GLOBAL EDUCATION MONITORING REPORT GENDER REVIEW

**2018**

# Meeting our commitments to gender equality in education

UNESCO
United Nations
Educational, Scientific and
Cultural Organization

Sustainable
Development
Goals

UNGEI!
United Nations Girls'
Education Initiative

Global
Education
Monitoring
Report

GLOBAL EDUCATION MONITORING REPORT

2018

# Gender Review

## MEETING OUR COMMITMENTS
## TO GENDER EQUALITY IN EDUCATION

The Education 2030 Incheon Declaration and Framework for Action specifies that the mandate of the Global Education Monitoring Report is to be 'the mechanism for monitoring and reporting on SDG 4 and on education in the other SDGs' with the responsibility to 'report on the implementation of national and international strategies to help hold all relevant partners to account for their commitments as part of the overall SDG follow-up and review.' It is prepared by an independent team hosted by UNESCO.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The *Global Education Monitoring Report* team is responsible for the choice and the presentation of the facts contained in this publication and for the opinions expressed therein, which are not necessarily those of UNESCO and do not commit the Organization. Overall responsibility for the views and opinions expressed in the Report is taken by its Director.

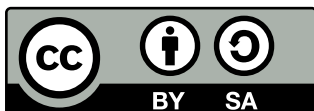The *Global Education Monitoring Report* is an independent annual publication. The GEM Report is funded by a group of governments, multilateral agencies and private foundations and facilitated and supported by UNESCO.

**For more information, please contact:**
Global Education Monitoring Report team
c/o UNESCO, 7, place de Fontenoy
75352 Paris 07 SP, France
Email: gemreport@unesco.org
Tel.: +33 1 45 68 07 41
www.unesco.org/gemreport
https://gemreportunesco.wordpress.com

Any errors or omissions found subsequent to printing will be corrected in the online version at www.unesco.org/gemreport

Graphic design by FHI 360
Layout by FHI 360

Cartoons by Godfrey Mwampembwa (GADO)

**Gender Review of the Global Education Monitoring Report series**
2018    *Meeting our commitments to gender equality in education*
2016    *Education for people and planet: Creating sustainable futures for all*

**Previous Gender Reviews of the EFA Global Monitoring Report series**
2015    *Gender and the EFA 2000-2015: Achievements and Challenges*
2013/4  *Teaching and learning: Achieving quality for all*
2012    *Youth and skills: Putting education to work*
2011    *The hidden crisis: Armed conflict and education*

Cover photo: Andres Pascoe
Caption: Pupils study at a school near Manaus, in the state of Amazonas, Brazil.

This publication and all related materials are available for download here: bitly.com/CountOnME and gem-report-2017.unesco.org.
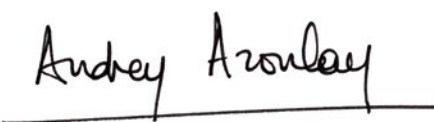
# Foreword

Signing up to the 2030 Agenda for Sustainable Development commits countries to leave no one behind. No target in this agenda can therefore be considered met unless gender equality is realized. Creating a more inclusive, just and equitable world – the essence of sustainable development – means ensuring that all men and women, all boys and girls, can lead empowered and dignified lives. Ensuring an inclusive and gender-equitable education of good quality is a key way to achieve this goal.

The 2018 Gender Review prepared by the Global Education Monitoring Report team, the sixth in the series, knows that it is not sufficient to look at parity in enrolment levels in education, where considerable progress is being made. Gender inequality takes many different guises. Our monitoring framework and data collection mechanisms need to be smarter in order to demonstrate other forms of gender inequality in education. Inequality can lie in the under-representation of women in education leadership positions, the inappropriate school infrastructure or the misrepresentation of gender in textbooks.

The Gender Review looks at who should be called to account when gender inequality in education prevails. It reminds us that countries have made legal commitments for girls' and women's right to education through international treaties. Fulfilling these obligations means that governments should put in place laws and policies, which tackle the obstacles that women and girls face in accessing school and to prevent discrimination while they are in school.

It is necessary to understand and directly address these structural barriers. This effort does not just call for financial resources, adequate capacity and support structures. Teacher attitudes, parental choices or decision-making processes all impact on the likelihood that a girl will enrol in school, stay there until completion and benefit from an equitable learning environment. This, therefore, also means addressing deep-rooted, long-standing discrimination and unequal power relations in other spheres of life.

All of us, as community members or professionals, are responsible for monitoring governments, schools and teachers, to ensure discriminatory practices and attitudes are not tolerated – the 2018 Gender Review sets out how this can be achieved at the local, national and global level.

Audrey Azoulay
Director-General of UNESCO

**Students from North High School in Des Moines, Iowa, celebrate their graduation.**

CREDIT: Des Moines Public Schools.

# Introduction

The 2030 Agenda for Sustainable Development opened a new chapter in the long struggle towards achieving gender equality. Its commitment to 'leave no one behind' expresses the conviction that boys and girls, men and women should benefit equally from development. It envisages a 'world in which every woman and girl enjoys full gender equality and all legal, social and economic barriers to their empowerment have been removed'.

*'Realizing gender equality and the empowerment of women and girls will make a crucial contribution to progress across all the Goals and targets. The achievement of full human potential and of sustainable development is not possible if one half of humanity continues to be denied its full human rights and opportunities. Women and girls must enjoy equal access to quality education, economic resources and political participation as well as equal opportunities with men and boys for employment, leadership and decision-making at all levels. We will work for a significant increase in investments to close the gender gap and strengthen support for institutions in relation to gender equality and the empowerment of women at the global, regional and national levels. All forms of discrimination and violence against women and girls will be eliminated, including through the engagement of men and boys. The systematic mainstreaming of a gender perspective in the implementation of the Agenda is crucial.'*

**TRANSFORMING OUR WORLD: THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT (§20)**

While the fifth Sustainable Development Goal (SDG) is focused on gender, other goals also support the empowerment of women. The inter-relatedness of the different goals sends a strong message about the realization of gender equality in different sectors. For example, gender equality in education cannot be achieved only through education-specific efforts; it also depends on interventions in other sectors. At the same time, progress toward gender equality in education can have important effects on equality in employment, health and nutrition.

The Education 2030 Framework for Action, a tool aimed at helping the international community achieve SDG 4 on education, explicitly recognizes gender equality as a guiding principle linked to the realization of the right to education. It states clearly that girls and boys, women and men, must be equally empowered 'in and through education'.

In this sixth Gender Review, in a series that began in 2011, the Global Education Monitoring Report team maintains the focus on a broad conception of gender equality that extends beyond counting boys and girls in classrooms. The review's first part examines disparities in participation and skills, in education and political leadership positions, and in selected aspects of infrastructure and curricula. It also examines gender issues in professional development by exploring the role of education in three other SDGs: those concerning agriculture, health, and water and sanitation. The second part of the review analyses institutions, laws and policies to explore ways to determine and enforce accountability for gender equality in education.

**Students use a tablet provided by the government to public schools, in South west of Caracas, Venezuela.**

CREDIT: GEM Report/Victor Raison

# Monitoring gender equality in education

Under the 2030 Agenda for Sustainable Development, a new education monitoring framework has been established, replacing the framework set up under the Millennium Development Goals (MDGs). The new system uses a much richer set of information sources than the one it replaced, casting its net wider and aiming to match the ambition of the SDG targets. Even if it can only scratch the surface of the core education and lifelong learning questions related to sustainable development, the new framework necessitates a major mobilization of resources in order to set standards and deploy appropriate tools, especially in capturing different aspects of inclusion and equity.

In assessing gender equality, the SDG 4 monitoring framework makes one important step forward from MDG 3, as shown in the set of 11 SDG 4 global indicators adopted by the United Nations General Assembly in September 2017. Under MDG 3, gender parity was monitored only in primary, secondary and tertiary education enrolment and adult literacy. But under SDG 4, all indicators are to be disaggregated by sex where possible (**Table 1**). Indicator 4.5.1 sets out a requirement for a gender parity index for all indicators that can be disaggregated reiterated in references to disaggregation 'by sex' in other indicators (e.g., in indicator 4.1.1, etc.).

**TABLE 1:**
**SDG 4 global indicators by custodian agency and classification tier**

| Stage | Custodian agency | Tier |
|---|---|---|
| 4.1.1 Proportion of children and young people: | UIS | |
| (a) in grades 2/3; | | III |
| (b) at the end of primary; and (c) at the end of lower secondary | | II |
| achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, **by sex** | | |
| 4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial wellbeing, **by sex** | UNICEF | III |
| 4.2.2 Participation rate in organized learning (one year before the official primary entry age), **by sex** | UIS | I |
| 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, **by sex** | UIS | II |
| 4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill | UIS / ITU | II |
| 4.5.1 Parity indices (**female/male**, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated | UIS | I / II / III depending on indicator |
| 4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, **by sex** | UIS | II |
| 4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including **gender equality** and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment | UIS | III |
| 4.a.1 Proportion of schools with access to: (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) **single-sex basic sanitation facilities**; and (g) basic handwashing facilities (as per the WASH indicator definitions | UIS | II |
| 4.b.1 Volume of official development assistance flows for scholarships by sector and type of study | OECD | I |
| 4.c.1 Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country | UIS | I |

*Notes:* Emphasis added. The following definitions apply to the tier classification:
Tier I: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50% of countries and of the population in every region where the indicator is relevant.
Tier II: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.
Tier III: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.
*Source:* IAEG-SDGs (2017).

For many of the global indicators, further methodological work is needed. The Inter-Agency and Expert Group on SDG Indicators, set up by the United Nations Statistical Commission to oversee the development of the SDG monitoring framework, has adopted a three-tier classification, depending on established methodology and data coverage. For the education goal, three indicators are identified as tier I indicators (having an 'established methodology … and data regularly produced by countries'), four as tier II indicators (an 'established methodology … but data are not regularly produced by countries') and two as tier III indicators ('no established methodology'). Two indicators have been classified at multiple levels. However, even where indicators are not fully defined, it is still possible to report on gender disparities.

In spite of this progress, the monitoring framework does not go far enough; a complete monitoring framework addressing the challenge of gender equality in education would need to be much broader. Equalizing education opportunities between males and females, notably in terms of participation and learning outcomes, is necessary but not sufficient for realizing gender equality in education. Indicators from at least five more domains are needed to frame the issue: gender norms, values and attitudes (many of which can be influenced through education); institutions outside the education system; laws and policies in education systems; resource distribution; and teaching and learning practices (Unterhalter, 2015).

The 2016 *Global Education Monitoring Report* recognized this weakness and introduced an extended framework for monitoring gender equality in education (**Table 2**). Although systematically addressing indicators across all domains is beyond the scope of this report, the review selectively addresses indicators outside the educational opportunities domain.

This section of the review addresses gender disparities in participation in education, in learning and skills development and in access to leadership positions. Then, it describes the role of education in some SDGs beyond SDG 4.

**TABLE 2:**
**Potential indicators of gender inequality in education, by domain**

| Domain | Indicator |
|---|---|
| *Educational opportunities* | • Gender parity index on enrolment, transition and completion rates, and learning outcomes (alone or gender interacting with location and wealth) |
| *Gender norms, values and attitudes* e.g. sexual and reproductive health decisions; women's autonomy and empowerment: domestic violence; household expenditure decisions | • Percentage of population aged 20 to 24 married before age 18<br>• Percentage of women aged 20 to 24 who had a live birth before age 15 to 18<br>• Percentage who agree with statement 'A university education is more important for a boy than for a girl' (e.g. World Values Survey)<br>• Percentage who agree with statement 'If a wife burns the food, a husband is justified in hitting her' (e.g. DHS and MICS)<br>• Degree of decision-making on family planning<br>• Degree of decision-making on earnings and household expenditure<br>• Labour force participation rate or employment rate<br>• Percentage of women in leadership positions in political and economic life |
| *Institutions outside education* e.g. legislation forbidding gender-based discrimination | • Whether the constitution contains at least one approach to gender equality<br>• Whether the country is a signatory of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)<br>• Social Institutions and Gender Index (SIGI) |
| *Laws and policies in education systems* e.g. guarantees of the right to education for girls and women | • Whether the constitution protects the right to education regardless of gender<br>• Whether the country has a policy on gender equality in education |
| *Resource distribution* e.g. gender parity in teacher pay, water and sanitation, training, learning materials | • Percentage of women in school leadership and management positions<br>• Gender parity in teacher education graduates by sector and level<br>• Gender parity in teacher employment by sector and level<br>• Gender parity in teacher pay by sector and level<br>• Percentage of single-sex toilets<br>• Percentage of poor girls (or boys) who receive incentives to attend school (cash transfers, stipends, scholarships) |
| *Teaching and learning practices* e.g. teacher and student gender-related attitudes and interactions | • Percentage of teachers who received training in gender sensitivity<br>• Percentage of countries that include gender equality topics in their curricula (gender discrimination, gender roles, violence, sexual and reproductive health) |

*Source:* Based on Peppin Vaughan et al. (2016).

# Gender disparities in participation and completion vary by country group and education level

The world, taken as a whole, has achieved the target of gender parity at all levels except tertiary education. But this is not true of all regions, country income groups or individual countries. Only 66% of countries have achieved gender parity in primary education, 45% in lower secondary and 25% in upper secondary (**Table 3**).

Between 2000 and 2015, the share of countries that achieved gender parity in primary education increased by 8 percentage points and in upper secondary education by 14 percentage points (**Figure 1**). In 2015, the share of countries with fewer than 80 females enrolled for every 100 males was 1% in primary education (Afghanistan and South Sudan), 5% in lower secondary and 10% in upper secondary.

The world is still a long way from ensuring that all children, adolescents and youth, of either gender, are enrolled in school. In 2015, there were 264 million primary and secondary age children and youth out of school. This includes some 61 million children of primary school age (about 6 to 11 years; 9% of the age group), 62 million adolescents of lower secondary school age (about 12 to 14 years; 16% of the age group) and 141 million youth of upper secondary school age (about 15 to 17 years; 37% of the age group). After a decline in the early 2000s, out-of-school rates have stagnated (since 2008 for primary education, 2012 for lower secondary and 2013 for upper secondary).

Gender disparities in out-of-school rates have narrowed substantially over the last 15 years. Globally, a gap exists only in primary education: 9.7% of primary school-age girls and 8.1% of boys are out of school, or 5 million more girls than boys. In lower and upper secondary education, there is parity overall, but disparities emerge at regional

**TABLE 3:**
**Gender parity index of the gross enrolment ratio and percentage of countries that have achieved parity, by education level, 2015 or more recent year**

| | Pre-primary | | Primary | | Lower secondary | | Upper secondary | | Tertiary | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Gender parity index | Countries at parity (%) | Gender parity index | Countries at parity (%) | Gender parity index | Countries at parity (%) | Gender parity index | Countries at parity (%) | Gender parity index | Countries at parity (%) |
| **World** | **0.99** | **62** | **1.00** | **66** | **0.99** | **45** | **0.98** | **25** | **1.12** | **4** |
| Caucasus and Central Asia | 1.04 | 71 | 0.99 | 100 | 0.99 | 88 | 1.03 | 43 | 1.04 | 0 |
| Eastern and South-eastern Asia | 1.00 | 46 | 0.99 | 88 | 1.01 | 47 | 1.02 | 40 | 1.13 | 7 |
| Europe and Northern America | 0.99 | 85 | 1.00 | 93 | 0.99 | 67 | 1.01 | 31 | 1.28 | 5 |
| Latin America and the Caribbean | 1.01 | 66 | 0.98 | 61 | 1.02 | 41 | 1.11 | 17 | 1.31 | 5 |
| Northern Africa and Western Asia | 1.01 | 50 | 0.95 | 61 | 0.93 | 38 | 0.96 | 38 | 1.01 | 0 |
| Pacific | 0.98 | 43 | 0.97 | 69 | 0.95 | 31 | 0.94 | 8 | 1.38 | 0 |
| Southern Asia | 0.94 | 63 | 1.06 | 33 | 1.04 | 22 | 0.95 | 38 | 0.95 | 22 |
| Sub-Saharan Africa | 1.01 | 49 | 0.94 | 36 | 0.90 | 26 | 0.84 | 9 | 0.70 | 0 |
| Low income | 1.00 | 40 | 0.93 | 29 | 0.86 | 16 | 0.75 | 12 | 0.55 | 5 |
| Lower middle income | 0.99 | 50 | 1.03 | 63 | 1.02 | 33 | 0.94 | 23 | 0.99 | 6 |
| Upper middle income | 1.00 | 66 | 0.98 | 71 | 1.00 | 56 | 1.06 | 28 | 1.18 | 3 |
| High income | 0.99 | 78 | 1.00 | 83 | 0.98 | 58 | 1.01 | 29 | 1.24 | 4 |

*Source: UIS database.*

**FIGURE 1:**

**More countries have achieved gender parity, but disparities persist, especially at higher education levels**

*Percentage of countries by level of gender parity index of gross enrolment ratio, by education level, 2000 and 2015*
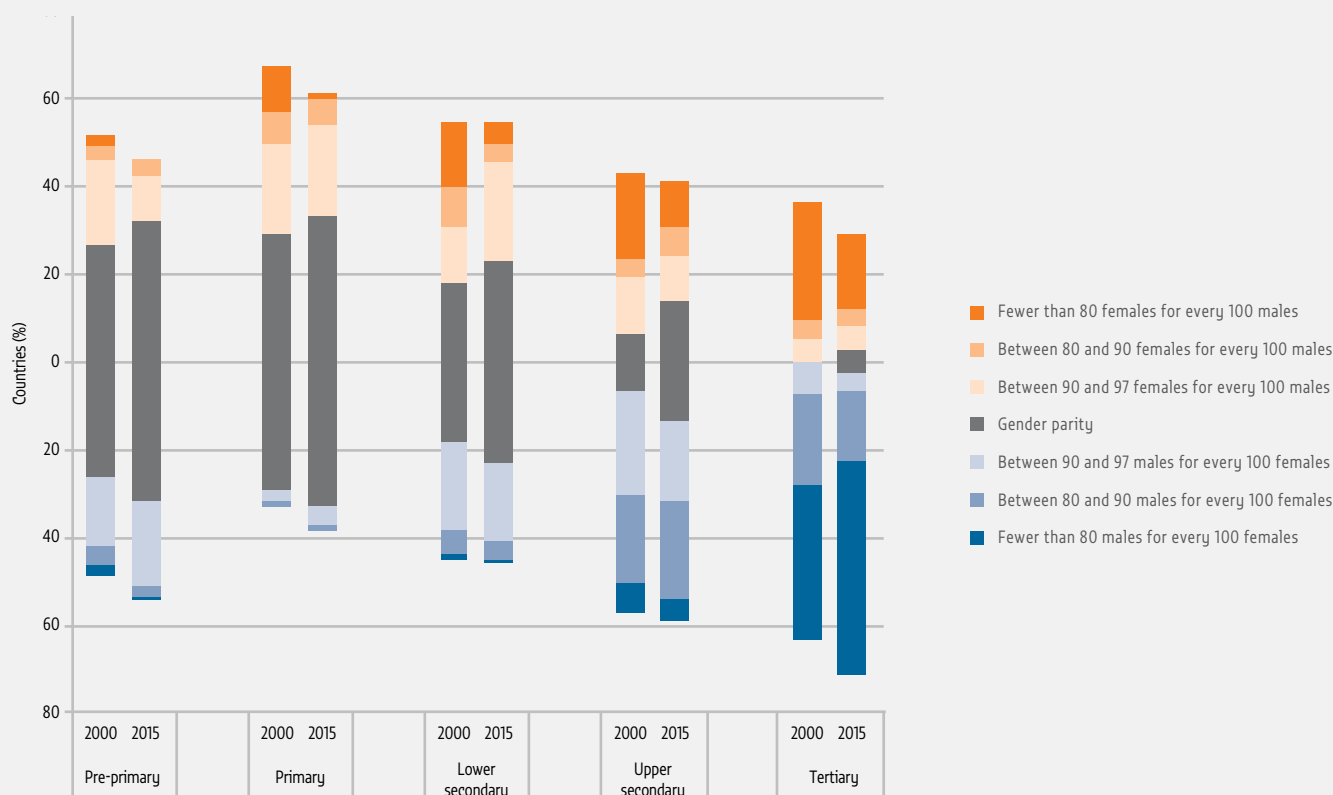


Source: UIS database.

level. For example, in Northern Africa and Western Asia, 12% of adolescent boys and 18% of adolescent girls are out of school. In Eastern and South-eastern Asia, 25% of young men and 19% of young women are out of school.

Overall, the percentage of countries at parity according to the adjusted net enrolment rate, which is the indicator underpinning the number of out-of-school children, adolescents and youth, is at least ten percentage points higher than the parity index for the gross enrolment ratio. For example, while only 66% of countries are at parity in terms of the primary gross enrolment ratio, 77% of countries are at parity in terms of the adjusted net enrolment rate (**Figure 2a**).
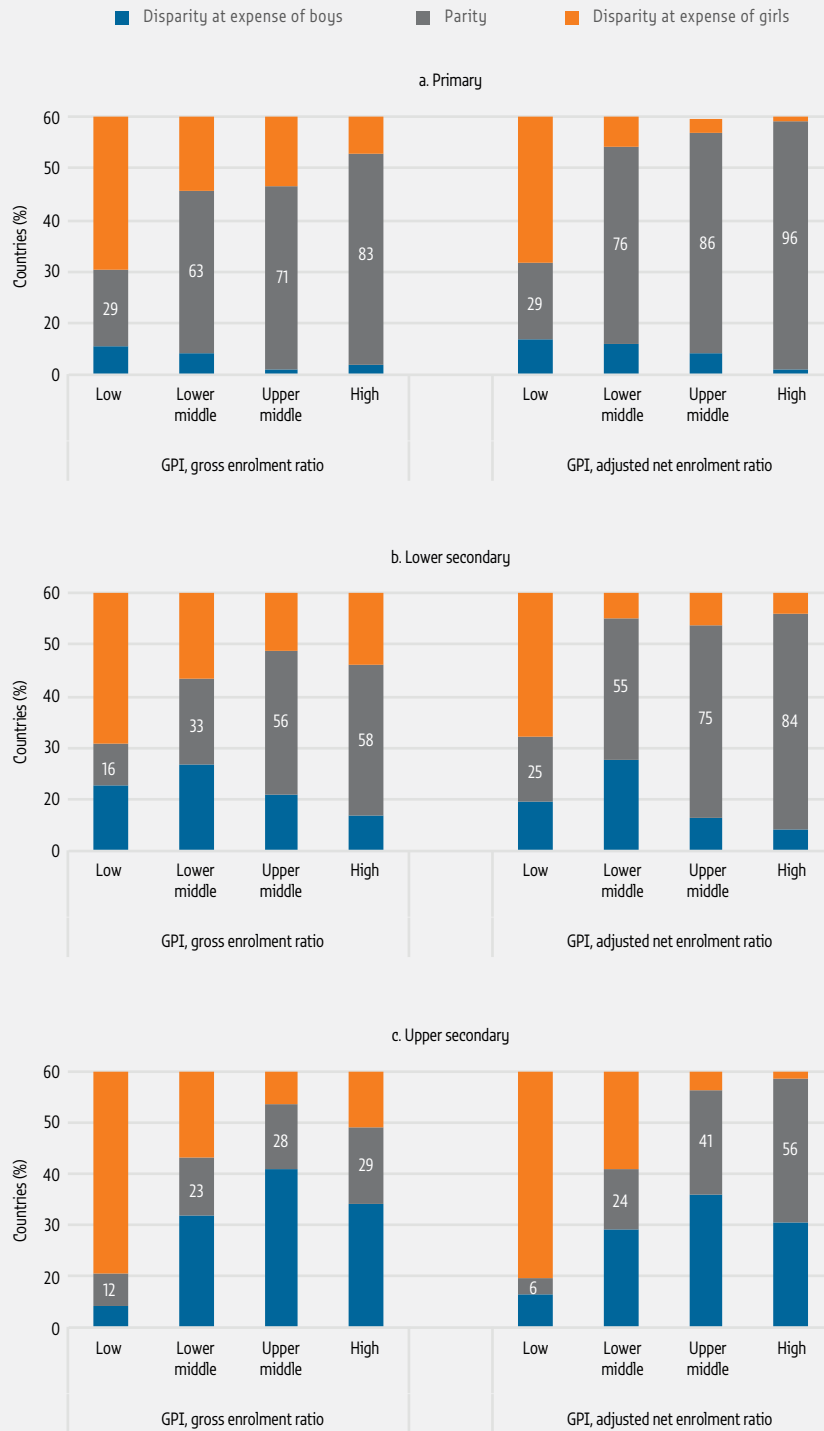
Disaggregating the distribution of the gender parity index values by country income group also shows that at the upper secondary level, among countries that have not achieved parity, disparity is overwhelmingly at the expense of girls in low income countries but at the expense of boys in upper middle and high income countries (**Figure 2c**).

