades worked to advance their education. Researchers have long studied girls’ and boys’ schooling and their different experiences of education. However, in the last quarter century, grassroots-level action has been promoted and amplified into national policy debates, donor strategies, media campaigns, multilateral action, and initiatives of increasingly high-profile global advocates.

What we face today: Girls’ education hotspots

The global convergence in average years of schooling between 1950 and 2010 described above, especially between men and women, marks a notable shift toward greater gender equality in education. Nonetheless, a closer and more disaggregated look at several education indicators shows persistent gender gaps in education in a number of countries.

Assessing gender equality: gender gaps in the quantity and quality of education

Examining a range of data—familiar quantitative indicators to time series data on student learning—has made it possible to highlight progress, or lack thereof in girls’ education. Some key findings emerge:

• The largest gender gaps in enrollment are in the poorest countries. In highly indebted poor countries, the average net enrollment rate at the primary level is 75.6 percent for girls compared with 80.9 percent for boys. The average girls’ net enrollment rate in these countries is more than 5 percentage points lower than the average for low-income countries, more than 16 percentage points lower than for middle-income countries, and more than 20 percentage points lower than for in high-income countries. At the secondary level, the deficits for girls in the heavily indebted countries are much larger, as table 2 indicates. To illustrate, the average girls’ net enrollment rate is 25.9 percent, as compared with 63.6 percent in middle-income countries and 90.0 percent in high-income countries.

Countries in Africa, Middle East, and South Asia are home to the widest gender gaps in enrollment

In South Asia, the average net enrollment rate for girls at the primary level is about the same as for boys, reflecting progress in primary education toward gender equality, but in secondary education the average girls’ enrollment is 86.5 percent of boys’ net enrollment rate. In the Africa region where the average girls’ enrollment rate is 74.8 percent at the primary level and 29.8 percent at the secondary level, far lower rates than in other regions and also significantly lower than those of boys.

• The girls who face multiple disadvantages are farthest behind. While gender accounts for observed disparities in education, poverty persists as the most important and pervasive factor for education inequality (UNESCO, 2010; Filmer, 2008b). Data from 24 low-income countries show that poverty alone accounts for 38 percentage points of the gender difference between, but gender exacerbates that educational disadvantage, accounting for about 10 percentage points of the difference (King and Nguyen, 2013). Education lags most significantly among people who face multiple sources of disadvantage, not only income poverty, but also place of residence, disability and/or ethno-linguistic background.

• Overall learning levels are low, but girls do worse in math and boys in reading. The gender distribution by competency levels in international and regional assessments reveals that in general boys do better than girls in math and girls perform better in reading. Yet there is considerable variation in the size of these gender differences across countries.

• Soft skills are also key for girls. There is a growing body of evidence from multiple disciplines
Emerging hotspots: Bogs, traps, and ceilings in girls’ education

The education data points to relatively clear country patterns with respect to gender equality. There are clear girls’ education hotspots where progress must continue to be made. For convenience, we use the monikers of “bogs,” “traps,” and “ceilings” to refer to three broad groups of countries; each group is a different type of hotspots. We defined these groups as:

- **Bogs**: Eighty countries where primary enrollment rates may have increased but have not reached the target levels of the MDGs, and gender gaps in enrollment rates at the primary and secondary levels have not narrowed sufficiently. In general, these countries have stalled in reaching the MDGs for education.

- **Traps**: The countries where both primary and secondary enrollment rates (and perhaps even tertiary enrollment rates) have progressed well and have generally reached the MDG targets, and gender gaps in enrollment have narrowed sufficiently. However, these countries lag behind in terms of learning outcomes, as measured by their students’ average performance relative to the average performance in international or regional assessments. In varying degrees, these countries have not made sufficient improvement in learning outcomes and appear to be caught in a low-quality education trap.