Enrolment does not guarantee completion. Based on household survey data in 2010–2015, completion rates were 83% for primary, 69% for lower secondary and 45% for upper secondary education. As with the enrolment indicators, globally, gender parity has been achieved in completion rates at the three education levels. But this masks disparities between regions and country income groups. For example, 86 females completed the lower secondary education level for every 100 males in sub-Saharan Africa, while in Latin America and the Caribbean, 93 males completed the level for every 100 females. Likewise, 66 females completed the upper secondary education level for every 100 males in low income countries, while in upper middle and high income countries 94 males completed for every 100 females (**Table 4**).

**FIGURE 2:**
**Wealthier countries are more likely to achieve gender parity**
*Percentage of countries by level of gender parity index of gross enrolment and adjusted net enrolment rate, by education level and country income group, 2015 or more recent year*

**TABLE 4:**

**Gender parity indices of the completion rate and completion rate of the poorest males and females, by education level, region and country income group, 2010–2015**

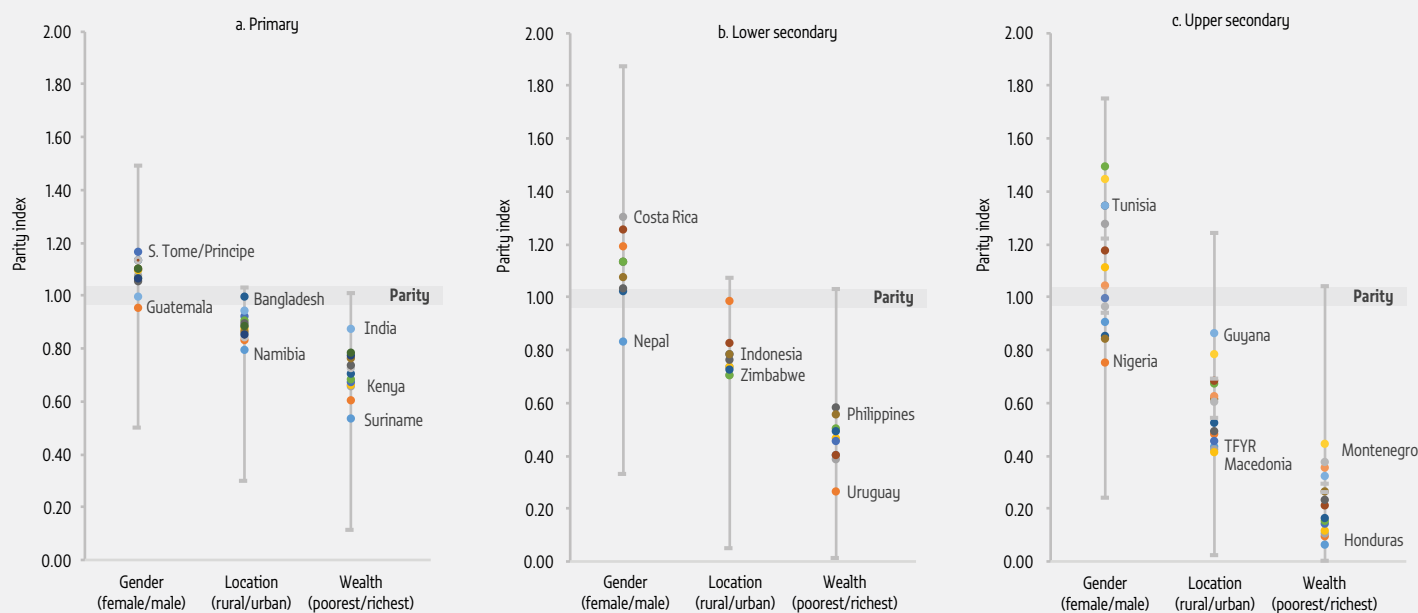| | Pre-primary | | | Lower secondary | | | Upper secondary | | |
|---|---|---|---|---|---|---|---|---|---|
| | Gender parity index, completion rate | Completion rate, poorest males | Completion rate, poorest females | Gender parity index, completion rate | Completion rate, poorest males | Completion rate, poorest females | Gender parity index, completion rate | Completion rate, poorest males | Completion rate, poorest females |
| **World** | **1.01** | **72** | **71** | **1.01** | **54** | **54** | **0.99** | **32** | **33** |
| Caucasus and Central Asia | … | … | … | … | … | … | … | … | … |
| Eastern and South-eastern Asia | 1.02 | 88 | 92 | 1.14 | 65 | 72 | 1.05 | 45 | 48 |
| Europe and Northern America | … | 99 | 98 | 1.00 | 95 | 96 | 1.05 | 77 | 81 |
| Latin America and the Caribbean | 1.04 | 80 | 86 | 1.07 | 56 | 63 | 1.13 | 31 | 34 |
| Northern Africa and Western Asia | 0.97 | 69 | 63 | 1.03 | 44 | 42 | 1.02 | 18 | 16 |
| Pacific | … | … | … | 1.01 | 97 | 96 | 1.09 | 80 | 69 |
| Southern Asia | 0.99 | 75 | 71 | 0.94 | 60 | 53 | 0.90 | 23 | 16 |
| Sub-Saharan Africa | 0.99 | 34 | 31 | 0.86 | 17 | 13 | 0.78 | 8 | 5 |
| Low income | 0.97 | 31 | 28 | 0.79 | 12 | 8 | 0.66 | 3 | 2 |
| Lower middle income | 1.00 | 70 | 68 | 0.97 | 53 | 47 | 0.93 | 21 | 15 |
| Upper middle income | 1.02 | 89 | 93 | 1.11 | 69 | 78 | 1.07 | 49 | 52 |
| High income | … | … | … | 1.01 | 89 | 92 | 1.07 | 73 | 79 |

*Source:* GEM Report team analysis using the UIS database for out-of-school indicators and gross intake ratio at the last grade based on administrative data; GEM Report team calculations for completion rates based on household survey data.



MANY MORE WOMEN THAN MEN GRADUATE, BUT FAR FEWER ACHIEVE STEM DEGREES

**FIGURE 3:**

**The degree of disparity varies even among countries with similar completion rates**

*Gender, location and wealth parity index of completion rate, by education level, selected countries close to the average completion rate, 2010–2015*



*Note:* Relative to the global average, countries compared are within 5 percentage points for primary completion and 10 percentage points for lower and upper secondary completion. The highest and lowest values on each vertical line indicated by a grey dash show the maximum and minimum value of the parity index for all countries.
*Source:* UIS and GEM Report team calculations using household surveys.

Disparities in completion rates among poorer children, adolescents and youth also vary. In Eastern and South-eastern Asia and in Latin America and the Caribbean, more poor females than poor males completed lower and upper secondary education. However, in Southern Asia and sub-Saharan Africa, more poor males than poor females completed lower and upper secondary education. In low income countries, just 2% of the poorest females and 3% of the poorest males completed upper secondary education.

On some indicators, the parity index can be a misleading measure. As the 2016 *Global Education Monitoring Report* showed, the value of the index will be close to parity in countries that are close to universal completion. It is, therefore, important to compare countries that are at roughly similar levels on the underlying indicator. For example, Nigeria and Tunisia have similar completion rates overall, but 75 females completed upper secondary for every 100 males in Nigeria, while 75 males completed for every 100 females in Tunisia (**Figure 3**).

In tertiary education, only 4% of countries have achieved parity, with the gender imbalance increasingly at the expense of males: Overall, there are more females than males in tertiary education in almost all regions. As Southern Asia moves towards closing the gap, sub-Saharan Africa is the only region where women still do not enrol in or graduate from tertiary education at the same rates as men. However, in many countries, although women outnumber men as graduates, they lag behind men in completing science, technology, engineering and mathematics (STEM) degrees. In Chile, Ghana and Switzerland, women account for less than one-quarter of all STEM degrees. By contrast, women in Albania, Algeria and Tunisia are more likely than men to earn a STEM degree (**Figure 4**).

For adult education and training participation rates, labour force surveys remain the data source with the highest potential for monitoring, although data are available only for a limited number of countries. In Europe, the EU Labour Force Survey (LFS), carried out quarterly since 1983 in 33 countries, is the official source of information

**FIGURE 4:**
**Women are a majority of university graduates but a minority of STEM graduates**
*Percentage of female graduates from science, technology engineering and mathematics programmes and all tertiary programmes, 2015*
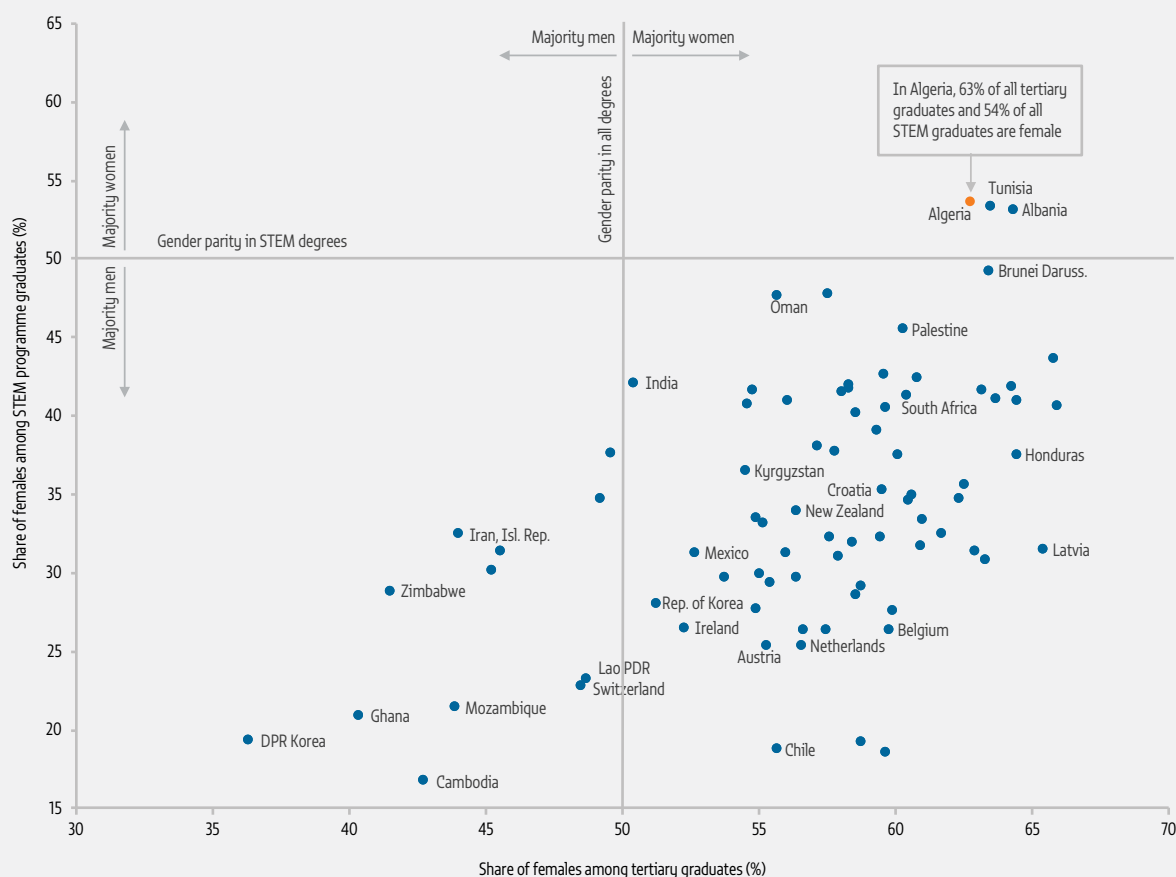


Source: UIS database.

on adult education, which is defined to include 'all learning activities undertaken … with the aim of improving knowledge, skills and competences, within personal, civic, social or employment-related perspectives' (Eurostat, 2017b). It covers participation in both formal and non-formal education and training during the four weeks prior to the interview.

Analysis of the 2007–2016 data suggests notable gender differences. Women are more likely to participate in education and training in all population groups defined by age and labour force status except those who do not actively participate in the labour force (**Figure 5.a**). There is considerable inequality in participation by age. In 2016, 17% of 25- to 34-year-olds participated in education and training, compared to 6% of 55- to 64-year-olds (**Figure 5.b**).

**FIGURE 5:**

**Adult participation in education and training in Europe is higher among women, younger people and the employed**
*Adult participation rate in education and training during the previous four weeks, by sex, European Union, 2007–2016*

*a. By labour force status*



*b. By age group*
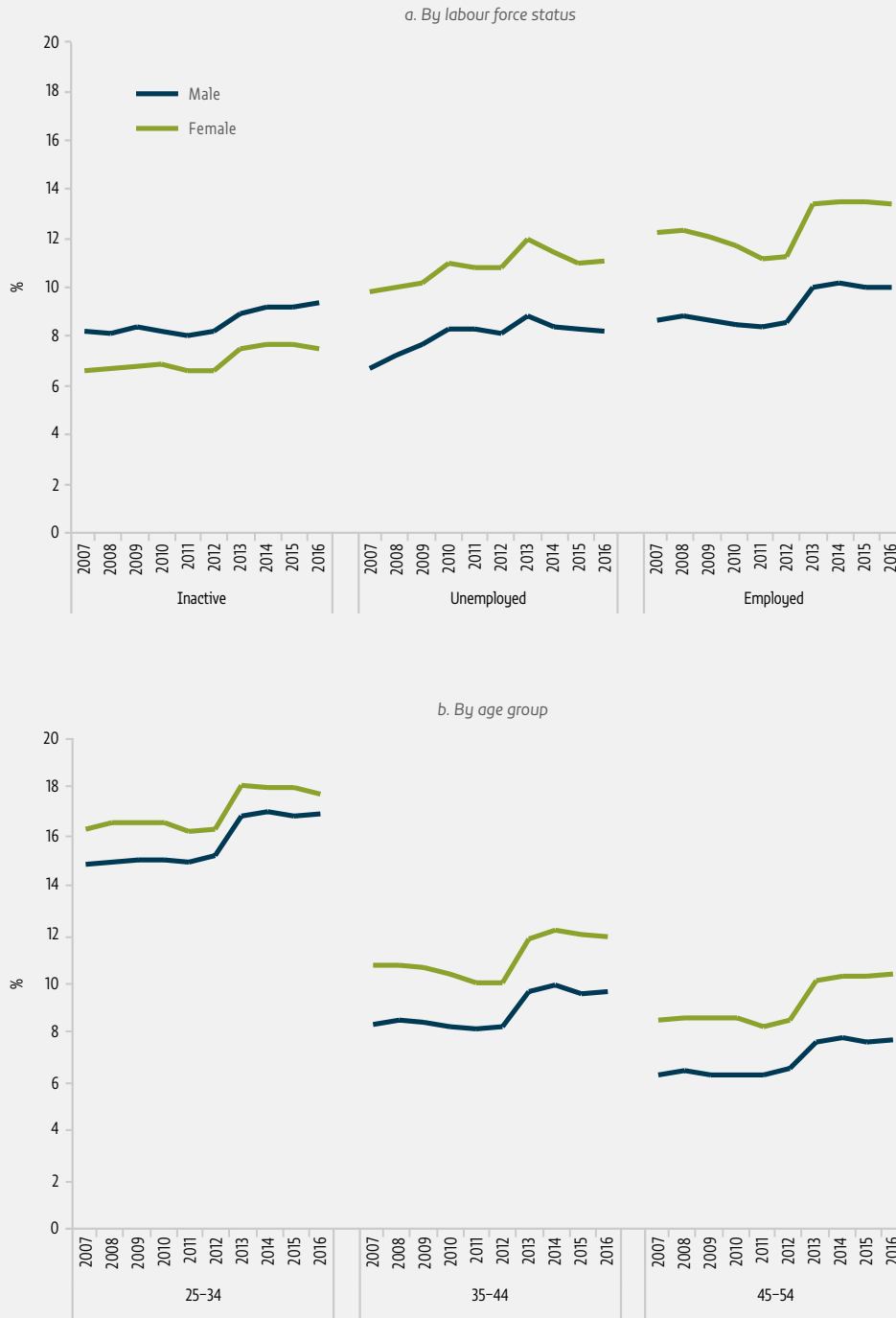


Source: Eurostat (2017a).

# Gender disparities in learning and skills vary by subject and over time

The Education 2030 agenda has placed learning outcome indicators at the core of its monitoring framework. That change from the earlier MDG agenda is most evident in target 4.1, where the global indicator is a measure of proficiency in reading and mathematics at three different ages. There is as yet no global standard for proficiency, although steps have been taken towards establishing one in recent months by the UNESCO Institute for Statistics. Currently, the SDG database includes minimum proficiency achievement data from regional or international learning assessments whose benchmarks may not be comparable. Available data suggest that, in many countries, students do not reach the minimum proficiency level set by the assessments. This is particularly the case in low and middle income countries, which are already under-represented in the SDG database.

Gender disparity in learning outcomes emerges in diverse patterns among subjects and over time. In the case of mathematics, girls show a clear disadvantage in the upper primary school grades in Latin America and in sub-Saharan Africa. Only two girls for every three boys reached minimum proficiency in grade 6 in Chad and Niger in 2014, without even taking into account the considerable gender disparity in primary completion rates. In 2013, about 85 girls for every 100 boys in grade 6 achieved minimum proficiency in Colombia, the Dominican Republic and Peru (**Figure 6**).

At the lower secondary level, for a different set of countries and learning assessments, more countries were closer to parity in mathematics. Of 20 countries observed at the end of both primary and lower secondary education, all remained in parity, on average, except for Costa Rica.

Girls' advantage in reading is well documented. All countries whose learning assessment results at the end of lower secondary education are posted on the SDG database had a gender disparity at the expense of boys. In Algeria and Jordan, which took part in the 2015 PISA, only 53 and 54 boys respectively achieved the minimum proficiency level for every 100 girls. In European Union countries that took part in the same survey, the smallest gap was in Germany (93 males for every 100 females) and the largest gap in Cyprus (70 males for every 100 females). However, new evidence casts doubt on the real meaning of this gap (**Box 1**).

By contrast, there is no doubt about the persistent gender gaps in adult literacy rates as traditionally estimated, mainly through self-reporting in population censuses. This gap changes only slowly because of the past legacy of limited education opportunities for women. While the adult literacy rate increased from 81.5% to 86% worldwide between 2000 and 2015, the share of women in the total population of adult illiterates has remained constant at 63%. The share of women in the total population of youth illiterates stands at 57%. Gender disparity persists in the youth literacy rate in three regions: North Africa and Western Asia, Southern Asia and sub-Saharan Africa (**Table 5**).

Target 4.4 focuses on skills for employment, decent jobs and entrepreneurship, a measure that covers a wide scope. The 2016 *Global Education Monitoring Report* outlined a range of skills that could be included here, but it emphasized that skill requirements were specific to job opportunities, which differ by country. Given the task of identifying skills that (a) are relevant across diverse labour market contexts, (b) are acquired through education and training, and (c) can be measured in a meaningful way at low cost, the SDG monitoring framework has focused on ICT and digital literacy skills.

The global indicator of ICT skills – the percentage of individuals who, on a standard household survey or census, report performing any of nine computer-related activities in the previous three months – is an example of an indirectly assessed measure.[1] Analysis of the International Telecommunications Union (ITU) survey database for

1. The nine activities are (a) copy or move a file or folder; (b) copy or cut and paste to duplicate or move information on screen; (c) use basic arithmetic formulas to add, subtract, multiply or divide figures in a spreadsheet; (d) write a computer program using a specialized programming language; (e) send email with attached files; (f) connect and install new devices; (g) modify or verify the configuration parameters of software applications; (h) create digital presentations with presentation software; and (i) transfer files between a computer and other devices.

**FIGURE 6:**

**Gender disparity in mathematics proficiency is at the expense of girls in primary but not in lower secondary education**

*Gender parity index of mathematics proficiency, by education level and learning assessment, 2013–2015*
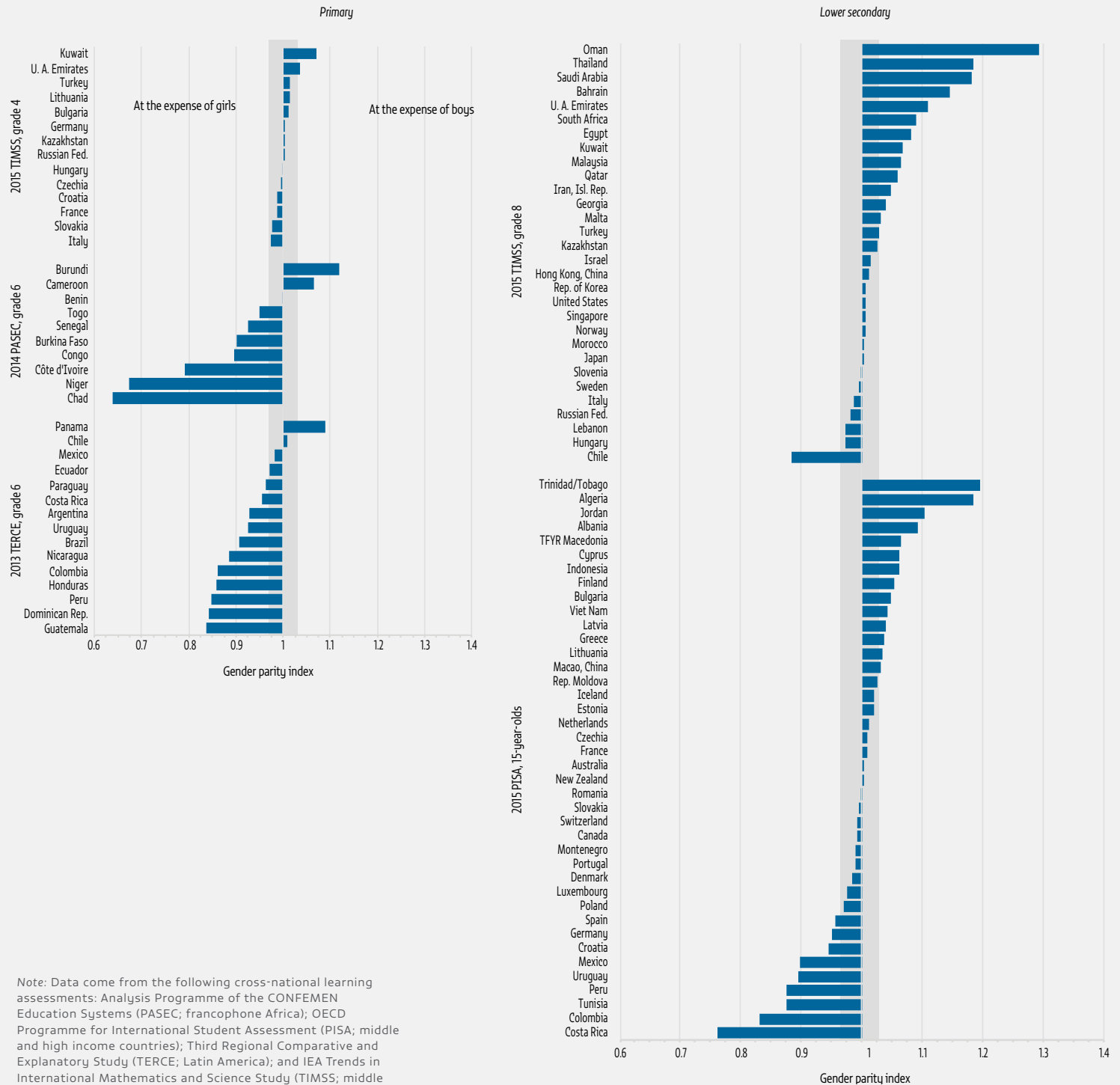


*Note:* Data come from the following cross-national learning assessments: Analysis Programme of the CONFEMEN Education Systems (PASEC; francophone Africa); OECD Programme for International Student Assessment (PISA; middle and high income countries); Third Regional Comparative and Explanatory Study (TERCE; Latin America); and IEA Trends in International Mathematics and Science Study (TIMSS; middle and high income countries).
*Source:* UIS database.

**BOX 1**

### Taking a fresh look at gender disparities in reading skills

The wide gender disparity in student reading achievement is a striking finding of cross-national learning assessments: the large gap favouring females has been seen as cause for concern. But learning disparity changes over young adulthood. Young people's literacy and numeracy skills continue to develop after compulsory education, reaching a peak at around 30 years old. The ways in which skills develop are influenced by the many formative education and employment choices and paths young people pursue. The results may be more complicated than the accepted narrative suggests.

A comparison of cohorts that participated in a PISA survey at age 15 and in the Programme for the International Assessment of Adult Competencies (PIAAC) survey 12 years later showed unexpected changes in disparities. Wide literacy gaps between girls and boys narrowed or disappeared in young adulthood. At age 15, girls in Organization for Economic Co-operation and Development (OECD) countries outperformed boys in reading. By age 27, the gender gap had almost completely closed, with gains concentrated among low-performing males (**Figure 7**).

One possible explanation is a difference in how males engage with the PISA and PIAAC assessments. PIAAC's shorter duration, use of technology and use of a trained interviewer in the home may elicit greater male engagement than the PISA assessment, which is administered in schools and in which peer effects may be present. This hypothesis is supported by the already very low gender disparity in literacy found in PIAAC assessments of those aged 16 years.

**FIGURE 7:**

**Literacy skills gaps between men and women disappear in early adulthood**

*Standardized literacy score gap at age 15 (PISA) and ages 26 to 28 (PIAAC), selected countries, 2000/03–2011/14*
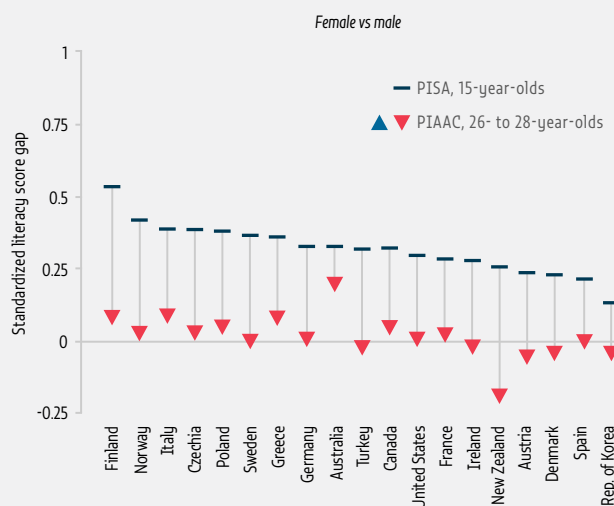


*Note:* The y-axis measures the standardized score gap, which is defined as the difference in group means divided by the average standard deviation of participating countries.
*Source:* Borgonovi et al. (2017).

**TABLE 5:**

**Gender parity index of the adult literacy rate, 2000 and 2016**

| | Youth | | Adults | |
| --- | --- | --- | --- | --- |
| | Gender parity index | | Gender parity index | |
| | 2000 | 2016 | 2000 | 2016 |
| **World** | **0.93** | **0.97** | **0.88** | **0.92** |
| Caucasus and Central Asia | 1.00 | 1.00 | 0.99 | 1.00 |
| Eastern and South-eastern Asia | 0.99 | 1.00 | 0.92 | 0.97 |
| Europe and Northern America | … | … | … | … |
| Latin America and the Caribbean | 1.01 | 1.00 | 0.98 | 0.99 |
| Northern Africa and Western Asia | 0.89 | 0.95 | 0.74 | 0.85 |
| Pacific | … | … | … | … |
| Southern Asia | 0.80 | 0.94 | 0.66 | 0.78 |
| Sub-Saharan Africa | 0.84 | 0.89 | 0.71 | 0.79 |
| Low income | 0.81 | 0.89 | 0.69 | 0.76 |
| Lower middle income | 0.86 | 0.95 | 0.75 | 0.84 |
| Upper middle income | 0.99 | 1.00 | 0.93 | 0.97 |
| High income | … | … | … | … |

*Source:* UIS database.

2014–2016 showed that most adults in low and middle income countries could not perform even the most basic ICT functions. Only 4% of adults in Sudan and Zimbabwe could copy and paste files, and only 2% to 4% of adults in Egypt, the Islamic Republic of Iran, Jamaica and Pakistan could use basic arithmetic formulas in a spreadsheet.

There is considerable inequality in the distribution of these skills. The gender parity index of programming skills in European countries including Austria, the Czech Republic and Hungary is extremely low: at most, 25 women for every 100 men can program. Few countries achieve parity even in less sophisticated skills: about 75 women for every 100 men could use basic arithmetic formulas in a spreadsheet in Italy, Germany and the Netherlands (**Figure 8**).

**FIGURE 8:**
**Far fewer women than men have ICT skills**
*Gender parity index among adults who performed a computer-related activity in the previous three months, selected countries, 2014–2016*

- Using copy and paste tools to duplicate or move information within a document
- Using basic arithmetic formulas in a spreadsheet
- Writing a computer program using a specialized programming language
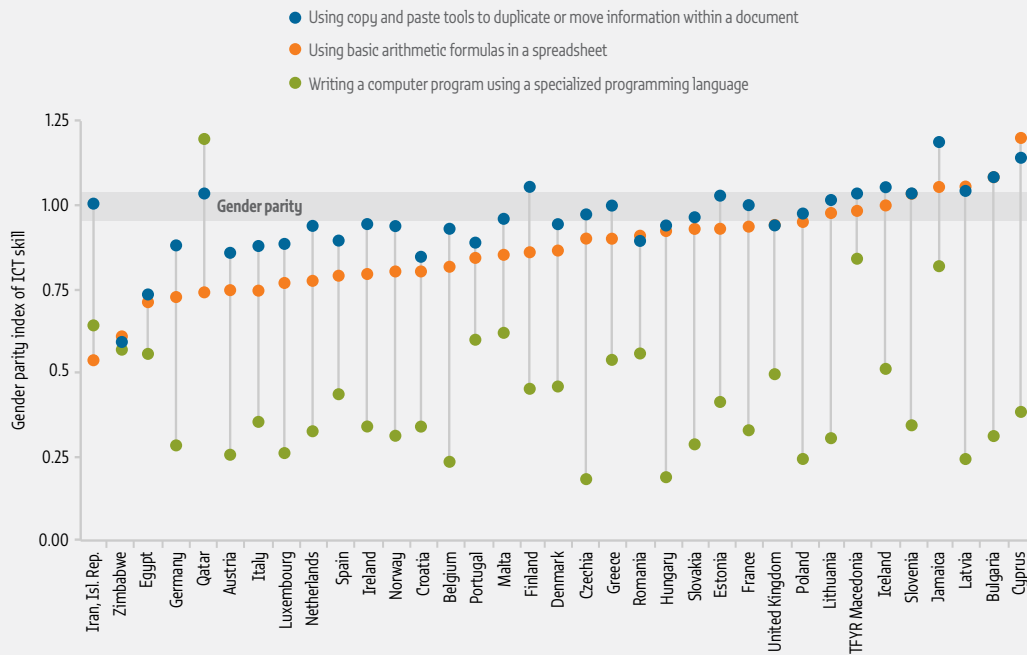
*Source:* ITU database.

# Gender inequality persists in leadership positions

Having female leaders influences the extent of emphasis placed on gender equality in policy and practice (Clots-Figueras, 2012; Smith, 2014). Women in leadership positions tend to favour the equitable redistribution of resources, and legislatures with a higher share of women on average tend to support health, education and social welfare spending at the expense of defence spending. Across 103 countries, countries that mandated a percentage of women in their legislatures spent 3.4 percentage points more on social welfare than those that did not (Chen, 2010). But the continuing dominance of men in decision-making posts limits women's voice in and ability to influence policy design at international, central and local government levels, as well as at the level of schools and communities.

## WOMEN ARE UNDER-REPRESENTED IN UN AND AID AGENCY LEADERSHIP

Women are under-represented at senior levels within the international organizations that shape much of the global dialogue on education. The UN recognizes that gender parity within the organization is a 'crucial first step to orienting the system to deliver on gender equality in education' (United Nations, 2017). Even so, efforts to ensure equal representation in positions of authority have fallen short, with a negative relationship between seniority and share of women. UNICEF has made some strides by requiring senior-level expertise on gender and targeting parity in senior leadership as one of the five gender equality benchmarks against which the organization is evaluated (UNICEF, 2015). A task force reviewing the UN as a whole has set 2026 as the target

THERE ARE FAR FEWER WOMEN LEADERS MAKING DECISIONS AT THE TOP

year for parity at all levels across the system (United Nations, 2017).

As of October 2017, 16 out of 21 directors in the OECD, and 7 out of 8 heads of agencies and special entities were men (OECD, 2017c). The World Bank does not provide information on staff ratios; their gender strategy instead faces outward on addressing inequities in the projects they fund (World Bank, 2015).

With respect to bilateral aid agencies, the representation of women in three of the top ten donors was mixed as of 2015. In the United States, the US Agency for International Development has an incentive programme to promote women interested in gender issues, and 44% of senior foreign service posts are filled by women, relative to 53% of all staff (USAID, 2016). In the United Kingdom, only 43% of Department for International Development senior civil service roles are filled by women, compared to 55% of the department's total staff (DFID, 2016). In Australia, while 57% of all Department of Foreign Affairs and Trade staff are women, only 34% of senior executive service staff and 27% of heads of missions and posts are female. The organization has identified internal cultural constraints that may be hampering women from applying for more advanced positions (DFAT, 2015).

## WOMEN HAVE EVEN LOWER REPRESENTATION IN DOMESTIC POLITICAL LEADERSHIP POSITIONS

Women are under-represented in all positions of authority at home. As of October 2017, out of 193 UN countries, 11 had a woman serving as head of state and 12 had a woman as head of government (UN Women, 2017). Within parliaments, only the Nordic countries come close to equal representation, with women making up 41% of their single house parliaments. In all other regions, fewer than three in ten parliamentarians are women: 28.5% in the Americas, 26% in Europe excluding Nordic countries, 24% in sub-Saharan Africa, 19% in Asia, 18% in the Pacific and 17.5% in the Arab States (Inter-Parliamentary Union, 2017).

Over 75 countries have established quota policies to ensure more women have leadership roles (O'Brien and Rickne, 2016). Early adopters include Uganda, which in 1989 mandated that 18% of seats in parliament be reserved for women, and Argentina, which in 1991 required that 30% of party nominees be women (Hughes et al., 2015).

An examination of 149 countries from 1989 to 2008 showed that quota adoption became more likely as the international women's movement gained strength (Hughes et al., 2015). At the end of 2015, nearly half of the countries in Latin America and the Caribbean had mandated legislative quotas. Surveys across 24 countries in the region indicated overall support for quotas. In El Salvador, 53% of people strongly agreed that the state should reserve places on the list of candidates for women. Citizens in countries with a history of good governance were more likely to support quotas (Barnes and Córdova, 2016).

The range targeted in quotas varies across countries. In Niger the goal is 10% of female representation in parliament, while in Panama the target is 50% (Sojo et al., 2016). In Azerbaijan, a government decree in 2000 mandated that at least one of the Deputy Heads of the Executive Power in all regions should be a woman (Safikhanli, 2014). Mexico moved from a target of 30% female representation on candidate lists in 2002 to 40% in 2014 (Sojo et al., 2016).

Quotas increase the number of women elected in a country and lead to better qualified elected officials. Between 1970 and 2006, across 103 countries, the proportion of female legislators was five percentage points higher in countries that adopted gender quotas than in those that did not (Chen, 2010). Following the 1993 implementation of a quota that required 50% of local candidates for the Swedish Social Democratic Party to be women, the proportion of elected women increased by 10% (O'Brien & Rickne, 2016). In Italy, municipal quotas increased the number of women elected; moreover, the women elected were, on average, more educated than the men elected (Baltrunaite et al., 2016). Stronger candidates were also found in Uganda (O'Brien, 2012).

Pakistan and Samoa, countries where women are very under-represented in positions of power, have made marginal gains by installing minimal quotas. In Punjab province, Pakistan, the quota of women increased from 5% to 15% in 2016/7 (Agha, 2016). In 2013, the Samoan parliament passed an act that required 10% of parliamentarians to be women. However, given that parliamentarians must hold a title of leadership (*matai*) in their village, and that only 11% of people with this title were women, more needs to be done to expand access for women (Office of the Ombudsman and NHRI Samoa, 2015).

Legal enforcement of quota targets can influence whether quotas are successful. An analysis of 63 countries with legislative targets found that countries with stronger quota enforcement mechanisms had a higher percentage of women elected to legislative bodies and came closer to meeting the targets announced. In Iraq, if the goal of 25% of seats is not reached, unelected women with the highest number of votes are selected. In Guyana, an independent electoral commission verifies the compliance of candidate lists (Sojo et al., 2016).

In local positions of authority, women leaders can have a positive impact on the well-being of the community. In India, increased numbers of women political leaders led to greater emphasis on immunization programmes and girls' education (Beaman et al., 2007). The benefits, however, seem to be concentrated in urban areas. Increasing female political representation by 10 percentage points increases the probability that an individual attains primary education in urban areas by 6 percentage points (Clots-Figueras, 2012). In Brazil, female mayors are associated with better prenatal health outcomes and fewer cases of corruption, as compared to male mayors. In municipalities where a man won a close election over a woman,  1.6% more pregnant women go without any prenatal visits, and 1.2% fewer women have regular births (Brollo and Troiano, 2016). The level of discretionary power given to office-holders can influence female leaders' ability to impact gender equality. Across 239 cities in the United States, female mayors allocate 3% of block grant funding to women's issues when they have no authority, as compared to 9% when they have considerable authority (Smith, 2014).

## THERE IS A HARD CEILING FOR WOMEN IN SCHOOL AND UNIVERSITY LEADER POSITIONS

The feminization of the teaching workforce in most countries is a well-known phenomenon, but less attention is paid to the continued imbalance in men's favour in education management and related leadership positions. This imbalance has a context: Women often make up the majority of civil servants, but they tend to be concentrated in positions with less authority. In OECD countries, women represent 57% of the government workforce, equating to 65% of secretarial positions, 35% of middle managers and 27% of top managers in 2010 (OECD and EUPAN, 2015).

Women in education leadership positions provide role models that can help encourage female student retention (Kagoda, 2011), which is especially important in countries with low education attainment for girls (Mulkeen et al., 2007). In Malawi, primary school teachers considered the lack of female role models as being one of the top four reasons for girls' poor performance, ahead of early marriage and pregnancy (Mzuza et al., 2014). Female staff can also help reassure parents that schools offer a safe and welcoming environment, as evident in Guinea and Sierra Leone (UNGEI, 2017).

Most countries do not regularly collect and publish data on gender in education leadership. Where they do, data are often not published or data from different sources need to be matched. When data are available from national sources, they are typically not easily comparable among countries: definitions and titles differ, as do the education levels at which data are aggregated or published. Attempts at cross-national reporting prefer to show results separately by country.

Cross-national school surveys that administer questions to school principals, such as PISA and TIMSS, do not ask the gender of respondents. The Teaching and Learning International Survey (TALIS), which focuses primarily on lower secondary school teachers, is one of few sources that asks whether a principal is male or female. The TALIS estimate is based on a sample and not a census of schools but is broadly consistent with the administrative data reported by Eurostat on school management personnel in EU and European Economic Area countries. Eurostat includes principals, headmasters, assistant headmasters and other management staff with similar responsibilities, but not administrative support staff.

The data show that gender inequality in school leadership also persists in OECD countries. In most countries, the share of males among head teachers is higher than among teachers. On average across OECD countries, 68% of lower secondary teachers are women, but women account for only 45% of principals (Van Damme, 2017). Women are especially under-represented in some countries: 39% of lower secondary teachers in Japan were female, but only 6% of head teachers were. In the Republic of Korea, the respective shares were 68% and 13% (**Figure 9**).

## FIGURE 9:

**In Japan, only 6% of lower secondary school principals are female**
*Percentage of female lower secondary teachers and head teachers, selected countries, 2010–2013*



*Sources:* Data from 2013 OECD TALIS, supplemented by Commonwealth Secretariat and UNESCO (2010) for Dominica and Lesotho at the secondary level and Wills (2015) for South Africa.

Where data are available for different levels, the share of women in leadership positions decreases at higher levels. For example, in Austria, 79% of primary school heads were female, compared with only 32% of lower secondary school heads. In Sweden, the shares were 73% in primary and 45% in upper secondary (European Commission/EACEA/Eurydice, 2013). In Rwanda, 30% of primary and 19% of secondary principals were women (USAID, 2014).

Nevertheless, the proportion of female school leaders is increasing. For example, in the United States, the percentage of female principals in public schools rose from 35% in 1993/94 to 52% in 2011/12 (United States NCES, 2016). Because principals are usually recruited from teaching staff and experience increases the likelihood of being recruited, the overall share of women in school leadership is likely to continue to grow.

Even fewer women occupy leadership positions in higher education. As of 2009, only 13% of higher education institutions in 27 EU countries were headed by women (Morley, 2014). A survey of Commonwealth countries showed that, in 2006, women were the executive heads of 9% of 107 higher education institutions in India and just 1% of 81 higher education institutions in anglophone sub-Saharan African countries. The shares increased for lower-level positions: in India, 20% of deans and 23% of department heads or directors were women, and in anglophone sub-Saharan African countries, women held 13% of dean and 18% of department head or director roles (Singh, 2008).

In Europe, 18% of full university professors are women (Vernos, 2013), in India, 26% (Morely and Crossouard, 2014) and in Australia, 27% (Universities Australia, 2017). In the Netherlands, an additional €5 million was allocated in 2017 to reduce disparities by recruiting 100 additional female professors (OECD, 2017b). In Makerere University in Uganda, although the share of female assistant lecturers increased from 19% in 1996 to 33% in 2008, the percentage of professors or assistant professors increased from 4% to only 12% (Kagoda, 2011).

## FEMALE PARTICIPATION IN SCHOOL MANAGEMENT COMMITTEES IS ALSO LIMITED

A school management committee has multiple duties. In addition to monitoring teacher and student performance, it may be able to shape decisions on school personnel, curricula and other matters (Barrera-Osorio et al., 2009; Bruns et al., 2011; Demas and Arcia, 2015). Membership of school committees improves women's access to information and empowers women (Masue and Askvik, 2017). In India, a larger share of women in leadership positions was linked to gains in girls' assessment results (Beaman et al., 2012).

Nevertheless, women are usually under-represented on management committees and, where they do hold positions, they tend to be assigned to roles in social affairs or welfare and not to roles involving executive or finance decisions. Moreover, even when they are committee members, women may still be reluctant or feel unable to participate fully in discussions.

In Guatemala, women's involvement is limited by a machismo culture, in which women's main role is seen as taking care of children and the family. In one case study, covering four community schools, no females at all participated in the school management committee (Gershberg et al., 2009). A large-scale school improvement programme initiated in six Nigerian states in 2009 included interventions aimed at increasing community engagement in school management. Participation by women in committees improved but remained low. Only 30% of schools reached a benchmark of one woman attending at least two meetings, ranging from 11% in Jigawa State to 72% in Lagos State (Daga, 2016).

Quotas have been used to stipulate proportional presence in school management. In India, half of school management committee members in government schools are supposed to be female, and in Bangladesh, the quota is three out of ten. Allocations are also mandated in the United Republic of Tanzania. However, men continue to dominate membership and decision-making (Masue, 2014).

**Students play outside in Kabul, Afghanistan, after taking their end of year assessments.**

CREDIT: Arete / Ivan Armando Flores

# Education in the other SDGs: a gender perspective in health, water, sanitation and agriculture

Education is key to achieving the SDGs, because education and training help develop professional capacities in each and every sector and because education influences the achievement of other development outcomes.