- **Ceilings**: Thirty countries that have reached the highest levels of enrollment rates at all levels and have achieved also relatively high levels of student learning as measured by their average performance on international assessments, but face gender inequality in the academic performance. We use a simple measure of gender gap in performance: the relative shares of girls to boys in the extreme competency levels. The male dominance of adolescent boys in math in international assessments means that in many ways the glass ceiling begins in school.

Why girls are behind: What we know about gender equality in education

To examine why girls are behind in hotspots, we begin with the girl and her family at the center, but also trace gender differences to the norms, resources, and constraints in the broader community and economy that influence choices and outcomes. This framework is well known and it ultimately allows us to see that gender gaps in education reflect, in large part, gender inequality in other aspects of society and the economy, and are also often instruments for perpetuating that gender inequality. Some of the root causes of the gender gap in education are:

- **Schooling is more costly for girls.** The direct costs (e.g. school fees where they exist, uniforms, transportation) and opportunity costs (e.g. time could have spent working or helping family) of school often impact boys and girls differently. Many non-experimental studies using household survey data find that girls’ schooling is more sensitive to cost, however defined, than is boys’ schooling (see for example Glick and Sahn, 2007). For example, in Kenya, higher school fees increase dropout probabilities for girls but have no effect on boys (Lloyd, Mensch, and Clark, 2000). A study in Ethiopia finds that boys are less likely than girls to combine work and schooling or to be engaged in work only, and are more likely to be involved in leisure activities only compared to girls, so the sum of domestic and non-paid work for girls is higher for girls (Woldehanna, Jones, and Tefera, 2008).
• **Restricted space and expectations limit girls’ ability to reap the returns to education.** Social norms define the roles that women and men have in the family and the community, the expectations they have about their futures, their individual preferences and the kind of relationships they form. For example, in West Bengal, Beaman et al. (2011) find that, in places where no woman had ever been the local leader, 86 percent of parents wanted their daughters to be either a housewife or whatever their in-laws would decide for her, compared with less than 1 percent for their sons. Also, twice as many parents reported that they wanted their teenage sons to graduate from secondary school or college as those who wished the same for their daughters. In all, the degree of autonomy and empowerment that girls and women possess affects how much they can expect to gain from schooling.

• **Early marriage and teen pregnancy keep girls out of school.** Today, one in three girls in low- and middle-income countries (excluding China) continue to be married before the age of 18 and one in nine girls are married before their 15th birthday. While countries with the highest prevalence of child marriage are concentrated in Western and sub-Saharan Africa (e.g. in Niger 76 percent of girls marry before age 18), due to population size, the largest number of child brides reside in South Asia. Child marriage imposes heavy costs for girls socially, physically, and emotionally and undermines efforts to improve girls’ education. In rural Bangladesh, for example, each additional year that marriage is delayed between ages 11 and 16 could add 0.22 year of schooling and 5.6 percent higher literacy (Field and Ambrus, 2008).

• **Pervasive school-related violence harms millions of girls and young women.** The relationship of school-related violence to educational participation and academic performance is typically not examined in research on the determinants of schooling, perhaps because of the absence of systematic information on its prevalence. However, what data exist paints a picture of extensive school-related violence inflicted on girls. This violence ranges from extreme acts such as kidnapping, bombing, maiming, and killing—acts which often occur in contexts of armed conflict, militancy, and political violence and in 15 countries around the world are directly targeted at girls (e.g. Malala in Pakistan, Chibok girls in Nigeria). But it also includes the often invisible but pervasive practices of sexual abuse, exploitation, and bullying. For example, one study finds that more than 30 percent of girls in southern Africa are raped in and around school (Prinsloo, 2006).

What is working: Evidence on addressing girls’ education

Evidence from evaluations of programs and policies, mostly in the developing world, that have been undertaken to increase girls’ and women’s education point to, among others, several important strategies.