## Education helps develop men and women's capacities to implement development strategies…

Every sector needs enough qualified professionals to ensure service delivery and all sector human resource strategies need to focus on gender mainstreaming so that men and women can be equal participants in the workforce. More attention must be paid to the institutional barriers faced by female workers in the health, water and sanitation, and agriculture sectors, as well as to gender stereotypes across professions.

### …IN THE HEALTH SECTOR

Women are pivotal in the health care workforce (Langer et al., 2015). Nurses, community health carers and home carers are primarily female. One estimate has suggested that, in many countries, women make up over 75% of the health workforce (WHO, 2008). SDG target 3.c aims to increase health financing and improve the recruitment, developing, training and retention of the health workforce in poorer countries. Using a minimum threshold of 4.45 doctors, nurses and midwives per 1,000 people, the World Health Organization (WHO) estimated that there was a global shortage of 17.4 million healthcare workers in 2013, which included a shortage of 2.6 million doctors and 9 million nurses and midwives (WHO, 2016). Countries with the heaviest disease burden are also those with the lowest density of health professionals, and the same applies within countries, with rural areas lagging behind urban ones (Crisp and Chen, 2014).

With regard to nursing, the most recent global strategic vision prioritizes education and recruitment, improved involvement in health policy development, collaborative partnerships, and increased political will to invest in effective evidence-based nursing and midwifery (WHO, 2016). The shortage of faculty to teach in schools of nursing is also an issue; lack of adequate incentives in academic programmes, reduced full-time equivalent positions and the global migration of nurses are factors in reducing the availability of trained staff to provide nursing instruction (Nardi and Gyurko, 2013). A 2010 study of Kenyan training institutions showed gender inequities that need to be addressed. Men and women were concentrated in different cadres; for example, pharmacy was considered a male job. Although the nursing profession is feminized, 80% of professors in nursing-only institutions were male (Newman, 2014).

In some countries, attempts have been made to recruit more male nurses. A key barrier to male nurse recruitment is the need to fight the stereotype that nursing is a female profession. In the United States, institutions have been set up to combat stereotypes around the nursing profession. For instance, the American

Assembly for Men in Nursing encourages men to enrol in nursing programmes, with a goal of increasing male enrolment to 20% by 2020 (AAMN, 2018; MacWilliams et al., 2013).

Trained community health workers play an important role in alleviating staff shortages (UNESCO, 2016a). Community health workers are typically local residents with basic education who receive vocational training. Remuneration strategies vary, ranging from volunteers to fully paid positions (Olaniran et al., 2017). Community health workers have substantially contributed to reducing maternal and child mortality around the world. In the United States, they are also helping to reduce the disease burden from non-communicable diseases, such as hypertension and cardiovascular problems, especially for hard-to-reach populations (Perry et al., 2014). With respect to acceptance by the community, analysis from the United Republic of Tanzania found that men were more likely to be comfortable with male workers and women with female workers in discussing health issues (Feldhaus et al., 2015).

In Brazil, Ethiopia, India and Pakistan, community health worker programmes have been substantially scaled up, and countries have made efforts to integrate community workers into health systems (Zulu et al., 2014). For instance, under the Brazilian Special Service for Public Health programme, 240,000 health workers provide home visits to 110 million people. In Pakistan, the Lady Health Worker Programme has over 90,000 workers serving 70% of the rural population. India has one of the largest systems, including 800,000 accredited social health activists, 1.2 million *anganwadi* (or local mother-and-child health) workers and over 200,000 ancillary nurse midwives (Perry et al., 2014). In recognition of the importance of this type of programme, in 2017, 23 country delegations laid out plans to institutionalize community health systems, in collaboration with USAID, UNICEF, WHO and the Bill and Melinda Gates Foundation (Zambruni et al., 2017).

Several challenges need to be addressed to improve working conditions for health workers. Women in nursing, community health work and home care have been found to privately make adjustments for systemic challenges they face in their profession, furthering gender inequalities in the healthcare system and society (George, 2008). Female community health workers remain under-recognized, underpaid, overworked and under-supported (Zambruni et al., 2017). Community health workers also often suffer from gender-based violence, and stronger efforts must be made to provide them with a safe working environment (HIFA, 2017).

## ...IN THE WATER AND SANITATION SECTOR

More female involvement is needed if target 6.b, improving local communities' participation in improving water and sanitation management, is to be achieved. Women are the frontline workers in the sector as community-based sanitation workers, yet, in some contexts, men are the primary decision-makers in terms of investment and construction of latrines.

There is a significant shortage of qualified professionals in the sanitation sector. The 2012 Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) report from 74 developing countries showed that women made up less than 10% of the professional workforce in half the surveyed countries (WHO and UN Water, 2012). An analysis of 12 low and middle income countries found that female professionals constituted 17% of the workforce, on average, ranging from a low of 7% in Papua New Guinea to a high of 35% in Burkina Faso and South Africa (International Water Association, 2014).

Policies to improve the gender balance in water utilities need to include improvements in education, investment in networks and increased use of legal tools (Das and Hatzfeldt, 2017). In Peru, the government enacted a law of equal opportunities in 2007 to address governance and gender relations. Local governments adopted this law and small town water suppliers introduced reforms to ensure men and women have equal representation in

water management oversight boards. In the United Republic of Tanzania, the National Water Policy required local community water committees to ensure equal representation of men and women and to implement a merit-based gender-sensitive recruitment policy. In Uganda, reforms undertaken after an institutional review in 2003 increased female representation in management positions at the Ministry of Water and Environment from 0% to 18% (Water and Sanitation Program, 2010).

In South Africa, the national gender policy recommends that rural women should be trained in pump and water systems management and repair. A Working for Water project created 180,000 full-time jobs over the past two decades and ensured that 52% of the benefits from training and income generation accrue to women by requiring that resources are allocated in a gender-aware manner (International Water Association, 2016).

## ... AND IN THE AGRICULTURAL SECTOR

Agricultural labour is often misconstrued as a male domain, despite the fact that women constitute about half of the sector worldwide. In richer countries, there has been a resurgence of female farmers and a growing interest among women in agricultural higher education. In the United Kingdom, the number of women running farms increased by nearly 10% between 2010 and 2013 and 28% of the agricultural workforce is female. Agriculture-related courses at universities and colleges attracted 25% more women than men in 2015 (UK DEFRA, 2016). In Australia, since 2003, female enrolment in agricultural universities has exceeded male enrolment, with agriculture now considered equally appropriate for both genders (Pratley, 2017).

Women make up less than half of agricultural researchers employed in government, academia and non-profit organizations but there are enormous variations among countries (**Figure 10**). In sub-Saharan Africa, across 39 countries, approximately 27% of researchers were female. As in many other sectors, women's participation declines in higher level positions and women face many challenges prior to and during their scientific careers (Beintema, 2014).



**FIGURE 10:**
**Women are a minority of the agricultural research workforce**
*Share of females among agricultural researchers, 2009-2014*
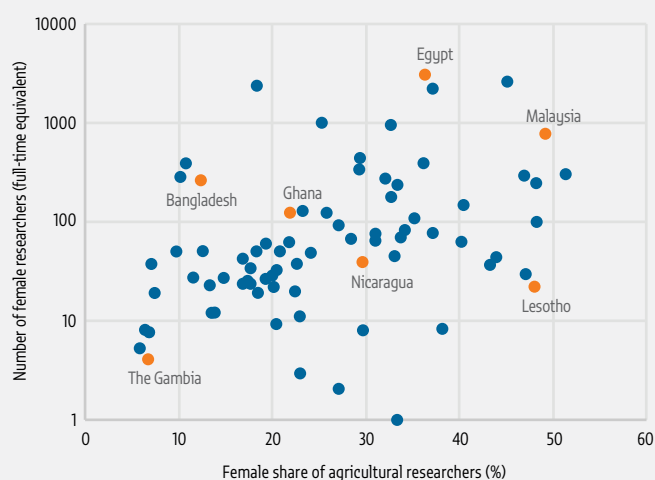
*Source:* ASTI (2017).

# Education has important interactions with health, water and sanitation, and agriculture

Education is both shaping and being shaped by development challenges. This section discusses examples of relations between education and outcomes in three sectors.

# Education influences preventive behaviour against non-communicable diseases

In 2012, non-communicable diseases including cancer, diabetes, chronic respiratory and cardiovascular diseases, along with those caused by alcohol, tobacco, excessive sodium and insufficient physical activity, accounted for 68% of deaths worldwide, three-quarters of which occurred in low and middle income countries (WHO, 2014).

The mediating influence of education on non-communicable diseases operates through different channels. Education affects behaviour through cognitive and psychological processes, wealth and status, and empowerment. Initially, education may negatively affect health behaviour, as a better-educated population can afford unhealthy lifestyles. As availability of accurate health information increases, the relationship between education and healthy behaviour becomes positive, although there can be variations by gender (Baker et al., 2017).

### Formal and non-formal education can help reduce obesity

Obesity worldwide more than doubled between 1980 and 2014. The epidemic is increasingly global, and no country has experienced substantial declines over the last three decades. Among adults, obesity was more than 50% among women in countries in Northern Africa and Western Asia (Kuwait, Libya and Qatar) and the Pacific (Kiribati, the Federated States of Micronesia, Samoa and Tonga) (Ng et al., 2014). A systematic analysis of 91 countries showed that the relationship between educational attainment and obesity varied by country income and overall prevalence (Cohen et al., 2013). In low income countries with a low prevalence of obesity (with a few exceptions, such as Cambodia), the most educated women were the likeliest to be obese. In middle income countries with a higher prevalence of obesity, such as Colombia, the Dominican Republic and Peru, the opposite was true (**Figure 11**).

In high income countries, tertiary education is linked to a lower probability of obesity among both women and men. In 24 OECD countries, 19% of adults were obese in 2011, and adults with a tertiary education were half as likely to be obese as those with less than upper secondary education. Of those with less than upper secondary education, 28% of women (and 22% of men) were obese, compared to 12% of women (and 15% of men) with tertiary education (OECD, 2013). This finding was supported by an analysis of longitudinal data on identical male twins in Australia, which found that education also reduced the probability of being overweight (Webbink et al., 2010).

Being obese or overweight is more and more linked to education and socioeconomic inequality. A comparison of 34 countries in North America and Europe in 2002, 2006 and 2010 found that socioeconomic inequalities in health were increasing, as measured by levels of physical activity and body mass (Elgar et al., 2015). In OECD countries, obesity has been rising rapidly among less educated men and among average educated women, except in the United States. For instance, in the Republic of Korea, less educated women were five times more likely in 2010 to be overweight or obese than those with higher education, whereas in 2014, they were six times more likely (OECD, 2017a).

**FIGURE 11:**

**The effect of education on obesity changes from poorer to richer countries**

*Percentage of women who are obese, by education level, selected countries, 2011–2014*
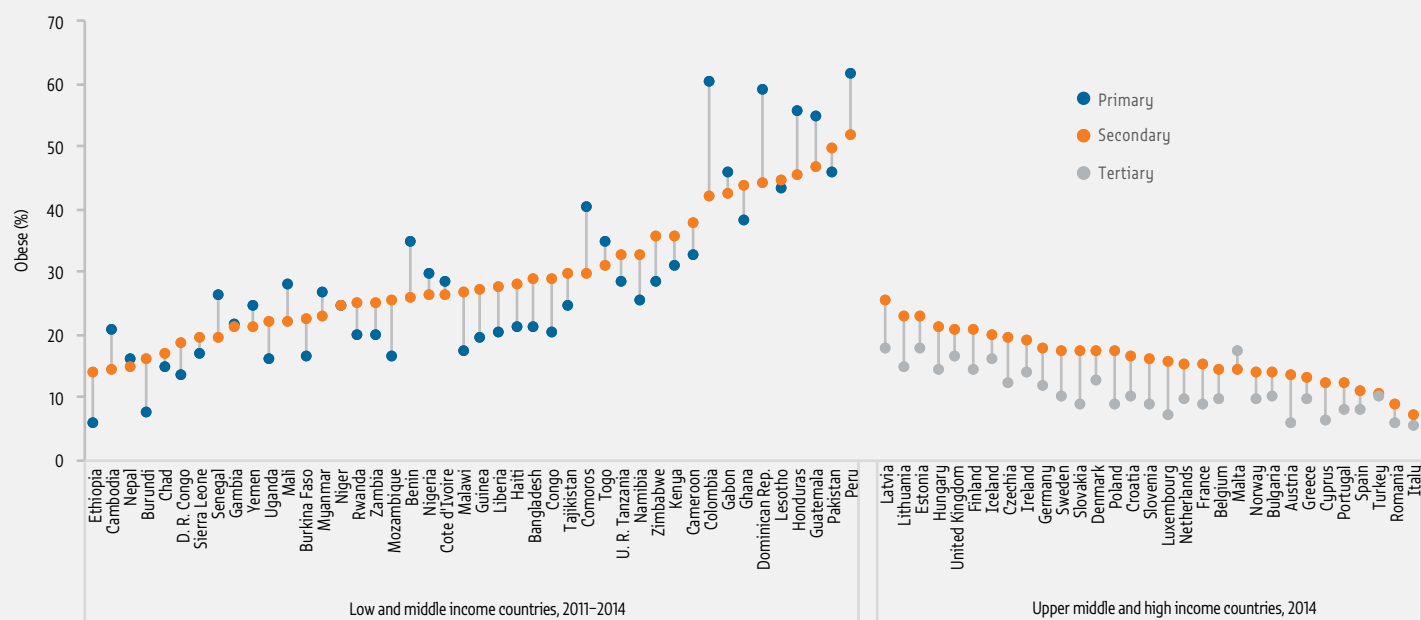


Source: DHS StatCompiler for low and middle income countries; Eurostat for upper middle and high income countries.

Physical activity is an important healthy behaviour that may help reduce obesity. In 2010, more than 80% of school-going adolescents aged 11 to 17 years were not sufficiently active, that is, participating in at least 60 minutes of moderate to vigorous physical activity per day. In most countries, girls were less physically active than boys (WHO, 2014).

In some instances, adolescent girls' physical activity and movement are restricted by legal and cultural norms. In Saudi Arabia, obesity is a general public health concern but a worse issue among girls than boys, with at least some of this challenge linked to restrictions on physical activity and education for women and girls (Mahfouz et al., 2011). In Philadelphia, United States, adolescent girls were far less likely to be active than boys – 28% of girls were sedentary compared to 11% of boys (Lenhart et al., 2012).

A review of school-based physical activity programmes across 44 studies found that printed educational materials and changes in school curricula to promote physical activity had positive health outcomes and succeeded in increasing the duration of physical activity among students (Dobbins et al., 2013). Non-formal and informal campaigns also make a difference. In Tonga, the national strategy to prevent and control non-communicable diseases was used to promote physical activity among women and encourage them to play netball. Since 2012, it has delivered community mobilization updates, advertising campaigns and interpersonal education (WHO, 2014).

### Education is linked to lower tobacco use

Tobacco is a leading cause of preventable deaths worldwide; 6.4 million people died as a result of tobacco use in 2015. Globally, in 2012, 21% of adults smoke: 36% of men and 7% of women. In the OECD, 23 countries had data on smoking, showing that 44% of men and 32% of women with less than upper secondary education smoked, compared with 24% of men and 19% of women with tertiary education. The impact remains strong even after controlling for age and income effects (OECD, 2013). Disaggregating tobacco use by education level shows that in poor and rich countries alike, men with more education are less likely to use tobacco (**Figure 12**).

**FIGURE 12:**
**More education is linked to less tobacco consumption**
*Percentage of men who smoke, by education level, selected countries, 2011–2014*
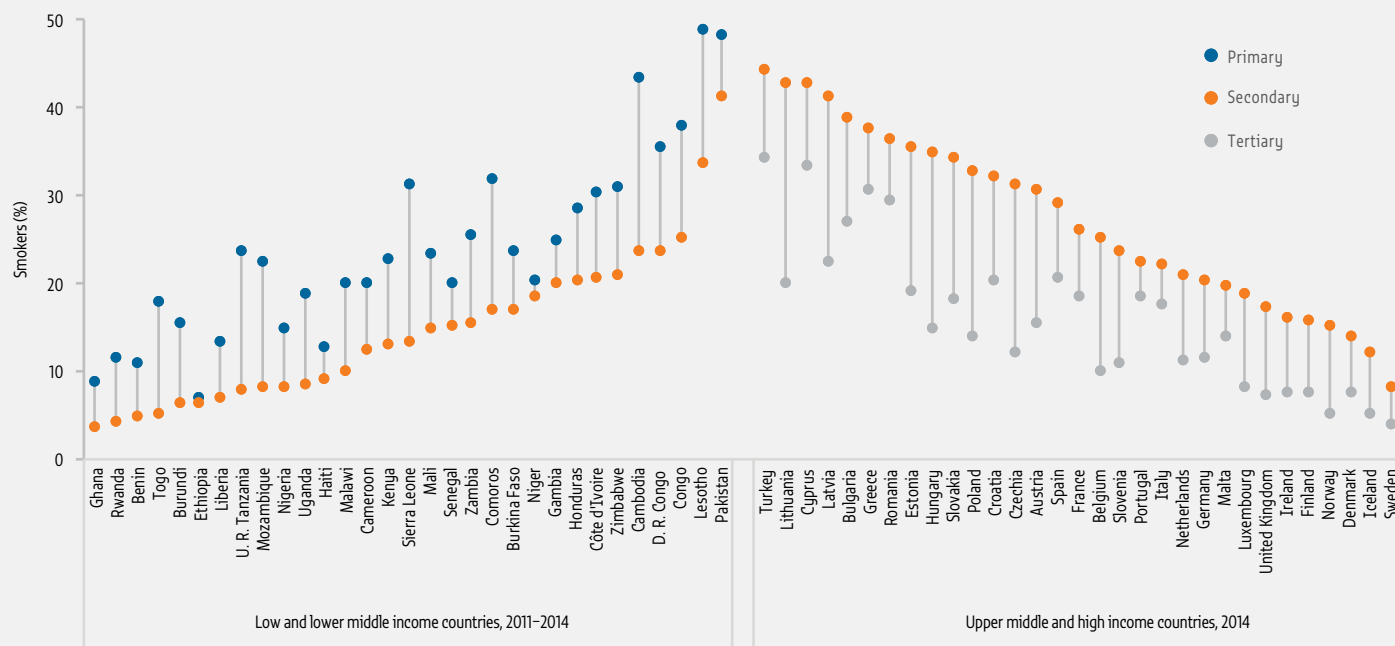


*Sources:* Eurostat for upper middle and high income countries, DHS StatCompiler for low and middle income countries.

Smoking prevalence globally has increased among women with a lag, as cultural norms change. While tobacco consumption correlates negatively with education, this relationship has increased over age cohorts and is different for men and women. In France, in the oldest cohort, less educated men were 1.5 times as likely to smoke as the most educated; in the youngest cohort, less educated men were 5 times as likely to smoke as the most educated. Among women, the oldest cohort of more educated women were twice as likely to smoke as less educated women; in the youngest cohort, less educated women were 3.7 times as likely to smoke as more educated women (Pampel et al., 2015).

Tobacco companies have turned their attention to poorer countries around the world, where consumption continues to increase. Data from global tobacco surveys show that the number of female adolescents who smoke tobacco in African countries vastly exceeds the number of adult women, due to increased marketing and tobacco access. For instance, in the Gambia, 3% of adult women but 37% of adolescent females were found to be using some tobacco product (Good Business, 2016). A gender-sensitive global response to control tobacco use is needed. However, most national guidelines for treating tobacco dependence are gender neutral or gender-blind (Bottorff et al., 2014).

The tobacco industry has systematically marketed cigarettes with a gender-differentiated focus, using feminine or masculine qualities in their campaigns to appeal to different target demographics. For instance, historically, the advertising industry spent billions to attract women by suggesting that smoking would make them thinner (Amos and Haglund, 2000; Cole and Fiore, 2014; Marine-Street, 2012). In Indonesia, a country with some of the highest male smoking rates, tobacco advertising is highly prevalent, and smoking is strongly associated with masculine identity (Ng et al., 2006; Nichter et al., 2009).

Informal education can affect smoking habits. Hard-hitting health warnings are among the most effective deterrents. Between January 2009 and June 2014, the number of countries running comprehensive national mass media anti-smoking campaigns lasting at least three weeks increased from 23 to 39 (WHO, 2015b).

Educating young people about advertisements that target them can best be achieved by using the same marketing methods that have been successfully employed by the tobacco industry (Barbeau et al., 2004). In some countries, father and family-man images have been used to challenge the association between smoking and masculinity in order to encourage men to quit smoking (Bottorff et al., 2014). In Botswana, a social media based intervention encouraged girls to use specific phrases to note their decision not to smoke. The campaign has become embedded in teenager social life and is also highly popular on Facebook (Good Business, 2016).

## WATER AND SANITATION ISSUES NEGATIVELY AFFECT GIRLS AND WOMEN

Water and sanitation quality has major effects on child cognitive development and brain function, influencing lifelong learning capacity (Piper et al., 2017). But there are also other links between water, sanitation and education.

Girls and women are most often responsible for hauling water, especially in rural areas. As a result, lack of easy access to water for household usage has a detrimental effect on school attendance (UNESCO, 2015a). In Ghana, an analysis of four rounds of data from the Demographic and Health Surveys between 1993 and 2008 found that reducing the time to fetch water by half increased girls' school attendance by about 7 percentage points (Nauges, 2017). An analysis of 24 sub-Saharan African countries estimated that 13.5 million women and 3.4 million children spend more than 30 minutes each day collecting water for household use; in all countries, girls were more likely than boys to have the responsibility of fetching water (Graham et al., 2016).

Climate change and population growth increase water insecurity and intensify the impact on education. For instance, in Botswana, more than half of girls spent more time fetching water for domestic use during droughts (Chigwanda, 2016). In Gujarat and Rajasthan states, India, a survey of secondary school students from 500 families who attended 8 secondary schools revealed that more than 90% viewed groundwater scarcity as a major issue affecting their education. On average, 60% of the students missed about two days of school a month. In Rajasthan, female students missed at least five days of school a month at rates two to ten times as high as male students (Kookana et al., 2016).

Policies focused on increasing access to water-related infrastructure are important in reducing the time spent on these chores. In Nepal, a community-based water supply and sanitation project targeted access to latrines, to provide a safer environment for women and reduce the time it takes to manage household water supply. The average time for fetching water was reduced from 3.8 to 2 hours per day, which freed up time for education activities (Asian Development Bank, 2015). In China, a major water treatment programme, which started in the 1980s, benefited rural girls to the extent that the education gender gap in treated villages was eliminated (Zhang and Xu, 2016).

Slums also face water shortages. In low-income housing areas in Blantyre, Malawi, populations in peri-urban areas lack access to portable and safe water. In unplanned areas, girls often stay away from school to help their mothers collect water (Chipeta, 2009). In Delhi, India, 20% of residents live in slums and settlements. Mothers reported that girls missed school for different chores, including water collection, a situation that had worsened because of growing slum populations, increased droughts and unpredictable rainfall (Kher et al., 2015).

### Menstrual hygiene management is a key issue in schooling for adolescent girls

Menstrual hygiene is a public health issue that requires better planning (Mahon and Fernandes, 2010). The global visibility of the issue has increased in recent years (Sommer and Sahin, 2013). However, consistent financing policy measures on sanitation were targeted at women in only 11 of 74 countries surveyed (WHO and UN Water, 2017).

The lack of adequate sanitary care for adolescent girls has several consequences for education. In Bangladesh, a nationally representative study from 2013 found that 41% of schoolgirls aged 11 to 17 in Bangladesh reported missing 2.8 days of school per menstrual cycle (Alam et al., 2017).

A recent analysis of policy documentation in schools in 21 low and middle income countries found little focus on menstrual hygiene management in education sector plans (Sommer et al., 2017). A study in rural areas of Ethiopia, Kenya, Mozambique, Rwanda, Uganda and Zambia found that less than 20% of schools had at least four out of the five recommended menstrual hygiene services (separate sex latrines with doors and locks, water for use, waste bins) (Morgan et al., 2017).

A feasibility study in rural Kenya examined water and sanitation facilities in 62 primary schools during unannounced visits. It found that 60% had water for handwashing, 13% had washing water in latrines and only 2% had soap (Alexander et al., 2014). Data on water, sanitation and hygiene expenditures in 89 rural Kenyan primary schools showed that expenditures averaged US$1.83 per student per year, while the estimated cost to meet basic standards was US$3.03 per student per year (Alexander et al., 2016).

Policy awareness of the issue is increasing in some countries. In India, the government in 2010 proposed a new scheme to provide subsidized sanitary napkins in rural areas (Garg et al., 2012).  Analysis from 28 states and 4 union territories in India between 2007 and 2015 found that providing separate female toilets in schools is positively associated with enrolment and participation at the upper primary level. However, this does not improve the situation for scheduled caste populations, which hints at further equity challenges linked to untouchability (Ray and Datta, 2017).

Other challenges include fighting negative attitudes towards menstruation and increasing the provision of health information and facilities in schools (Sommer et al., 2015). In rural Bolivia, girls received limited information on menstrual hygiene management from teachers and parents, which suggests the need for its inclusion in school curriculum and national policies (Johnson et al., 2016).

## EDUCATION INTERVENTIONS ARE NEEDED TO REACH OUT TO FEMALE FARMERS

Improving agricultural productivity is a key target in SDG 3. In 2010, women made up around 50% of the agricultural labour force in sub-Saharan Africa. Women's productivity per hectare is estimated to be lower than men's, which is mostly due to limited access to land, technology and other inputs. If women had the same access to resources, then their yields would increase by 20% to 30% (FAO, 2011).

Men have higher input measures than women, in terms of inorganic fertilizer, seed varieties and extension services (Peterman et al., 2014). In northern Nigeria, women produced 28% less than men. However, after controlling for observed factors of production, there were no differences in the south of the country (Oseni et al., 2015). A productivity differential between men and women was also observed in Ethiopia (Aguilar et al., 2015). In Uganda, men were found to use more inputs, and the main difference between men and women was linked to childcare responsibilities (Ali et al., 2016).

The gap in productivity suggests a need for improved training and support. It has long been understood that agricultural extension and advisory services often do not reach women. An analysis of access to extension services in Ethiopia in 2010 found that female heads of households are less likely to have access to extension services (Ragasa et al., 2013). An earlier analysis in Nigeria found that women farmers who were supervised by female extension agents were more likely to have more access to extension services and to show higher levels of awareness and participation, which suggests that extension organizations should recruit more female extension agents (Lahai et al., 1999). An analysis of the quality of the advice received by women in Sri Lanka found that women had more discussions on their crops with female 'plant doctors' (Lamontagne-Godwin et al., 2017).

However, it has also been suggested that in order to move towards gender-equitable control over assets and resources, the focus should be on collaboration between men and women rather than just on targeting women (Russell et al., 2015). In the eastern Democratic Republic of Congo, joint male and female programme participation in agricultural extension programmes was found to lead to the highest adoption of technologies such as improved legume varieties, row planting and mineral fertilizers, more so than efforts targeting just female farmers (Lambrecht et al., 2014).

Other research suggests that gender-specific responsibilities, resources and constraints need to be factored in by agricultural development programmes if they are to benefit men and women shareholder farmers. Coming up with sex-disaggregated measures for agricultural productivity is riddled with assumptions, which means that the conventional wisdom that productivity is lower for women is difficult to fully confirm. But since women perform a larger share of other household tasks, some argue that the answer to enhancing women's agricultural productivity lies beyond the agricultural sector, in interventions that can alleviate women's drudgery – such as through improving access to water and improving child health and education (Doss, 2017).

**A young girl, whose community has been supported by Action Aid during the Ebola epidemic, in Gollu, Sierra Leone.**

CREDIT: GEM Report/Kate Holt

# Accountability for gender equality in education

Although almost all countries have committed through international treaties and national legislation to ensuring gender equality, this review has shown that the equality principle is frequently violated around the world. To take action to correct the problem, it is important to determine who is responsible for achieving equality in education, and to expect those responsible to provide an account of how they fulfil their responsibilities.
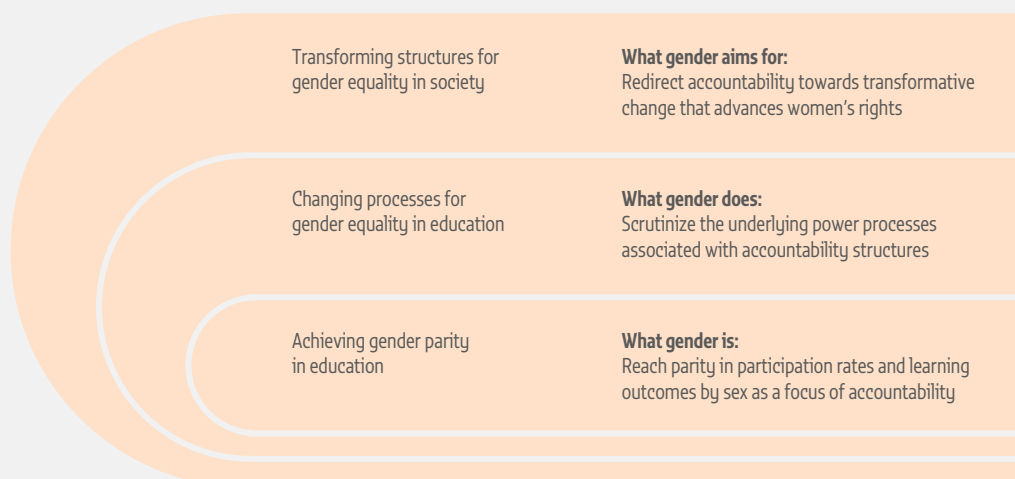
Achieving gender equality in education involves complex processes and the efforts of many actors. Accountability can help ensure all are functioning as they should. Accountability is a process that helps individuals or institutions meet responsibilities and reach goals. For the purposes of this review, it can be understood as having three main elements: firstly, the actor must have clearly defined responsibilities; secondly, the actor must have an obligation to provide an account of how responsibilities have been met; and thirdly, there must be a legal, political, social or moral justification for the obligation to account.

How responsibilities are defined and assigned changes depending on how gender is conceptualized. Three ways of thinking about gender inequality, each with a progressively broader perspective, offer different implications for the nature, focus and limits of accountability (Unterhalter et al., 2018) (**Figure 13**):

■ The narrowest and most descriptive level focuses on examining responsibilities for ensuring gender parity in education participation and learning outcomes, setting aside questions of power dynamics that drive gender inequality.

**FIGURE 13:**
**Different conceptualizations of gender have different implications for accountability**



| | |
|---|---|
| Transforming structures for gender equality in society | **What gender aims for:** Redirect accountability towards transformative change that advances women's rights |
| Changing processes for gender equality in education | **What gender does:** Scrutinize the underlying power processes associated with accountability structures |
| Achieving gender parity in education | **What gender is:** Reach parity in participation rates and learning outcomes by sex as a focus of accountability |

*Source:* Based on Unterhalter et al. (2018).

■ The next level, from a more analytical perspective, seeks to expose and question the relationships and processes, associated with the exercise of power, that lead to gender inequality.

■ The broadest level concerns the normative aspirations regarding justice or equality in society beyond education alone.

All three approaches have value, and the differences in conceptualization should be embraced. An understanding of all levels is necessary to challenge stereotypes, pedagogical processes and education outcomes and to understand whether an education system supports a rights agenda or is complicit in undermining it.

For example, government is a responsible actor in education provision. At the narrowest level, government's responsibility can be defined in terms of ensuring gender parity in participation rates, financing allocations and representation in decision-making bodies. Here, accountability mechanisms should focus on obtaining disaggregated data to monitor disparities and support affirmative action programmes to reach parity. At the next level, government is responsible and should be held accountable for defining the education policy-making processes in which gender inequality is rooted. Finally, at the highest level, government is responsible for tracking how key policies affect the equal enjoyment of rights in the long term. Accountability mechanisms here require qualitative evidence documenting the intersection of gender and power.

Ensuring gender equality in education is a collective enterprise in which all actors – not just government – must work together to meet their responsibilities. For example, schools and teachers do not work in isolation; they depend on the actions of others, from government decisions to social influences, to fulfil their responsibilities for gender equality. This interdependence can limit the effectiveness of accountability mechanisms targeted at single individual or institutional actors for achieving gender equality in education.

Even so, responsibilities linked to particular individuals or institutions can be identified, and those responsible can be expected to provide an account of their actions, even if problems and solutions will differ by context. This review discusses a range of accountability tools in various contexts and examines how they have or have not motivated actors to shift their behaviour towards achieving gender equality in education (**Table 6**).

For example, in democratic systems, voting enables all citizens to exercise their power to hold politicians to account, including those responsible for education and gender equality, although admittedly in some contexts political expedience can also militate against the promotion of gender equality objectives. Education actors can hold each other to account by invoking laws and regulations. Mechanisms can range from the government ensuring that rules are followed internally within various levels and bodies to independent institutions scrutinizing gender parity in pay and allowances. Formal or, more often, informal codes of conduct form the foundation of social and professional education accountability; these codes require individuals to respect norms of responsibility accepted by their communities and peers. While mechanisms linked to performance are increasingly common for education outcomes related to test scores, they have yet to be used systematically to ensure compliance with gender equality targets.

Some actors may demand accountability through different approaches. For example, the international community can apply legal tools when it puts in motion the monitoring mechanisms of a legally binding treaty, performance tools when it withholds external financial assistance from a country due to its poor track record in gender equality, or social tools when it openly criticizes discriminatory policies.

**TABLE 6:**
**Approaches to accountability for gender equality in education**

| Approach | Description | Potential motivation |
|---|---|---|
| Electoral/ political | Citizens vote politicians in or out of office | Removal from office |
| Legal/ regulatory | Laws or regulations establish formal checks and balances, and government publishes inspection or audit reports | Disciplinary action |
| Performance-based | Authorities evaluate performance information with respect to processes, outputs or outcomes | Sanctions or rewards |
| Social | Individuals or communities use their own experience or other information to put pressure on education providers to meet norms of appropriate behaviour | Moral duty<br>Public pressure |
| Professional | Peers observe and review others in their group to ensure they meet shared standards and expectations | Professional duty<br>Peer pressure |

*Source: GEM Report team.*

GLOBAL EDUCATION MONITORING REPORT 2018

GENDER REVIEW

There is a wide range of possible approaches to accountability, and countries vary enormously in the extent to which they employ them. In some countries, a serious lack of checks and balances is symptomatic of neglect in the exercise of government or professional duty. Limited accountability mechanisms have been identified as the 'main barrier to effective gender mainstreaming' in OECD countries (OECD, 2014). In other countries, accountability mechanisms for gender equality in education are becoming more embedded. However, evidence for the effectiveness of accountability mechanisms for gender equality in education is mixed. Some countries achieve education goals without explicit emphasis on accountability mechanisms. In other countries, accountability mechanisms have promoted a renewed focus on what matters and have prevented violations.

This part of the review looks at evidence on the mechanisms in place to hold to account key actors entrusted with ensuring gender equality in education. It consists of four sections. The first section reviews how country responsibilities for gender equality in education are defined at the global level and how they are enforced. The second section focuses on governments' legal obligations to create an education plan that is non-discriminatory. The last two sections examine the responsibilities of key education actors for ensuring gender equality in access to school and providing gender equality through school.

# Countries have committed politically and legally to gender equality in education

The international community has been committed to achieving gender equality at least since the establishment of the United Nations: Chapter I of the UN charter lists as one of the organization's purposes the effort to achieve international cooperation through 'promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion' (United Nations, 1945). Since then, countries have been increasing their political and legal commitment to gender equality in education.

## COUNTRIES HAVE MADE A STRONG POLITICAL COMMITMENT TO ACHIEVING GENDER EQUALITY IN EDUCATION

The 2030 Agenda for Sustainable Development commits countries to gender equality throughout all 17 of the Sustainable Development Goals (SDGs). Individual goals foreground gender equality in education, including SDG 4, which calls for inclusive, equitable education of good quality, and SDG 5, which aims at achieving gender equality and empowering women and girls. SDG 5's targets include the elimination of all forms of discrimination, gender-based violence and child marriage, increasing participation of women at all levels of decision-making, and providing universal access to sexual and reproductive health services (CESR, 2017).

The Education 2030 Framework for Action, the international community's roadmap towards achieving SDG 4, recognizes that gender equality is essential if the right to education is to be extended to all. The framework says that governments must put in place gender-sensitive policies, plans and learning environments. This includes eliminating gender-based discrimination and violence and providing teacher education and support in offering gender-equitable instruction. Gender equality is captured throughout SDG 4 using indicators disaggregated by sex. In addition, target 4.5 calls for eliminating gender disparities in education; target 4.7 includes education for gender equality as a necessary component for education for sustainable development and global citizenship; and means of implementation 4.a monitors safe and gender-sensitive learning environments.

However, the 2030 Agenda is not legally binding. Moreover, although accountability was originally emphasized in the drafting of the goals, it was later replaced with a weaker follow-up and review process, based mainly on voluntary national reviews and offering limited space for civil society and little recognition of the importance of

independent external monitoring. For example, of 22 voluntary national reviews completed in 2016, only 4 were presented by a diverse delegation that included representatives of unions, civil society organizations and the private sector as well as government actors (Finland, Germany, Norway and Switzerland) (CESR, 2017).

## COUNTRIES HAVE ALSO MADE LEGAL COMMITMENTS TO GENDER EQUALITY IN EDUCATION

States' legal obligations on education come from legally binding international treaties that lay out governments' responsibilities to respect, protect and fulfil the right to education. To respect the right to education, the state must refrain from interfering with citizens' enjoyment of the right. To protect it, the state must ensure that third parties do not prevent equal access to and enjoyment of education. To fulfil it, the state must adopt legislative, administrative, budgetary, judicial and other measures towards full realization of the right. All countries have ratified at least one such treaty.

Three global treaties are particularly relevant to gender equality in education. First, the 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) is the most specific and substantive treaty with regard to the normative content and legal obligations of states towards gender equality in education. Article 1 of the treaty defines discrimination against women. Articles 2 and 3 set out measures that states should take to eliminate discrimination. Article 5 requires states to eliminate all gender stereotyping, prejudices and discriminatory practices. Article 7 calls for states to draft and implement policy and laws with gender equality in mind. Article 10 lays out state obligations and establishes acceptable norms, including on equality in access to and quality of education, the reduction of female dropout rates, programmes for women and girls who have left school prematurely, and access to educational information on health and family planning. Article 16 prohibits child marriage. Although 189 states have ratified CEDAW, many countries have included reservations, which undermine their commitment to the treaty (**Box 2**).

Secondly, the Convention against Discrimination in Education (CADE), the only treaty specific to the field of education, is the most comprehensive treaty covering discrimination in education. CADE prohibits discrimination in all forms, including by gender, and addresses discrimination both in access to and quality of education. Article 2 permits gender-segregated educational institutions provided they have the same quality, provide equivalent content and meet the same standards as gender-integrated institutions (Right to Education Initiative, 2018).

Finally, Articles 13 and 14 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) are often seen as the foundation of the legal right to education. In elaborating on the guarantee of education for all without discrimination in Article 13, the treaty's committee has laid out state practices necessary to provide redress for any discrimination, all of which require close monitoring and disaggregated data to identify patterns of discrimination (Right to Education Initiative, 2018).

Countries' legal commitment to gender equality in education can be classified using the ratification status of the three treaties as a proxy measure. The least committed countries are those that have not ratified CEDAW, CADE or ICESCR; the most committed are those that have ratified CEDAW without reservations and have also ratified CADE and ICESCR (**Figure 14**).

**BOX 2**

## Reservations to international treaties undermine state commitments to gender equality

A reservation is a unilateral statement in which a state reserves its obligations to fulfil certain provisions of a treaty. Many states have entered reservations to treaties that signal their unwillingness to be bound by provisions that oblige them to take action to achieve gender equality in education or provisions that could affect the right to education of women and girls.

No states have entered a reservation on Article 10 of CEDAW, which lays out obligations on equality in education. However, 27 states (that is, 14% of signatories) have made 44 reservations on other provisions that could affect the right to education as applied to women and girls. Articles 2 and 16 have received the most substantive reservations (**Table 7**).

Reservations to Article 2, which refers to the elimination of discriminatory laws and policies, are problematic because they imply that women's and girls' right to education cannot be legally protected. Article 2 (f) reads:

2. States Parties condemn discrimination against women in all its forms, agree to pursue by all appropriate means and without delay a policy of eliminating discrimination against women and, to this end, undertake:

(f) To take all appropriate measures, including legislation, to modify or abolish existing laws, regulations, customs and practices which constitute discrimination against women

Many states have objected to reservations to this article as being against the 'object and purpose' of the treaty (which is prohibited by Article 19 (c) of the Vienna Convention on the Law of Treaties).

Reservations to Article 16, which refers to discrimination and unequal treatment of women and girls in marriage and family life, are also problematic because marriage, and in particular child marriage, can have a deleterious impact on a girl's education.

In addressing reservations to CEDAW, the Committee on the Elimination of Discrimination has stated that 'Reservations to articles 2 and 16 perpetuate the myth of women's inferiority and reinforce the inequalities in the lives of millions of women throughout the world. They continue to be treated in both public and private life as inferior to men, and to suffer greater violations of their rights in every sphere of their lives.'

### TABLE 7:
### Reservations affecting gender equality in education, by CEDAW article

| Article | Description | Countries with reservation |
|---------|-------------|----------------------------|
| Article 2 | Sets out legal and policy measures states should take to eliminate discrimination against women | 12<br>Algeria; Bahamas; Bahrain; Bangladesh; Egypt; Iraq; Federated States of Micronesia; Morocco; Niger; Singapore; Syrian Arab Republic; United Arab Emirates |
| Article 5 | Requires states to eliminate gender stereotyping, prejudices, discriminatory cultural practices, and all other practices based on the idea that one sex is superior than the other | 4<br>India; Federated States of Micronesia; Niger; Qatar |
| Article 11(1)(c) | Provides for the right to vocational training and retraining | 1<br>Singapore |
| Article 16 | Sets out rights of women with respect to marriage and family life, guarantees the same rights to marry as men, prohibits forced marriage and child marriage, and requires states to set a minimum age for marriage | 20<br>Algeria; Bahrain; Bangladesh; Egypt; India; Iraq; Israel; Jordan; Lebanon; Malaysia; Maldives; Malta; Mauritania; Federated States of Micronesia; Niger; Oman; Qatar; Singapore; Syrian Arab Republic; United Arab Emirates |
| General | CEDAW provisions associated with gender equality in education | Brunei Darussalam; Mauritania; Monaco; Oman; Pakistan; Saudi Arabia; Tunisia |

*Source:* Right to Education Initiative (2018).

## FIGURE 14:
### Only 44% of countries have fully committed to gender equality in education
*Classification of countries by level of ratification of three treaties referring to gender equality in education*



Legend:
- 1: Fully committed
- 2
- 3
- 4
- 5
- 6: Least committed
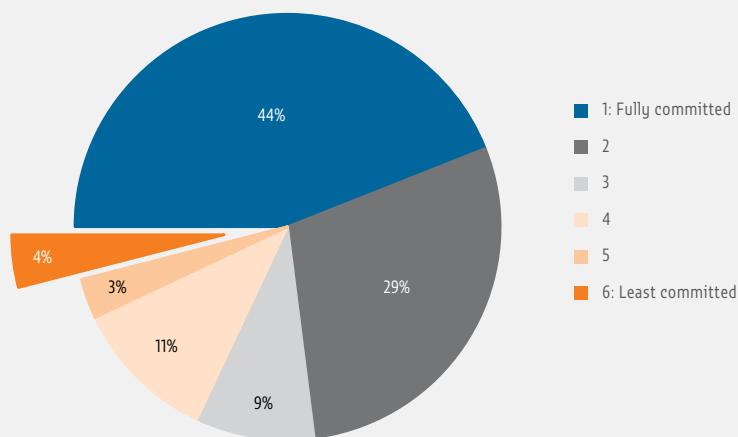
*Notes:* The nominal de jure commitment classification follows the following criteria:

| Tier | State party to CEDAW | Reservation(s) to CEDAW | State party to CADE | State party to ICESCR |
|------|----------------------|-------------------------|---------------------|-----------------------|
| 1 | ✓ | X | ✓ | ✓ |
| 2 | ✓ | X | State party to one of either CADE or ICESCR | |
| 3 | ✓ | X | X | X |
| 4 | ✓ | ✓ | State party to one of either CADE or ICESCR | |
| 5 | ✓ | ✓ | X | X |
| 6 | X | Not applicable | Not applicable | Not applicable |

*Source:* Right to Education Initiative (2018).

In total, 189 states, or 96% of all UN members, have ratified CEDAW, though 27 of them have entered reservations that are relevant to gender equality in education. In total, 44% of states are classified as fully committed, while a further 29% fall into the second tier, which means that they have ratified either CADE or ICESCR in addition to full commitment to CEDAW. Seven states have not ratified CEDAW and fall into the bottom category: the small island developing states of Niue, Palau and Tonga, the Islamic Republic of Iran, Somalia, Sudan and the United States of America.

The United States is frequently absent from international treaties; notably, it is the only country that has not ratified the Convention on the Rights of the Child. It has not ratified CEDAW, CADE and ICESCR, and it has not guaranteed the right to education in its constitution, which means that citizens in the United States lack an important recourse in cases of violations of their right to education.