• **High-quality and gender-sensitive curricula and learning materials.** Textbook provision is almost universally accepted as an important tool for teaching and learning when the textbooks are used. But thumbing through textbooks used in primary schools in many countries around the world, one gets an immediate sense of the traditional and accepted gender roles in those countries. Over the past three decades, an increasing number of studies have been undertaken to examine the gender content of textbooks: females tend to be greatly underrepresented; males and females are associated with certain personal traits; they are depicted in stereotyped ways in both occupational and domestic spheres (Blumberg, 2007). The content of textbooks has been slow to change, so they do not reflect actual progress in women’s empowerment and changing roles in society and the economy. Ensuring gender equality is reflected in teaching and learning materials and across the education system “may represent the strongest source of counter messages to traditional norms learned in the family, community, and national media” (Stromquist, 2007 as quoted in Blumberg 2007).

• **Girl-friendly infrastructure.** Programs that focus on improving infrastructure and school inputs
Table 1. Education and gender indicators: Bogs, traps and ceilings

<table>
<thead>
<tr>
<th>Gender indicators</th>
<th>Girls’ net primary and/or secondary enrollment rate are/is below the global meansa</th>
<th>Girls’ net primary and/or secondary enrollment rates above the global meansa</th>
<th>Learning outcomes below average basic competency levelb</th>
<th>Learning outcomes at or above average basic competency levelc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bogs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender parity education not reacheda</td>
<td>Albania, Antigua &amp; Barbuda, Azerbaijan, Cameroon, Comoros, Dominican Republic, Ghana, Guatemala, India, Kenya, Malaysia, Morocco, Mozambique, Papua New Guinea, Palau, Timor-Leste, Zambia*</td>
<td>1SD below the enrollment mean: Afghanistan, Angola, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Cote d’Ivoire, Democratic Republic of Congo*, Djibouti, Ethiopia, Guinea, Guinea-Bissau, Haiti*, Iraq, Lao PDR, Jamaica, Liberia, Malawi, Mali, Niger, Nigeria, Pakistan, Sierra Leone, Solomon Islands, South Sudan, Syrian Arab Republic, Togo, Uganda, Yemen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender parity in net enrollment ratesa</td>
<td>Bermuda, Bhutan, Bolivia, Botswana, El Salvador, Honduras, Maldives, Marshall Is., Myanmar, Namibia, Nicaragua, Philippines, Paraguay, Sao Tome &amp; Principe, Senegal, Suriname, Tanzania, Turks &amp; Caicos, Tuvalu, Vanuatu, Venezuela*, Zimbabwe</td>
<td>1SD below the enrollment mean: Equatorial Guinea, Gambia, Guyana, Lesotho, Madagascar, Mauritania, Puerto Rico, Swaziland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender inequality in math achievementf</td>
<td>Algeria, Argentina, Bangladesh*, Brazil, Chile, Colombia, Costa Rica, Croatia, Ecuador, Greece, Grenada, Hungary, Iran, Italy, Kuwait, Lebanon, Luxembourg, Malta, Mexico, Mongolia, Peru, Rwanda*, Saudi Arabia, Serbia, Slovak Republic, South Africa, Spain, Sri Lanka*, Tunisia, Turkey, Uruguay, [Boys’ deficitg: Bahrain, Egypt, Jordan, Oman, Palestinian NA, Qatar, Thailand]</td>
<td>TRAPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No significant gender inequality in learning</td>
<td>Bulgaria, Cyprus, Georgia, Indonesia, Israel, Kazakhstan, Kyrgyz Republic, Lithuania, Macedonia, Mauritius, Moldova, Montenegro, Panama, Romania, Russian Federation, Sweden, Turkey, Trinidad &amp; Tobago, United States, United Arab Emirates</td>
<td>CEILINGS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>China (Shanghai), Finland, Latvia, Macao (China), Norway, Poland, Singapore, Slovenia, Taipei (China), Ukraine</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aData are for 2014 unless otherwise noted. 
bData represent a comparison to the PIRLS sample mean. 
cData represent a comparison to the TIMSS sample mean. 
dGender parity in education not reached refers to those countries with a gender disparity index greater than 0.25. 
eGender parity in net enrollment refers to those countries where net enrollment rates for boys are equal to or greater than those for girls. 
fGender inequality in math achievement refers to those countries with a gender difference in PISA scores for math of more than 0.5 of a standard deviation. 
gBoys’ deficit indicates a country where math test scores for boys are lower than those for girls. 
**Bogs:** Includes countries (a) where girls’ primary and/or secondary net enrollment rates are below the global means, whether or not their female/male ratio of enrollment rates is above or below the mean of that ratio; and (b) where girls’ primary and secondary net enrollment rates are above the global mean but the female/male ratio of enrollment rates falls below the mean of the ratio. The table also marks those countries that where the girls’ net enrollment rates are 1 SD below the mean.