A high score in this proxy measure is not sufficient to guarantee gender equality in education. For example, Afghanistan has ratified all three treaties, but it has one of the highest levels of gender inequality in education. In the United Republic of Tanzania, President John Magufuli stated in 2017 that as long as he is in office 'no pregnant students will be allowed to return to school' (Right to Education Initiative, 2017). And countries that show high levels of commitment in treaty ratification do not always reflect this commitment in their education sector plans. While the plans of Burkina Faso and Zimbabwe disaggregate data by sex, Nicaragua and Uzbekistan do not include explicit gender elements in their plans (GPE, 2017).

## SEVERAL CHANNELS ARE AVAILABLE WHEN THE RIGHT TO GENDER EQUALITY IN EDUCATION IS VIOLATED

Even when states formally accept the responsibility to guarantee the right to gender equality in education, discriminatory practices based on gender persist. Citizens and non-governmental organizations can avail of formal and informal routes to have their voices heard and hold the government to account. Formal channels include those associated with human rights treaty bodies, parliaments and independent institutions. Informal channels include large social movements addressing women's rights issues.

### Formal international mechanisms hold governments to account for violations

Depending on the treaty, governments can be held accountable in one or more of three ways. First, authorized parties may be able to bring complaints directly to the committee overseeing the treaty. Secondly, the treaty may require countries to report progress on meeting treaty commitments to the committee. Thirdly, during a country review process, third parties may be able to provide reports to further inform the committee.

**TABLE 8:**
**Requirements for submitting complaints to the committees overseeing major international treaties on gender equality in education and potential outcomes**

|  | CEDAW | ICESCR | CADE |
|---|---|---|---|
| Submission requirements | • Complaint is submitted in writing and is not anonymous<br>• Domestic remedies must have been exhausted, unless application of such remedies is unreasonably prolonged or unlikely to bring effective relief | In addition to requirements for CEDAW:<br>• Complaint must be submitted within one year of exhausting all domestic remedies<br>• Complaint cannot be based exclusively on media reports | In addition to requirements for CEDAW:<br>• Communication must be submitted within reasonable time limit after facts have become known<br>• Communication cannot be based exclusively on media reports |
| Potential outcomes | • Interim measures to avoid irreparable damage while complaint is heard<br>• Recommendations to the state, which require a response from the state on planned remedies within six months | • Friendly settlements between parties | • Recommendations to the state following confidential examination of the communication by the committee and discussion with government in question |

*Source:* Right to Education Initiative (2018).

The primary way governments are held accountable for their commitments on the right to education is through the submission of complaints, communications, petitions or claims by anyone who feels their human rights have been violated by the state. The committees overseeing CEDAW, ICESCR and CADE all have mechanisms to submit complaints and complainants do not need a lawyer to bring forward their concerns (**Table 8**).

The Committee on the Elimination of Discrimination against Women monitors the implementation of CEDAW, which makes it the UN treaty body most likely to receive a complaint on gender inequality in education. It should be noted that although UN treaty bodies have dealt with a small number of complaints or communications on the right to education, no UN treaty body has yet adjudicated on a specific case of gender discrimination in education. However, the Committee has taken decisions that affect gender equality in education. In a communication alleging that several provisions of CEDAW were violated by an executive order that sought to regulate access to contraception in Manila, the Committee conducted an inquiry and concluded the order violated the right to health (Article 12) and the right to access reproductive health information (Article 10(h)). The latter finding prompted the committee to recommend that the Philippine government integrate age-appropriate education on reproductive and sexual health into school curricula (Right to Education Initiative, 2017).

Countries are required to report periodically on measures they have taken to meet their obligations. During the last reporting for CADE, completed in 2013, 40 out of 59 countries reported relevant policy changes. In Australia, the Sex and Age Discrimination Legislation Amendment Act 2011 legally protects students of any age from sexual harassment, including through the use of modern technologies such as texting or social networking sites. In Bahrain, nursery schools were opened in continuing education centres to provide a space for childcare while parents continue their education. The Female Stipend Programme was expanded to upper secondary in Bangladesh, allowing the 3.9 million students receiving the stipend to extend their education. As part of its National Plan for Equity, Ethiopia adopted positive discrimination measures at key education transition points as well as instating tutoring support for female students when they enter higher education. The Girl's Day – Boy's Day project in Luxembourg aimed to combat gender stereotypes by encouraging students to explore occupations associated with the opposite sex (UNESCO, 2014).

During country reviews, non-government actors are given the opportunity to submit documents on the state of corresponding rights in the country. Reports from NGOs are known as shadow or parallel reports and bring local voices into the international arena. In 2016, in response to such a report, the Committee on Economic, Social and Cultural Rights, which oversees ICESCR, recommended that the government of the Dominican Republic 'incorporate comprehensive age appropriate lessons on human rights, gender equality and sexual and reproductive health' in curricula and guarantee access for children of Haitian descent, including those lacking a birth certificate or identity document (CESCR, 2016; CLADEM/Colectiva Mujer y Salud, 2016).

The Human Rights Council is made up of 47 UN Member States elected by the UN General Assembly. It is not associated with a treaty, but it discusses human rights issues and situations and monitors states through

the Universal Periodic Review, under which all UN Member States undergo a review of their human rights performance every 4.5 years. During the Universal Periodic Review process, states indicate the actions they have taken to fulfil their human rights obligations, and other states are able to criticize, question or praise their human rights record. On average, 3,400 complaints are made each year (Right to Education Initiative, 2018). In 2015 and 2016, 49 of 51 recommendations related to girls' right to education were accepted (UN Human Rights Council, 2017). For example, Portugal recommended in 2014 that Bhutan 'take further measures to address the decline of female enrolment in schools', which Bhutan agreed to do (UN Human Rights Council, 2014).

The multiple avenues offered by international treaties are underutilized measures for holding countries accountable for gender equality in education. Although lack of enforcement authority may limit the degree of national reporting against treaty goals, normative pressure to meet commitments has driven progress in some countries. Individual citizens and civil society organizations could make better use of these avenues to bring up issues of discrimination and segregation, since committee recommendations, when combined with public scrutiny, can prompt government action.

### Formal national mechanisms also hold governments to account

Independent institutions and government agencies provide other routes for citizens to voice complaints. National Human Rights Institutions (NHRIs), including ombudsman offices, are tasked with reporting on complaints involving government human rights violations and recommending corrective action. In 2010, 118 countries had ombudsman offices (Finkel, 2012).

The Global Alliance of National Human Rights Institutions has encouraged its members to prioritize gender equality in their work (CESR, 2017). Steps have been taken to integrate gender equality aims in NHRIs in several countries; in Australia, a special commissioner for sex discrimination has been appointed, and in India, a specialized women's commission has been established (CESR, 2017). Elsewhere, Bhutan has the National Commission for Women and Children, Ethiopia and Turkey each have an ombudsman dedicated to women and children, and Sierra Leone has a women and children's rights unit in their Human Rights Commission (CRIN, 2017).

In Finland, the Ombudsman for Equality supervises compliance with the Act on Equality between Women and Men. The office fields inquiries and complaints on gender issues in employment, education, housing, social protection and healthcare, and goods and services. In 2015, 644 inquiries were made to the ombudsman, with 369 case files opened and processed during the year (Equinet, 2017). The Commissioner for Human Rights (Ombudsman) office in Azerbaijan has raised awareness by organizing events on the right to education as part of the National Action Plan to prevent gender-based violence. Ombudsman efforts also resulted in a class on introduction to gender being integrated into the law faculty curriculum at Baku State University (Safikhanli, 2014).

Gender audits by independent audit institutions can also put pressure on the government. In Victoria state, Australia, the Auditor General's Report has drawn attention to the large gender gap favouring girls in reading and shown that boys' writing performance is declining at a far faster rate than their female peers (Rowe, 2017). The conclusions of the 2015 Auditor General report in Canada led to an action plan for the years 2016–2020, collaboratively developed with Status of Women Canada, the Privy Council Office and the Treasury Board Secretariat, to close gender gaps (OECD, 2017b).

In the Lao People's Democratic Republic, the Ministry of Education and Sports commissioned Plan International to complete a gender audit for the mid-term review of the 2011–2015 education sector plan. The report highlighted contradictions between the plan and other documents. While the plan includes data disaggregated by sex, a lack of data by location or ethnicity limits its usefulness in identifying disparities. The audit also pointed out the absence of women in decision-making positions, in spite of the fact that national policies emphasize the need for their inclusion (Edwards and Girgis, 2015).

### Informal social action and activism maintain pressure for gender equality

Social accountability systems, including sustained social movements, provide an informal avenue for citizens to voice complaints. Women activist groups have played an important role in many countries in holding the government to account for their commitments (Cornwall and Edwards, 2015; Sen and Mukherjee, 2014; Weldon and Htun, 2013). An analysis of policies on violence against women in place between 1975 and 2005 across

70 countries found that, even after controlling for a country's income level, the presence of a strong, autonomous domestic feminist movement plays a key role in policy change (Weldon and Htun, 2013).

Campaigns for women's rights are often organized by NGOs, occasionally in partnership with government. For example, the Rwanda Education NGO Coordination Platform (RENCP) is a coalition of over 70 local and international organizations. Members are required to contribute to one of the RENCP's five working groups, which align with government priorities. Supported by the Ministry of Education, one working group focuses on girls' education (Williams, 2015). In Bangladesh, NGOs are not formally linked to government policy-making, but they raise awareness of gender issues, for example through research reports and micro-credit programmes, and they encourage women to take advantage of gender quotas for local government positions (Panday and Feldman, 2015). With the support of local and religious leaders who are convinced of the importance of girls' education, changes in attitudes have been observed in communities in Afghanistan, Nepal and Pakistan (UNGEI, 2017).

Progress can also be encouraged by gender-focused international NGOs, such as the Campaign for Female Education, the MenEngage Alliance and Women Deliver, as well as global campaigns such as the Determined campaign by the Global Fund for Women or the Planet 50-50 by 2030: Step it Up for Gender Equality by UN Women. The #HeForShe campaign launched by UN Women in 2014 focuses on engaging men to become change agents and help achieve gender equality. As part of the campaign, the Impact 10x10x10 project encouraged ten leaders each from government, corporations and universities to make public pledges for gender equality. For example, the ten higher education champions committed to implement gender-sensitive curricula and develop programmes to address gender-based violence at their universities (HeForShe, 2018).

Social media is increasingly used to draw attention to gender issues, hold organizations and individuals to account and provide a voice for individuals regardless of their status. Hashtag activism can help bring local concerns into global consciousness. The #BringBackOurGirls campaign drew global attention to the kidnapping of over 250 secondary school girls in Borno State, Nigeria, in 2014 (Chittal, 2015).

# Credible education plans clarify commitments to gender quality in education

Governments have political and legal obligations to plan and implement education policy, within their resource constraints. They are responsible both for protecting the right to gender equality in education and for providing gender equitable education services. There is no single formula for how governments can ensure gender equality in education. The situation is further complicated by the fact that governments are not uniform actors; they are composed of many sectors, departments, levels and authorities with variable levels of capacity. Fragile, post-conflict and post-disaster states tend to be in a weaker position in enacting and enforcing policies.

In holding the government accountable for its promises in gender equality in education, a key tool is credible education plans, which should identify clear lines of responsibility, be properly costed and have a transparent budget. Education plans facilitate coordination across entities and can bring together different ministries to tackle the wide-ranging challenges that often hamper girls' education. Involving different stakeholders can help ensure that plans include and adequately fund strategies and policies that advance gender equality.

A Global Partnership for Education review concluded that 25 out of 42 education sector plans it surveyed were gender-sensitive, using three criteria: the plan had gender-disaggregated data; it included an analysis of barriers to girls' education; and it provided information on the implementation of gender-focused strategies. But the plans of nine countries did not meet any of the three criteria: the Central African Republic, Chad, Comoros, Guyana, Haiti, Madagascar, Nicaragua, the Republic of Moldova and Uzbekistan (GPE, 2017).

The existence of a plan that meets certain criteria is by no means a guarantee of success. Afghanistan has a gender-sensitive plan, which recognizes the importance of female teachers in facilitating girls' enrolment as well as the difficulty of recruiting them. The Ministry of Education introduced incentives to attract more female teachers, especially in rural areas. Unfortunately, the strategy has made little difference: 80 (or about one in five) districts do not have a single female teacher (GPE, 2017).

Every stage of a plan should be considered through a gender lens (**Figure 15**). First, a gender assessment should gauge the potential gender implications of the policy. Second, gender budgeting should ensure resources are properly targeted and equitably disbursed. Third, multiple stakeholders should be included in reviewing the plan or policy against the original intention and identifying any explicit or hidden prejudice or discrimination. Finally, a report on policy implementation and results, including gender analysis and disaggregated data, should be prepared and published (GPE and UNGEI, 2017).

An ex-ante gender assessment is required in some countries prior to policy finalization, including in Belgium and France since 2013. Canada, Iceland, Mexico and Spain have also committed to assessing policies from a gender perspective before adopting them. In Denmark, the government has introduced workshops to develop the capacity of ministries to adopt gender-sensitive approaches in their work (OECD, 2017b).

National and cross-national consultation processes can help identify challenges in promoting gender equality. Periodic regional conferences on women have been held in the Latin America and Caribbean region since 1977. In 2016, after an extensive consultation process that included civil society organizations and specialists from women's movements and academic institutions, the 13th conference culminated in the Montevideo Strategy for the Implementation of the Regional Gender Agenda within the Sustainable Development Framework by 2030 (CESR, 2017).

Gender budgeting – analysing budgets from a gender perspective – can clarify how priorities are set and strengthen accountability. It originated in Australia in 1984, and in the following ten years, federal assistance to families with children increased by over 25% (OECD, 2014). By 2016, the practice had been introduced in 12 out of 34 OECD countries. For example, a 2007 law in Belgium introduced gender budgeting and the use of data disaggregated by sex (Quinn, 2016). Gender budgeting has been required at all levels of government in Austria since 2009. All ministries in Israel have had to analyse their budget from a gender perspective since 2014. Gender budgeting is in the planning stage in Italy and is being considered in the Czech Republic and Turkey (OECD, 2017b).

**FIGURE 15:**

**A gender lens is needed at all points in the education policy and planning cycle**
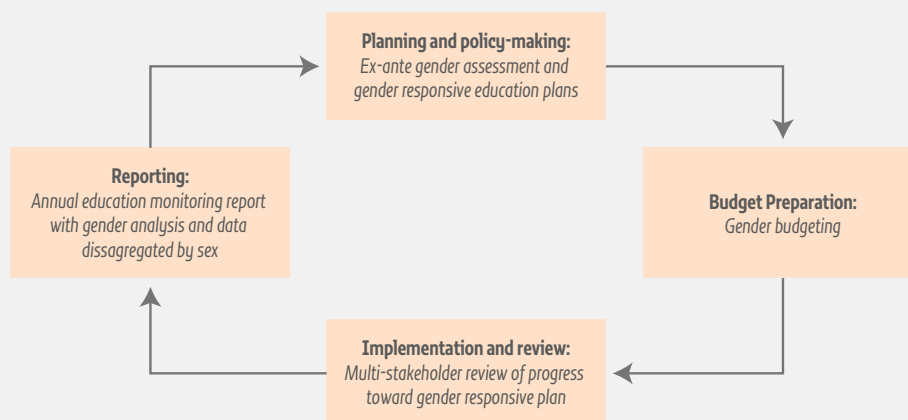


*Source:* Global Education Monitoring Report team.

To date, more than 80 countries have tried some form of gender budgeting (Stotsky, 2016). In Timor-Leste, legal requirements for gender budgeting led to scholarship programmes being established to address gender inequality in higher education participation (Christie and Thakur, 2016). In Uganda, gender budgeting resulted in allocations to monitor efforts to increase girls' participation and retention in school (Stotsky et al., 2016).

Reviews of education plans should involve multiple stakeholders. In countries supported by the Global Partnership for Education, ministries of education invite, among others, donors and civil society organizations to carry out a Joint Sector Review of sector-wide progress. However, ministries of social affairs or gender participated in only 26% of reviews (Martinez et al., 2017). Reviews are often narrowed down to a discussion of activity and budget implementation. But substantive gender issues are more likely to be discussed when gender indicators are included in plans and budgets, as in Rwanda (Holvoet and Inberg, 2015).

In India, a Joint Review Mission of the main basic education programme takes place twice a year and are complemented by evaluations carried out by the National Council of Educational Research and Training (NCERT, 2014). An evaluation of the inclusive education programme in secondary education recommended several improvements, including a focus on girls (Julka et al., 2013). In Rwanda, Education Councils operate at both the sector and district level. They review sector and school plans, analyse data and recommend improvements. In addition to government, school and teacher representatives, the National Women's Council is represented on Education Councils (Honeyman, 2017).

To provide the public with information to hold governments to account, governments should prepare an annual education monitoring report that tracks progress toward gender equality among other national education plan objectives. However, only one in two countries had published at least one national education monitoring report since 2010 and only one in six countries had done so on an annual basis (UNESCO, 2017a).

The Annual Performance Report of the Ministry of Education and Sports in Uganda reports on performance at levels from pre-primary to tertiary education and evaluates policies against the original objectives. It also includes a section dedicated to gender. Among the eight primary policy concerns are persistent socio-economic and cultural barriers to girls' education and inadequate infrastructure, including sanitation facilities for girls. In 2013/14, Uganda undertook gender-specific interventions focused on reducing teen pregnancy and marriage, reducing discrimination towards pregnant girls, and developing a comprehensive Gender in Education Strategic Plan. Some of the key outcomes during the year included a four percentage point increase in girls' secondary education completion rates, increased capacity for gender budgeting and greater collaboration between line ministries, NGOs and development partners on gender issues (Uganda MOES, 2014).

# Gender equality in access to school: ensuring equality in enrolment and attendance

Ensuring that all boys and girls enrol in and attend school is a joint project. Governments are responsible for laws, regulations and policies that promote equal opportunities in education. Parents, students and communities have roles to play in ensuring attendance.

In many countries, laws act as barriers to education – especially those that permit early marriage or allow schools to exclude girls that are pregnant. An evaluation of 15 countries found that Indonesia and the United Republic of Tanzania had the most discriminatory environments for girls. In the Democratic Republic of Congo, girls were regularly expelled due to pregnancy. Early marriage increases the probability of early school leaving but in 2016 was still practiced in many countries, including Afghanistan, Bangladesh, Nepal, South Sudan, the United Republic of Tanzania and Yemen (HRW, 2016).

### Community action with NGO support has focused on eliminating child marriage in Malawi

In Malawi, 50% of women marry before they turn 18, but the responsibility for ensuring girls stay in school is shared. Led by community leaders with the support of a civil society organization, parents, schools and local government officials in a rural community near Zomba recorded their perceptions of school quality. Scorecards were used to prompt discussion, which highlighted how child marriage prompted girls to leave school early. As marriage under the age of 18 was already illegal in Malawi, regulations were not a viable solution.

Traditional chiefs are powerful leaders with legitimate authority and significant convening powers. They also, by tradition, administer marriage ceremonies. Following the community meeting, the senior chief of the area brought together all village headmen and other stakeholders. In consultation with primary education advisors, it was decided that any headman who allowed early marriage in his area would be removed from his role by the senior chief, while parents who allowed their child to marry early would also face consequences. The District Commissioner and District Education Manager endorsed the decision. This collective opposition to child marriage led to a reduction in the dropout rate from 25% to 5% and supported the return of 74 married girls to school.

*Sources:* (GPSA, 2016; HRW, 2014; UNFPA, 2012; World Vision, 2015) (GPSA, 2016; HRW, 2014; UNFPA, 2012; World Vision, 2015).

In Zimbabwe, families may feel forced to marry off their daughters to maintain the family's honour if the girl becomes pregnant, spends the night outside of the home or even is seen with a boyfriend. One estimate found that nearly one-third of girls in the country marry by age 18, while 4% marry by age 15 (HRW, 2016). Even where laws are in place, they may not be effective. Key to addressing the problem is raising community awareness of the issue and adapting responses to local culture, so that actors take collective responsibility for ensuring girls stay in school (**Box 3**).

In some countries, pregnant girls are excluded from school in a misguided attempt to uphold moral standards. Pregnancy tests are conducted routinely in the United Republic of Tanzania, and every year, over 8,000 girls are expelled because they are found to be pregnant (HRW, 2016). Other countries, such as Fiji, provide a path back to school for girls who left due to pregnancy (UNESCO, 2015c). In Mexico, this path is supported by grants for girls aged 12 to 18 to complete their education (UN Human Rights Council, 2017).

Legal guarantees of access to school do not always result in regular attendance. Education costs and financial difficulties may lead parents to prioritize the education of one child over the other, often on the basis of social norms that favour boys or girls. Truancy laws are used in some countries to attempt to increase attendance, the idea being that the threat of fines or jail-time will prompt parents to take action. However, there is no substantial evidence to suggest that truancy laws reduce chronic absenteeism (Atkinson, 2016). Moreover, severe sanctions disproportionately disadvantage low income families (Hutchinson et al., 2011). Given that more single parents are women, mothers are more often prosecuted in England and Wales, making up 59% to 63% of all truancy sentences between 2002 and 2006. This kind of treatment mistakenly identifies single mothers as being responsible for their marginal socio-economic situation and stigmatizes them as incapable of being good parents (Donoghue, 2011).

Conditional cash transfer programmes provide financial or in-kind assistance to poor families as long as their children attend school. They were pioneered in Latin America but have spread to low and middle income countries in other regions (Barrientos et al., 2010; Garcia and Moore, 2012). In Mali, the Bourses Maman programme provides women with grants for income-generating activities to ensure girls attend school (UN Human Rights Council, 2017). Conditional cash transfer payments often target mothers, not only to empower women but also because they are more likely to invest the transfers in their child's human capital (McGuire, 2013).

After the introduction of conditional cash transfer programmes, girls' enrolment, attendance and retention improved in countries such as Bangladesh, Burundi, Pakistan, Somalia and Turkey (Fiszbein and Schady, 2009; UNGEI, 2017). In Bangladesh, the Female Secondary School Stipend Programme not only increased the schooling attainment of eligible girls by 2.7 years but also of their younger siblings by nearly 10% (Begum et al., 2017). In Zimbabwe, an intervention covering fees, supplies and additional help to orphan girls led to a nearly 50% lower dropout rate for girls included in the intervention (Iritani et al., 2016).
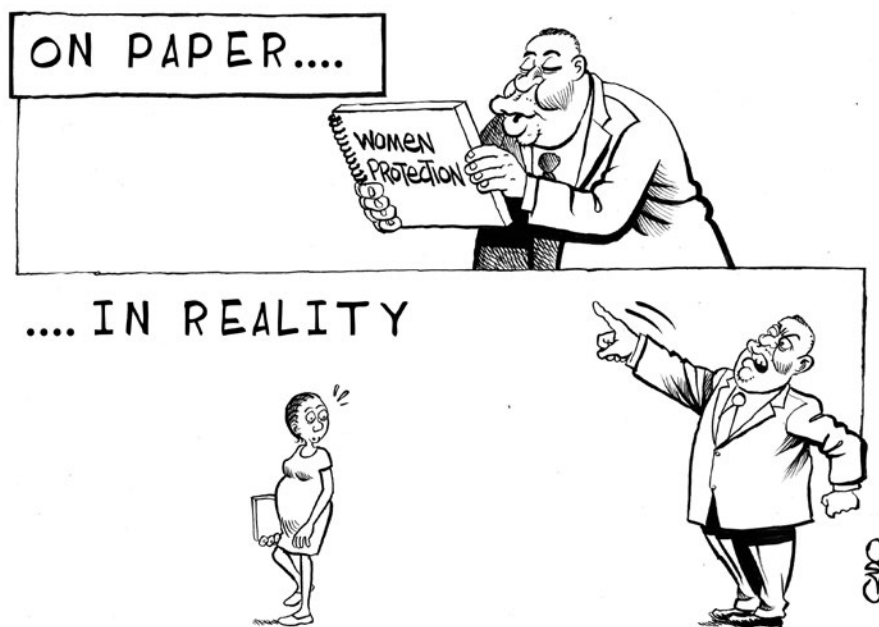
# Gender equality through school: providing a safe and inclusive learning environment

Boys and girls must feel welcome in a safe and secure learning environment. Governments, schools, teachers and students all have a part to play in ensuring that schools are free of violence and discrimination and provide a gender-sensitive, good-quality education (**Figure 16**). To achieve this, governments can develop non-discriminatory curricula, facilitate teacher education and make sure sanitation facilities are adequate. Schools are responsible for addressing school-related violence and providing comprehensive health education. Teachers should follow professional norms regarding appropriate disciplinary practices and provide unbiased instruction. And students must behave in a non-violent, inclusive way.
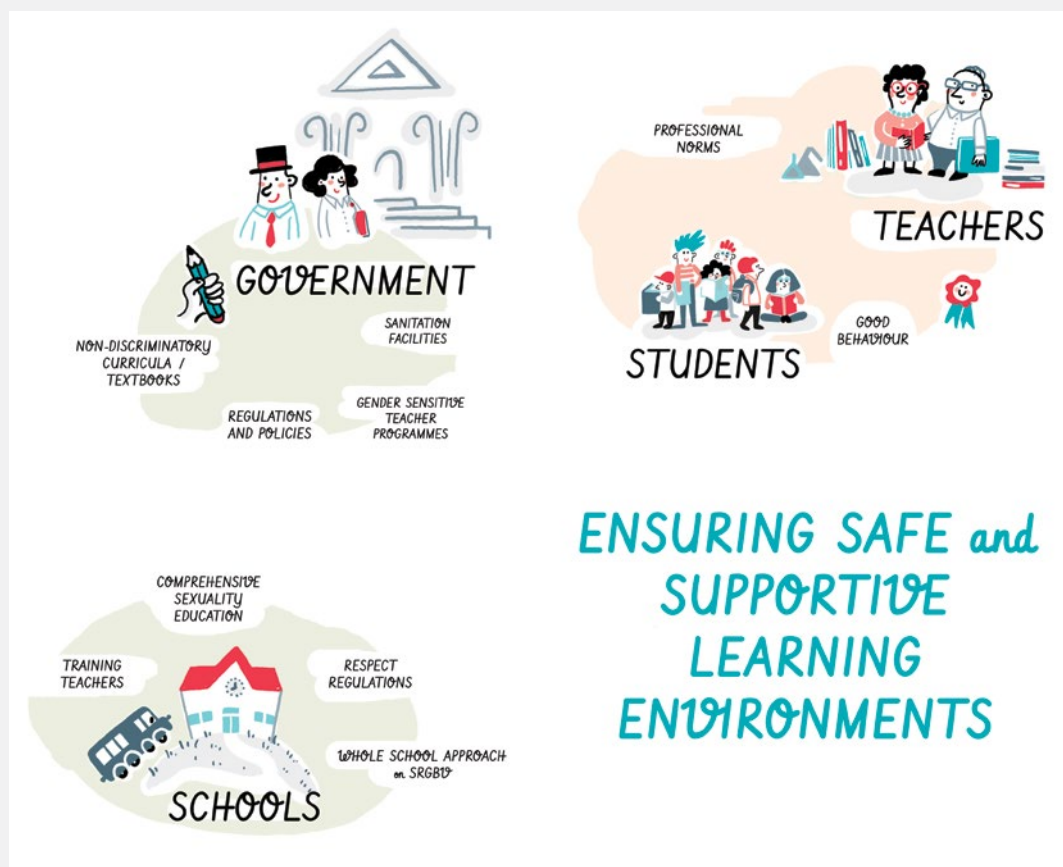
## NATIONAL AND SCHOOL POLICIES SHOULD TARGET SCHOOL-RELATED VIOLENCE

School-related violence is a pervasive issue in some countries. Violence can be physical, psychological or sexual; it can occur on school grounds, in transit or in cyberspace; and it may include bullying, corporal punishment, verbal and emotional abuse, intimidation, sexual harassment and assault, gang activity and the presence of weapons among students. It is often perpetrated as a result of gender norms and stereotypes and enforced by unequal power dynamics. It was estimated that, globally, approximately 246 million girls and boys experienced some form of school-related violence in 2014 (UNGEI, 2017).

While the vast majority of teachers are caring professionals who put the best interest of their students first, some abuse their position of power. In West and Central African countries, sexual abuse and exploitation by teachers, school staff and others in position of authority is common practice (Antonowicz, 2010). Sexual violence happens frequently in many schools in South Africa but crimes are rarely investigated and prosecution rates are low (HRW, 2016). In the United Republic of Tanzania, over half of girls and boys who had experienced physical abuse identified a teacher as an abuser (HakiElimu, 2017). In Samoa, 41% of children surveyed in 2013 indicated that they had experienced violence at the hands of their teacher (Office of the Ombudsman and NHRI Samoa, 2015).

Some countries, including Chile, Fiji, Finland, Peru, the Republic of Korea and Sweden, have passed legislation on violence in educational institutions (UNESCO, 2015c, 2017b). The 2013 Anti-Bullying Act in the Philippines requires all schools to adopt policies to prevent and address acts of bullying. It explicitly refers to gender-based

**FIGURE 16:**
**Who is responsible for what in ensuring gender equality through school**



GOVERNMENT

NON-DISCRIMINATORY CURRICULA / TEXTBOOKS

SANITATION FACILITIES

REGULATIONS AND POLICIES

GENDER SENSITIVE TEACHER PROGRAMMES

PROFESSIONAL NORMS

TEACHERS

STUDENTS

GOOD BEHAVIOUR

COMPREHENSIVE SEXUALITY EDUCATION

TRAINING TEACHERS

RESPECT REGULATIONS

WHOLE SCHOOL APPROACH on SRGBV

SCHOOLS

ENSURING SAFE and SUPPORTIVE LEARNING ENVIRONMENTS

*Source:* Adapted from Housatonic Design Network.

bullying, which is described as any act that humiliates or excludes a person on the basis of perceived or actual sexual orientation and gender identity. Yet in the following year just 38% of schools had adopted child protection or anti-bullying policies. The low rate highlighted a lack of communication and a weak monitoring framework. The Department of Education responded by issuing a memorandum to clarify submission requirements and is working to build implementation capacity (UNESCO, 2015c).

Teacher education and codes of conduct can help change teacher attitudes and behaviours. In South Sudan, the UNICEF Communities Care programme engaged with teachers to challenge norms that enable sexual violence and brought about some shifts in teacher attitudes and behaviours (UNGEI, 2017). The Doorways programme in Burkina Faso, Ghana and Malawi trained upper primary and lower secondary school teachers on children's rights and responsibilities, alternative teaching practices, basic counselling and listening skills, awareness of sexual harassment at school and teacher code of conduct (DevTech Systems, 2008; Queen et al., 2015). The Communication for Change project trained teachers in the Democratic Republic of Congo to act as first responders when they witnessed school-related gender-based violence. The share of participating teachers who were aware of how to prevent gender-based violence in school increased from 56% to 95% after the intervention (C-Change, 2013).

Teacher codes of conduct are generally written by teacher unions to guide their members. They promote professional accountability by giving peers a way to hold each other to account for adhering to norms (Poisson, 2009). A recent survey by Education International found that teacher codes of conduct were present in 26 of 50 countries surveyed (EI, 2017). A separate review of 24 countries found that over half of teachers believed the code of conduct had a very significant impact in reducing misconduct (McKelvie-Sebileau, 2011).

Teacher codes of conduct can be effective in reducing school-related gender-based violence if they explicitly refer to violence and abuse and include clear breach reporting and enforcement protocols. Mongolia's Teachers Code of Ethics for General Education Schools and Kindergartens contains a section on teacher ethical norms, which specifies that teachers should protect student's health and well-being, including from sexual abuse, and should ensure equal participation without discrimination, including on the basis of sex (Steiner-Khamsi and Batjargal, 2017). Kenya has a range of penalties for breach of professional conduct, including suspension and interdiction. Teachers convicted of sexual offences against students are deregistered (Kenya Teachers Service Commission, 2013). However, even when they exist, these codes are not always successfully disseminated. The implementation of Ethiopia's Code of Conduct on Prevention of School-Related Gender-Based Violence in Schools has been patchy. Some school staff reportedly lacked commitment to or a sense of ownership of the code (Parkes et al., 2017).

Students are also responsible for ensuring their behaviour does not impinge on others' right to education (UNICEF and UNESCO, 2007). Schools are increasingly implementing prevention-oriented models to teach students acceptable strategies for interacting with their peers (Horner et al., 2010). These models set clear guidelines for students and define consistent instruction, record-keeping and follow-up procedures for teachers and other adults, such as administrative and custodial staff, playground supervisors, cafeteria workers and parent and community volunteers (Lewis et al., 2014).

Students are more likely to show positive social behaviours and reduce negative behaviours after the implementation of such programmes (Durlak et al., 2011). There is also increasing evidence linking improved social skills to academic achievement (Horner et al., 2010). While these codes of conduct are mostly used in Europe and North America (Sklad et al., 2012), Asian countries such as Singapore have also begun adopting them (Durlak et al., 2011).

## GENDER-SENSITIVE FACILITIES CAN INCREASE THE TIME GIRLS SPEND IN SCHOOL

Inadequate sanitation facilities for girls during menstruation can have a negative effect on school attendance. Among 145 countries with data, primary school access to basic sanitation facilities was below 50% in 28 countries, 17 of them in sub-Saharan Africa. Only limited data are available on whether girls have separate facilities, let alone whether the facilities are functional or well maintained. In only 9 of 44 countries did more than 75% of primary schools have single-sex facilities; in Benin and Comoros, under 5% of schools had single-sex facilities. An estimated one in ten African girls miss school during menstruation (HRW, 2016).

Regulations requiring separate toilet facilities for boys and girls can help. Yet analysis of regulations in 71 education systems by the GEM Report team shows that only 61% required sex-separate facilities for public schools and 66% for private schools (UNESCO, 2017a).

Regulations alone are not sufficient to ensure facilities are available. Although separate sanitation facilities are mandated by regulations in Bangladesh, a survey found that in 2014 only 12% of girls reported access to female-only toilets with water and soap available. Combined with a lack of waste bins, the poor facilities contributed to girls missing school during menstruation. Two in five girls were absent during menstruation for an average of three days during each cycle (Alam et al., 2014). Girls in Haiti have reported having to go home to change the materials they use to manage their menstruation, resulting in lost instructional time (HRW, 2016).

School inspections play a key role in ensuring that schools adhere to regulations. However, inspections do not always take gender issues into account. In Sweden, the school inspectorate takes gender equality into consideration (Heikkilä, 2016) and in the United Kingdom inspectors evaluate equal opportunities in the classroom and whether the school provides an inclusive environment for boys and girls (Rogers, 2014). By contrast, gender issues are rarely included in inspections in Bangladesh, with sex-separate sanitation facilities only occasionally observed (Chatterley et al., 2014). In any case, inspectorates are severely constrained by human resource shortages in many poor countries. For instance, in Mvomero district, United Republic of Tanzania, although 80% of schools are supposed to be inspected annually, only one in five schools were inspected in 2013 (Holvoet, 2015).

## GENDER EQUALITY IN EDUCATION REQUIRES UNBIASED CURRICULA AND TEXTBOOKS

To facilitate gender-responsive instruction, curricula and textbooks should be free from gender bias and promote equality in gender relations. How students perceive themselves and how they project their role in society is shaped to some extent by what they experience at school, including by how they are represented in textbooks.

### Comprehensive sexuality education

School-based comprehensive sexuality education programmes equip children and young people with empowering knowledge, skills and attitudes. In many contexts, programmes focus almost exclusively on HIV as a motivator to encourage students to delay sexual activity and have fewer sexual partners and less frequent sexual contacts (Fonner et al., 2014). However, international guidelines and standards, along with emerging evidence about factors influencing programme effectiveness, increasingly stress the value of a comprehensive approach centred on gender and human rights (Ketting and Winkelmann, 2013). A review of 22 studies showed that comprehensive sexuality education programmes that addressed gender power relations were five times more likely to be effective in reducing rates of sexually transmitted infections and unintended pregnancy than those that did not (Haberland, 2015).

In 2009, UNESCO and other UN agencies published the revised *International Technical Guidance on Sexual Education* to provide an evidence-based, age-appropriate set of topics and learning objectives for comprehensive sexuality education programmes for students aged 5 to 18 (UNESCO, 2009). In 2010, the International Planned Parenthood Federation adopted a rights-based approach in its *Framework for Comprehensive Sexuality Education*, and the WHO Regional Office for Europe produced *Standards for Sexuality Education in Europe* as a framework for policy-makers and education and health authorities (WHO Regional Office for Europe and BZgA, 2010). Nearly ten years after the original report, UNESCO's revised guidance expands coverage to both school-based and out-of-school programmes with a strong focus on human rights, gender equality and skills building. The guidance can act as both an advocacy and accountability tool for programme implementers, NGOs, and youth (UNESCO, 2018).

A 2015 review of the status of comprehensive sexuality education in 48 countries found that almost 80% had supportive policies or strategies. Despite this political will, a significant gap remained between policies and implementation (UNESCO, 2015b). In western and central Africa, UNESCO's Sexuality Education Review and Assessment Tool was used to assess 10 out of 13 national sexuality education programmes. Fewer than half the curricula met global standards for required content for all age groups, with gender and social norms identified as the weakest areas (Herat et al., 2014; UNESCO and UNFPA, 2012).

Recent studies in Ghana and Kenya provided evidence of gaps in content and delivery. The Kenya study covered 78 public and private secondary schools. While 75% of teachers reported teaching all topics of a comprehensive sexuality education programme, only 2% of students reported learning all topics. Only 20% learned about types of contraceptive methods, and even fewer learned how to use and where to get them (**Figure 17**). In some cases, incomplete and sometimes inaccurate information was taught. Almost 60% of teachers incorrectly taught that condoms alone were not effective in pregnancy prevention (Sidze et al., 2017). Moreover, 71% of teachers emphasized abstinence as the best or only method to prevent pregnancy and sexually transmitted diseases, and most depicted sex as dangerous or immoral for young people.

Barriers to effective implementation of comprehensive programmes include lack of well-trained teachers, poor support of schools, weak regulation and supervision of policy implementation, opposition from religious and

conservative groups, and culturally imposed silence about sexuality. In the Ghana study, 77% of teachers reported lacking resources or teaching materials. A smaller share reported conflicts, embarrassment or opposition from the community or students on moral or religious grounds (Awusabo-Asare et al., 2017).
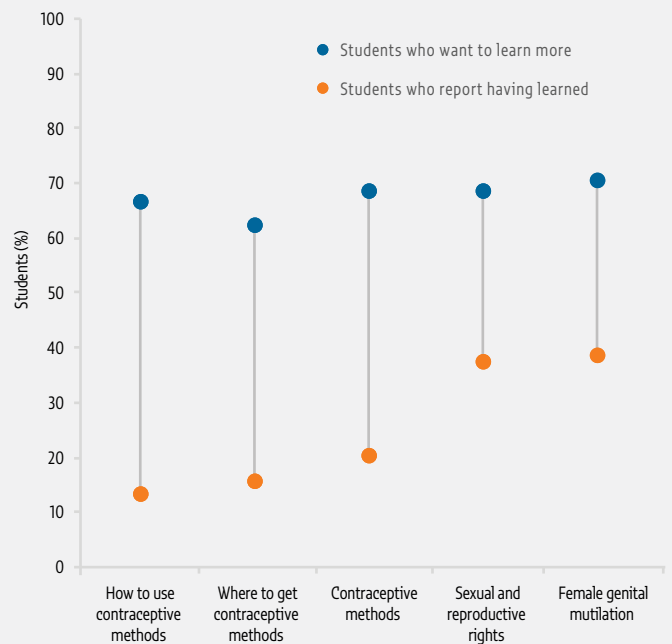
### Textbooks increasingly cover gender issues but progress is insufficient

Self-reporting from governments in Cuba, Estonia, Finland, Mexico, Nicaragua, Slovenia and Spain indicates that gender equality is integrated into national school curricula (UN Human Rights Council, 2017). The Ministry of Education, Culture, Science and Sports in Mongolia identified respect for gender equality as one of the key values in its new core curriculum (Steiner-Khamsi and Batjargal, 2017).

Over the past 50 years, mentions of women and women's rights in textbooks have increased (Bromley et al., 2016; Nakagawa and Wotipka, 2016). Nevertheless, in many countries women remain under-represented or, when included, are relegated to traditional roles such as housework and childcare (UNESCO, 2016a). Women accounted for only 37% of images in primary and secondary school textbooks in the Islamic Republic of Iran in 2006–2007 (Paivandi, 2008) and across nine

**FIGURE 17:**

**In Kenya, only one in five students reported learning about contraceptive methods**

*Percentage of secondary school students who reported having learned or wanting to learn more about selected sexual and reproductive issues, 2015*

- Students who want to learn more
- Students who report having learned

*Source:* Sidze et al. (2017).

OF COURSE GIRLS AND BOYS ARE EQUAL …
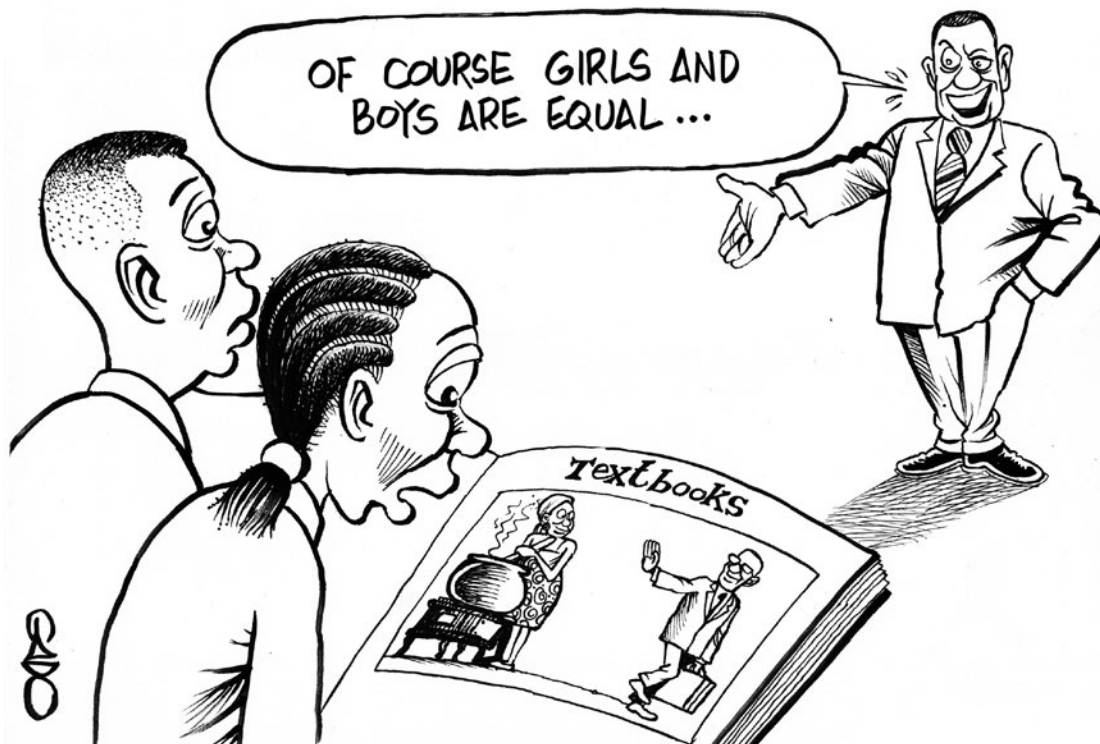
Jordanian secondary school history books only 21% of images were female. From Sweden to the Syrian Arab Republic, despite governments explicitly identifying the importance of gender equality in textbooks, women and men were still routinely portrayed in a stereotypical manner (Bromley et al., 2016).

Both governments and civil society can act to reduce textbook biases. The Human Rights Council has made it clear that 'states have an obligation to periodically review and revise curricula, textbooks, programmes and teaching methods to ensure that they do not perpetuate harmful gender stereotypes' (UN Human Rights Council, 2017). Some states include an explicit gender analysis as part of their textbook and review process. In Viet Nam, the National Strategy on Gender Equality for 2011–2020 specifies that textbook content should be reviewed for gender stereotypes (UNESCO, 2016c). In Ghana, the Textbook Development and Distribution Policy for Pre-tertiary Education included gender sensitivity as one of the main criteria for evaluating textbook proposals (Ghana MOE, 2001). By contrast, the Pakistan National Textbook and Learning Materials Policy and Plan of Action does not mention gender as a criterion of textbook review, referring instead to 'quality of content, presentation, language and specific provincial coverage' (Pakistan MOE, 2007).

Textbook monitoring by parents and civil society can be effective. In South Africa, a parent's question posted on Facebook in July 2016 inspired a petition that ultimately led the textbook publisher to amend and issue an apology for content that promoted blaming the victim for sexual assault (Davies, 2016).

## TEACHER EDUCATION CAN HELP ADDRESS UNDERLYING GENDER BIASES

Aside from the influence of official curricula and textbooks, teacher practice in the classroom is partly shaped by their assumptions and stereotypes about gender, which in turn affects students' beliefs and learning. In Australia, female teachers felt particularly responsible for boys' underachievement relative to male teachers (Hodgetts, 2010). In the United States, anxiety expressed by female mathematics teachers was associated with female students' belief in the stereotype that boys are better at mathematics (Beilock et al., 2010).