**Traps:** Countries where (a) girls’ primary and secondary enrollment rates (and perhaps even tertiary enrollment rates) are above the global means and the female-male ratio of enrollment rates is above the mean, but the average learning outcomes, as measured by the % of students performing at the low competency level is 40% or more.

**Ceilings:** Countries where (a) girls’ primary and secondary enrollment rates (and even tertiary enrollment rates) are above the global means, their female-male ratio of enrollment rates is above the mean, and they have achieved relatively high levels of student learning as measured by their performance on international assessments; however, the performance of girls relative to boys in math literacy is (statistically) significantly lower. For countries that participated in the most recent PISA and TIMSS assessments, we used their analysis of gender differences in math assessment (OECD, 2012; Mullis et al., 2012).

**Missing data:** Asterisks (*) indicate the countries that have missing gender-disaggregated net enrollment rates or test scores for the period 2000-14. For countries that have data on net enrollment rates for both primary and secondary levels, we used the data available to assign countries to their groups. For countries that have gender-disaggregated data only for either primary or secondary education, we used the available data to assign the countries to categories. Many countries do not have student assessment data, but those countries tend to have low net enrollment rates that place them in the “bog” category.

**Notes:**

1. Net enrollment rates of girls at the primary and/or secondary levels are below the global mean. UNESCO data for 2000-2014.

2. Learning is below the average competency level in math as signified by PISA, TIMSS, PASEC, SACMEQ and LLECE assessments (latest years of data). When PISA or TIMSS data are available for a country, that country is used to benchmark the other countries in the same region that did not participate in either assessment.

3. Learning is above the average competency level in math as signified by PISA, TIMSS, PASEC, SACMEQ and LLECE assessments (latest years of data). When PISA or TIMSS data are available for a country, that country is used to benchmark the other countries in the same region that did not participate in either assessment.

4. Gender parity is not reached when the female-male ratio of enrollment rates is equal to or less than the global mean for the ratio.

5. Gender parity is reached when the female-male ratio of enrollment rates is greater than the global mean for the ratio.


7. In a few countries, the gender inequality in math achievement is significantly to the disadvantage of boys. The data sources are PISA and TIMSS.
should be designed with incentives for girls in mind to ensure that they improve girls’ education outcomes. In Burkina Faso, a government program, the Burkinabé Response to Improve Girls’ Chances to Succeed (BRIGHT) program, which placed well-resourced schools in 132 villages, is an example of such a program. The package of interventions included, among other things, school construction, teaching and learning inputs, teacher support and housing, gender sensitivity training for officials, incentives to children to attend school, and a mechanism for mobilizing community support for education in general and for girls’ education in particular. The program results are promising. Enrollment of all children rose by 19 percentage points and scores improved by 0.41 standard deviations on a test that covered math and French subjects (Kazianga et al., 2012). The program increased girls’ enrollment by 5 percentage points more than boys’ enrollment, but boys’ and girls’ test scores increased by the same amount. “Girl friendly” amenities were found to be especially impactful in doing this.

• **Great teachers.** A focus on the role of teachers in addressing gender disparities is well-deserved. There is strong evidence of the positive relationship between teachers’ education, experience, and cognitive skills and their students’ academic performance. Six recent reviews of hundreds of impact evaluations of education interventions find that programs that train, support, and motivate teachers are among the most effective. For example, in the United States, having a good teacher is equivalent to the average gain in learning of one school year; having a great teacher means advancing 1.5 grade levels or more. Great teachers are important for girls and boys equally. While there are some arguments for the importance of female teachers, this is most salient in contexts where social norms preclude girls learning in classrooms with male teachers. Generally, what appears most important is for male or female teachers to use gender-sensitive pedagogy.

• **Cost-reducing mechanisms.** Demand side interventions, which reduce the costs of schooling, tend to have the clearest gender-differentiated results on enrollment (Glewwe, 2002). Conditional cash transfer programs (CCTs) that offset a family’s opportunity cost of sending girls and boys to school have been shown to increase enrollment, although only half of available studies of the educational impacts of CCTs actually report results by gender. Who receives the transfer for the family, not just the size of the transfer, also appears to make a difference in CCT programs. One study of a CCT program in Nicaragua shows that impacts of CCTs are higher when the woman holds more power in the household (Gitter and Barham, 2008). Scholarship programs can reduce the direct costs of schooling but the design of the program is essential to get right if scholarships schemes are going to be effective. Perhaps the best known scholarship scheme is the Bangladesh Female Secondary Stipend Program, which dates back to 1982 and to which researchers attribute the country’s impressive increase in girls’ education. To continue to receive the stipend, each girl must maintain a minimum 75 percent attendance rate, at least a 45 percent score in the annual school exams, and must remain unmarried until she obtains the Secondary School Certificate (SSC) or reaches age 18 (Raynor and Wesson, 2006).

• **Safety in schools and freedom from violence.** On the factors that might explain school violence, a study of 37 countries found that while national rates of general crimes are not good predictors of system-wide levels of school, factors inherent in the education system—such as large variation in school quality and in student achievement—are more powerful predictors of school violence. Akiba et al. argue that equalizing the quality of education that all students receive might be a national policy intervention that can reduce school-related violence (2002). Providing girls a safe means for getting to school can also increase enrollment. For example, an innovative program state of Bihar (and neighboring states) in India aimed to reduce the gender gap in secondary school enrollment by providing girls who continued to secondary school with a bicycle. This bicycle program, launched in 2006, increased
girls’ age-appropriate enrollment in secondary school by 30 percent and reduced the gender gap in age-appropriate secondary school enrollment by 40 percent (Muralidharan and Prakash, 2013).

- **Girls’ and women’s capabilities for leadership and ability to make choices.** A recent review of literature on girls’ and women’s leadership found several elements to be especially useful. First, girls and women need diverse skills to be leaders and cultivating the soft skills is important for their long-term leadership capabilities. Mentorships, networks, experiential learning opportunities, smart deployment of technology, and support from boys and men are all ways that can be helpful in building girls’ and women’s leadership skills and capabilities (O’Neil, Plank and Domingo, 2015). These capabilities and leadership experiences contribute to an expanded ability to make choices and an expanded vision for their future. Engaging adolescent girls in leadership activities is an important way of laying the foundations for future leaders. Studies have found that one of the characteristics of women leaders today is that they usually started early, with educational and leadership activities as girls (O’Neil, Plank and Domingo, 2015).

**What should we do: Taking action on girls’ education**

Taking action on girls’ education should not be confined to the halls of government offices or multilateral institutions. Civil society networks, business leaders, media organizations, academia, social enterprises, philanthropic communities, and individual global champions all have a role to play. With this in mind, we are recommending two focused streams of action.

- **Recommendation 1:** Lean in with girls and women’s leadership. Our first recommendation proposes specific initiatives that are well positioned for engaging diverse actors, including: women’s groups, technology companies, media partners, transparency and education NGOs, and government education planning departments. These initiatives are envisioned as catalytic “quick wins” that, if given sufficient financial and political support, could be scaled up within a short time period. They also represent an attempt to explore relatively new approaches to tackling the decades-long girls’ education problem. They are also recommended with the notion that while not directly confronting violence and early marriage, they will certainly help empower girls to push back against these forces. It is our assessment that all countries could benefit from leaning in on girls and women’s leadership, as it is fundamental to sustainable social change not only for girls’ educational opportunities but for gender equality more broadly. The two initiatives we recommend are:

  - **Recommendation 1.1:** Build strong girl leaders. We propose a girls’ leadership initiative that simultaneously provides opportunities for girls to develop the soft skills so crucial for their success as well as provides role models and networks that help shift social perceptions and norms around girls’ education and gender equality. We propose a mentorship model be used with either teachers or recent secondary school girl graduates and that the initiative be scaled up with diverse partners starting in countries where girls’ education is the most behind.

  - **Recommendation 1.2:** Girl-generated data. We propose a girl-generated big data initiative, which would combine the power of “factivists and feminists” (Drummond, 2015). Girl-generated data has the potential to radically change the power dynamics, with girls themselves generating regular information about their circumstances, needs, and achievements that is translated into digestible and timely insight for policymakers, civil society actors, community leaders, and educators. Transparency and accountability take on whole new meanings in this light and ultimately puts the girls at the center of the process. A girl-generated big data initiative also can go a long way in helping fill the data gap on girls’ education, both on basic education data that we have seen is often missing in many countries, but also
more importantly on sensitive issues such as school-related gender-based violence and child marriage. We propose a model where technology firms would partner with civil society and governments to collect, analyze, and disseminate this girl-generated data to those actors who can make the changes needed to improve girls’ lives.

- **Recommendation 2:** Focus on systemic reform with a gender lens. Ultimately, the best approach for helping girls get educated is to ensure governments have strong education systems, ones that enable all children to access good schools and quality learning opportunities. Good schools must be in places where girls and boys alike are given the opportunity to thrive and grow. Developing an education system where good schools are a reality, including for marginalized girls, necessitates systemic reform in many of the countries where girls are behind. In support of systemic reform we propose:

  - **Recommendation 2.1:** Design for education hotspots. We recommend that international donors and multilateral institutions focus increased attention on hotspot countries, in particular in countries stuck in an education bog where girls’ education progress has stalled. This includes both ensuring aid dollars flow to those countries and that the dollars go toward shoring up basic education and gender equality, including in humanitarian contexts. Governments must also do their part and employ strategies for including girls in education progress. This could include defraying costs, supporting great teachers, or improving teaching and learning materials. Teacher organizations also have a role to play. Global capacity can be deployed to help the professional development of teachers across countries where girls are farthest behind.

  - **Recommendation 2.2:** Focus with a gender lens. Countries themselves, and their regional and global partners, must ensure they undertake systemic reforms with a gender lens. This means all decisions around things such as policy, budgets, hiring, and monitoring must be evaluated with the understanding of their differential impacts on girls versus boys. Gender analysis tools should be systematically used in the development of education sector plans. Applying a gender lens to the process of sector plan development—including sector analysis, plan preparation, and plan appraisal—can ensure that the key tools for national education system reform and associated policies and strategies promote effective actions that advance gender equality.

While made separately and with distinct purposes in mind, these two recommendations are also mutually reinforcing. Improved girls’ and women’s leadership, and boosting the availability of relevant data generated, can provide an important feedback loop for governments either for planning or monitoring purposes. Likewise, government reforms can open up space for girls’ and women’s leadership, serving to both help such leadership flourish and reap its outcomes in terms of improved girls’ education opportunities. Ultimately, we hope that these two recommendations, and the specific initiatives made within each, are translated into action and together with the wide range of other strategies actors are pursuing can make a difference to girls, their learning opportunities, and ultimately their ability to be successful in their lives and livelihoods.
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