TEACHER TRAINING CAN HELP OVERCOME EXPLICIT GENDER BIAS

Teacher education can assist teachers to reflect on and overcome their biases. Formal initiatives in teacher education with a focus on gender have taken place in Italy, the Republic of Moldova and Sudan (OHCHR, 2015). In Spain, the University of Oviedo requires teacher candidates to complete a mandatory course on gender and education (Bourn et al., 2017). In Ankara, Turkey preservice teachers that took a semester long course on gender equity in education developed more gender sensitive attitudes (Erden, 2009).

In low and middle income countries, teacher education programmes are often externally funded. The UNESCO Regional Bureau in Bangkok has recently funded a five-year project, Enhancing Girls' and Women's Right to Quality Education through Gender Sensitive Policy Making, Teacher Development and Pedagogy, which focuses on training participants from Cambodia, Myanmar, Nepal, Sri Lanka and Uzbekistan to conduct gender assessments in teacher education (UNESCO, 2016b).

In Karamoja region, Uganda, the UNICEF Gender Socialization in Schools programme trained over 1,000 primary school teachers to enhance their knowledge, attitudes and practices related to gender equality promotion and conflict resolution. The initial training lasted for two days and was followed by two refresher training sessions. A subset of teachers received reinforcing text messages reminding them of examples of good practice. However, while the programme improved teachers' knowledge and attitudes on gender equality, classroom practices did not become more gender-responsive (American Institutes for Research and UNICEF, 2016; El-Bushra and Smith, 2016).

Nigeria updated its teacher education curriculum in 2012, in part to address gender issues (Unterhalter et al., 2015). While a policy is in place to ensure minimum standards on gender equality, a survey of 4,500 student teachers in 2014 showed that very few had an in-depth understanding of what gender equality in education might mean, while many were hostile to women's participation in public life and any form of social engagement. Among respondents employed following graduation, teachers reported receiving no professional development on gender, a point echoed by other colleagues at the schools where they taught. Teachers who had the most egalitarian ideas about gender reported themselves the most frustrated of respondents and said that they were unable to put their ideas into practice (Unterhalter et al., 2017).

The examples from Uganda and Nigeria highlight some of the challenges in changing teacher practices. To be effective, teacher education and training need to be continuous to recognize the time it takes for such practices to change. They also need to incorporate other stakeholders to help build a more supportive environment.

# Recommendations

This year's Gender Review has presented a picture of the progress and the setbacks on the way to gender equality in education and has asked who should be held accountable for ensuring the target is achieved. The review leads to the following recommendations for accelerating progress towards gender equality in education.

## IDENTIFY AND REMOVE GENDER BARRIERS

To improve what we know about gender equality in education, the monitoring framework needs to be improved. As suggested in the *2016 Global Education Monitoring Report* (see also **Table 2** in this review), the framework should go beyond simply measuring disparities in education opportunities between males and females. It should also cover law, institutions and policies inside and outside the education system, the distribution of resources, and teaching and learning practices.

Some basic barriers limit girls' access to school. In only 9 of 44 countries with available data did more than 75% of primary schools have single-sex facilities. And yet an estimated one in ten African girls miss school during menstruation because of inadequate sanitation facilities. Education plans should therefore make it a priority to provide all schools with single-sex toilets. School inspections should ensure that schools meet the mandated regulations.

But the most important barriers to gender equality remain primarily within the school; they are related to deep-rooted gender discrimination and power relations. Governments need to periodically review and revise curricula, textbooks and teacher education programmes to ensure that they do not perpetuate gender stereotypes.

To address the lack of gender balance in subject choice, governments should consider promoting apprenticeship programmes, mentorships, networking or scholarships for women in science, technology, engineering and mathematics. This is but a first step towards addressing gender imbalance in employment of professionals in other sectors, such as health, water and sanitation.

School-related gender-based violence needs to be addressed through legal and policy frameworks and complemented with a strong monitoring and reporting process. For example, comprehensive sexuality education programmes need to be introduced, but to increase their effectiveness in reducing rates of sexually transmitted infections and unintended pregnancy, it is also necessary to ensure that their content includes gender power relations.

To change gender-biased attitudes and behaviours, codes of conduct for students and teachers are needed. A review of 24 countries found that over half of teachers found codes of conduct had a very significant impact on reducing misconduct. School-wide approaches should be used to address student behaviour that undermines their peers' right to education.

## HOLD PEOPLE TO ACCOUNT FOR GENDER INEQUALITY IN EDUCATION

Ensuring gender equality in education is a collective enterprise in which all actors – and not just the government – make a concerted effort to meet their responsibilities.

Nevertheless, accountability for respecting the right to gender equality in education starts with governments. To ensure they are held to account for their commitments, states must respect, protect and fulfil the right to education, which requires refraining from interfering with citizens' enjoyment of the right, ensuring that third parties do not prevent equal access to and enjoyment of education, and adopting legislative, administrative, budgetary, judicial and other measures towards full realization of the right. Governments should establish and safeguard independent ombudsmen or other national human rights institutions to work on gender equality. However, only 44% of countries have fully committed to gender equality in education.

Individuals and civil society organisations should submit complaints, communications, petitions or claims about violations to the committees overseeing the three main treaties on the right to education for girls and women: the Convention on the Elimination of All Forms of Discrimination against Women, the Convention against Discrimination in Education, and the International Covenant on Economic, Social, and Cultural Rights. Such complaints can prompt national government action. Civil society groups should take an active stance against gender discrimination. Between 1975 and 2005, across 70 countries, the presence of a strong, autonomous domestic feminist movement played a key role in helping change policies protecting women from violence.

Governments should develop gender-sensitive education sector plans which disaggregate all indicators by sex and analyse barriers to girls' and boys' education. Only 25 out of 42 education sector plans reviewed by the Global Partnership for Education were gender sensitive. Governments should not only apply a gender lens to every stage of an education plan but should also carry out a gender assessment of the implications of the policy and examine the gender implications of resource allocation.

One of the problems at the core of gender-biased education policy and practice is gender disparities in school and other leadership positions. Although data is patchy, which in itself is a sign of insufficient concern about the issue, in most countries the share of females in the teaching profession is higher than the share of females among head teachers. As for political representation, the proportion of female legislators was five percentage points higher in countries that adopted a gender quota than those that did not across 103 countries between 1970 and 2006.

Ultimately, governments should prepare an annual education monitoring report that tracks progress towards all education targets, including those related to gender equality. Only one in two countries has published at least one national education monitoring report since 2010 and only one in six countries has done so on an annual basis. In countries with sufficient capacity, independent gender-sensitive performance audits have responded on the basis of available evidence. In Victoria State, Australia, one gender audit identified a decline in boys' writing performance, which was subsequently addressed in the next four-year Action Plan.

The achievement of the 2030 Agenda depends on the world's success in creating a level playing field for boys and girls, women and men, in education as in other sectors. Commitments have been made; the task now is to follow through to their fulfilment, by breaking down barriers and making sure that all actors play their part in the endeavour.
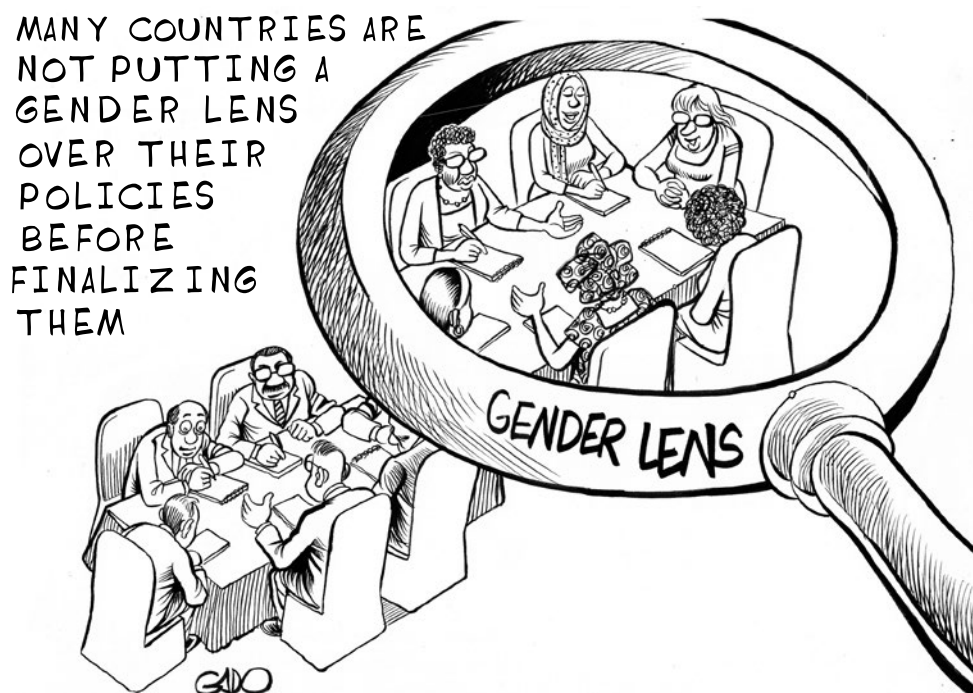
# References

AAMN. 2018. *20 x 20 Choose Nursing*. Lexington, Ky, American Association for Men in Nursing. www.aamn.org/resources/aamn-resources/20x20-choose-nursing. (Accessed 5 February 2018.)

Agha, N. 2016. Gender inequality. *Dawn*, 11 July. www.dawn.com/news/1269984. (Accessed 5 October 2017.)

Aguilar, A., Carranza, E., Goldstein, M., Kilic, T. and Oseni, G. 2015. Decomposition of gender differentials in agricultural productivity in Ethiopia. *Agricultural Economics,* Vol. 46, No. 3, pp. 311–34.

Alam, M.-U., Halder, A. K., Luby, S. P., Islam, M. K., Opel, A., Shoab, A. K., Ghosh, P. K., Sarkar, S., Mahon, T. and Unicomb, L. 2014. *Menstrual hygiene management knowledge, facilities, and practices associated with school absence among Bangladeshi adolescent school girls.* Paper for Water & Health Conference: Where Science Meets Policy, University of North Carolina, Chapel Hill, 13–17 October.

Alam, M.-U., Luby, S. P., Halder, A. K., Islam, K., Opel, A., Shoab, A. K., Ghosh, P. K., Rahman, M., Mahon, T. and Unicomb, L. 2017. Menstrual hygiene management among Bangladeshi adolescent schoolgirls and risk factors affecting school absence: results from a cross-sectional survey. *BMJ Open,* Vol. 7, No. 7, e015508.

Alexander, K. T., Mwaki, A., Adhiambo, D., Cheney-Coker, M., Muga, R. and Freeman, M. C. 2016. The life-cycle costs of school water, sanitation and hygiene access in Kenyan primary schools. *International Journal of Environmental Research and Public Health,* Vol. 13, No. 7, p. 637.

Alexander, K. T., Oduor, C., Nyothach, E., Laserson, K. F., Amek, N., Eleveld, A., Mason, L., Rheingans, R., Beynon, C. and Mohammed, A. 2014. Water, sanitation and hygiene conditions in Kenyan rural schools: are schools meeting the needs of menstruating girls? *Water,* Vol. 6, No. 5, pp. 1453–66.

Ali, D., Bowen, D., Deininger, K. and Duponchel, M. 2016. Investigating the gender gap in agricultural productivity: evidence from Uganda. *World Development,* Vol. 87, pp. 152–70.

American Institutes for Research and UNICEF. 2016. *Evaluation of the Transformative Potential of Positive Gender Socialization in Education for Peacebuilding*. Washington, DC, American Institutes for Research.

Amos, A. and Haglund, M. 2000. From social taboo to "torch of freedom": the marketing of cigarettes to women. *Tobacco Control,* Vol. 9, No. 1, pp. 3–8.

Antonowicz, L. 2010. *Too Often in Silence: A Report on School-based Violence in West and Central Africa*. New York, UNICEF.

Asian Development Bank. 2015. *Gender Equality Results Case Study: Nepal – Community-Based Water Supply and Sanitation Sector Project*. Manila, Asian Development Bank.

ASTI. 2017. *Agricultural Science and Technology Indicators: ASTI database*. Washington, DC, International Food Policy Research Institute. www.asti.cgiar.org. (Accessed 11 November 2017.)

Atkinson, T. 2016. A fine scheme: how municipal fines become crushing debt in the shadow of the new debtors' prisons. *Harvard Civil Rights-Civil Liberties Law Review,* Vol. 51, No. 1, pp. 189–238.

Awusabo-Asare, K., Stillman, M., Keogh, S., Doku, D. T., Kumi-Kyereme, A., Esia-Donkoh, K., Leong, E., Amo-Adjei, J. and Bankole, A. 2017. *From Paper to Practice: Sexuality Education Policies and Their Implementation in Ghana*. New York, Guttmacher Institute.

Baker, D. P., Smith, W. C., Muñoz, I. G., Jeon, H., Fu, T., Leon, J., Salinas, D. and Horvatek, R. 2017. The population education transition curve: education gradients across population exposure to new health risks. *Demography,* Vol. 54, No. 5, pp. 1873–95.

Baltrunaite, A., Casarico, A., Profeta, P. and Savio, G. 2016. *Let the Voters Choose Women*. Munich, Germany, Center for Economic Studies. (CESifo Working Paper 5693.)

Barbeau, E. M., Leavy-Sperounis, A. and Balbach, E. 2004. Smoking, social class, and gender: what can public health learn from the tobacco industry about disparities in smoking? *Tobacco Control,* Vol. 13, No. 2, pp. 115–20.

Barnes, T. D. and Córdova, A. 2016. Making space for women: explaining citizen support for legislative gender quotas in Latin America. *The Journal of Politics,* Vol. 79, No. 3, pp. 670–86.

Barrera-Osorio, F., Fasih, T., Patrinos, H. A. and Santibáñez, L. 2009. *Decentralized Decision-Making in Schools: The Theory and Evidence on School-Based Management*. Washington, DC, World Bank.

Barrientos, A., Nino-Zarazua, M. and Maitrot, M. 2010. *School Assistance in Developing Countries: Database Version 5.0*. Manchester, UK, University of Manchester. (Brooks World Poverty Institute Working Paper.)

Beaman, L., Duflo, E., Pande, R. and Topalova, P. 2012. Female leadership raises aspirations and education attainment for girls: a policy experiment in India. *Science,* Vol. 335, No. 6068, pp. 582–86.

Begum, L., Islam, A. and Smyth, R. 2017. Girl power: stipend programs and the education of younger siblings. *The Journal of Development Studies,* Vol. 53, No. 11, pp 1882–98.

Beilock, S. L., Gunderson, E. A., Ramirez, G. and Levine, S. C. 2010. Female teachers' math anxiety affects girls' math achievement. *Proceedings of the National Academy of Sciences of the United States of America,* Vol. 107, No. 5, pp. 1860–63.

Beintema, N. 2014. Enhancing female participation in agricultural research and development: rationale and evidence. Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A. and Peterman, A. (eds), *Gender in Agriculture*, Cham, Switzerland, Springer, pp. 393–409.

Borgonovi, F., Pokropek, A., Keslair, F., Gauly, B. and Paccagnella, M. 2017. *Youth in Transition: How Do Some of the Cohorts Participating in PISA Fare in PIAAC?* Paris, Organisation for Economic Co-operation and Development. (OECD Education Working Paper 155.)

Bottorff, J. L., Haines-Saah, R., Kelly, M. T., Oliffe, J. L., Torchalla, I., Poole, N., Greaves, L., Robinson, C. A., Ensom, M. H. and Okoli, C. T. 2014. Gender, smoking and tobacco reduction and cessation: a scoping review. *International Journal for Equity in Health,* Vol. 13, No. 1, p. 114.

Bourn, D., Hunt, F. and Bamber, P. 2017. *A Review of Education for Sustainable Development and Global Citizenship Education in Teacher Education*. (Background paper for *Global Education Monitoring Report 2017/8*.)

Brollo, F. and Troiano, U. 2016. What happens when a woman wins an election? Evidence from close races in Brazil. *Journal of Development Economics,* Vol. 122, pp. 28–45.

Bromley, P., Lerch, J. and Jimenez, J. 2016. *Education for Global Citizenship Education and Sustainable Development: Content in Social Science Textbooks*. (Background paper for *Global Education Monitoring Report 2016*.)

Bruns, B., Filmer, D. and Patrinos, H. A. 2011. *Making Schools Work: New Evidence on Accountability Reforms*. Washington, DC, World Bank.

Bush, T. and Glover, D. 2016. School leadership and management in South Africa: findings from a systematic literature review. *International Journal of Educational Management,* Vol. 30, No. 2, pp. 211–31.

C-Change. 2013. *C-Change Final Report*. Washington, DC, C-Change/FHI 360.

CESCR. 2016. *Concluding Observations on the Fourth Periodic Report of the Dominican Republic*. Geneva, Switzerland, Committee on Economic, Social and Cultural Rights. (E/C.12/DM/CO/4.)

CESR. 2017. *Seeking Accountability for Women's Rights through the Sustainable Development Goals*. New York, Center for Economic and Social Rights.

Chatterley, C., Javernick-Will, A., Linden, K. G., Alam, K., Bottinelli, L. and Venkatesh, M. 2014. A qualitative comparative analysis of well-managed school sanitation in Bangladesh. *BMC Public Health,* Vol. 14, No. 6.

Chen, L.-J. 2010. Do gender quotas influence women's representation and policies? *The European Journal of Comparative Economics,* Vol. 7, No. 1, pp. 13–60.

Chigwanda, E. 2016. *Is climate change the weakest link in girls' education programming?* Washington, DC, Brookings Institution. www.brookings.edu/blog/education-plus-development/2016/09/20/is-climate-change-the-weakest-link-in-girls-education-programming. (Accessed 27 November 2017.)

Chipeta, L. 2009. The water crisis in Blantyre City and its impact on women: the cases of Mabyani and Ntopwa, Malawi. *Journal of International Women's Studies,* Vol. 10, No. 4, pp. 17–33.

Chittal, N. 2015. How social media is changing the feminist movement. *MSNBC*. www.msnbc.com/msnbc/how-social-media-changing-the-feminist-movement (Accessed 17 January 2018.)

Christie, T. A. L. and Thakur, D. 2016. *Caribbean and Pacific Islands: A Survey of Gender Budgeting Efforts*. Washington, DC, International Monetary Fund. (IMF Working Paper WP/16/154.)

CLADEM/Colectiva Mujer y Salud. 2016. *Alternative Report to the Committee on Economic, Social and Cultural Rights (CESCR): On the Occasion of the Dominican Republic Presenting Its Periodic Report No. 4 to the Committee*. Geneva, Switzerland, Comité de América Latina y el Caribe para la Defensa de los Derechos de las Mujeres/Colectiva Mujer y Salud. (Periodic Report, 4.)

Clots-Figueras, I. 2012. Are female leaders good for education? Evidence from India. *American Economic Journal: Applied Economics,* Vol. 4, No. 1, pp. 212–44.

Cole, H. M. and Fiore, M. C. 2014. The war against tobacco: 50 years and counting. *JAMA,* Vol. 311, No. 2, pp. 131–2.

Commonwealth Secretariat and UNESCO. 2010. *Women and the Teaching Profession: Exploring the Feminisation Debate*. London/Paris, Commonwealth Secretariat/UNESCO.

Cornwall, A. and Edwards, J. 2015. *How Feminist Activism Can Make States More Accountable for Women's Rights.* Geneva, Switzerland, United Nations Research Institute for Social Development. www.unrisd.org/beijing+20-cornwall-edwards. (Accessed 1 December 2017.)

CRIN. 2017. *Global List of National Human Rights Institutions Specifically for Children*. London, Child Rights International Network. www.crin.org/en/library/publications/global-list-national-human-rights-institutions-specifically-children. (Accessed 1 November 2017.)

Crisp, N. and Chen, L. 2014. Global Supply of Health Professionals. *New England Journal of Medicine,* Vol. 370, pp. 950–57.

Daga, R. 2016. *ESSPIN Composite Survey 3: Gender and Inclusion Report.* Oxford, UK, Oxford Policy Management.

Das, M. B. and Hatzfeldt, G. 2017. *The Rising Tide: A New Look at Water and Gender.* Washington, DC, World Bank.

Davies, R. 2016. South African textbook asks pupils how victim's behaviour led to rape. *The Guardian,* 8 September.

Demas, A. and Arcia, G. 2015. *What Matters Most for School Autonomy and Accountability: A Framework Paper*. Washington, DC, World Bank. (SABER Working Paper 96450.)

DevTech Systems. 2008. *Safe Schools Program Final Report.* Arlington, Va., DevTech Systems.

DFAT. 2015. *Women in Leadership Strategy: Promoting Equality and Dismantling Barriers*. Canberra, Department of Foreign Affairs and Trade.

DFID. 2016. *Diversity and Inclusion: Annual Report 2015-16.* London, Department for International Development.

Dobbins, M., Husson, H., DeCorby, K. and LaRocca, R. L. 2013. School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18. *Cochrane Database of Systematic Reviews 2013*, Issue 2, Article CD007651.

Donoghue, J. 2011. Truancy and the prosecution of parents: an unfair burden on mothers? *The Modern Law Review,* Vol. 74, No. 2, pp. 216-44.

Doss, C. R. 2017. Women and agricultural productivity: reframing the issues. *Development Policy Review*, Vol. 36, No. 1, pp. 35–50.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. and Schellinger, K. B. 2011. The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. *Child Development,* Vol. 82, No. 1, pp. 405–32.

Edwards, J. and Girgis, M. 2015. Practical lessons from gender audit of an education sector plan in Laos PDR. *Development in Practice,* Vol. 25, No. 5, pp. 747–53.

EI. 2017. *Survey on the Implementation of Professional Standards for the Teaching Profession.* Brussels, Education International.

El-Bushra, J. and Smith, E. R. 2016. *The Transformative Potential of Positive Gender Socialization in Education for Peacebuilding: Pilot Programme and Impact Evaluation in Karamoja, Uganda*. Washington, DC, American Institutes for Research/UNICEF.

Elgar, F. J., Pförtner, T.-K., Moor, I., De Clercq, B., Stevens, G. W. and Currie, C. 2015. Socioeconomic inequalities in adolescent health 2002–2010: a time-series analysis of 34 countries participating in the Health Behaviour in School-aged Children study. *The Lancet,* Vol. 385, No. 9982, pp. 2088–95.

Equinet. 2017. *Finland: Ombudsman for Equality*. Brussels, European Network of Equality Bodies. www.equineteurope.org/Ombudsman-for-Equality. (Accessed 1 November 2017.)

Erden, F. T. 2009. A course on gender equity in education: does it affect gender role attitudes of preservice teachers? *Teaching and Teacher Education,* Vol. 25, No. 3, pp. 409–14.

European Commission/EACEA/Eurydice. 2013. *Key Data on Teachers and School Leaders in Europe*. Luxembourg, Publications Office of the European Union.

Eurostat. 2017a. *Education and Training Database*. Luxembourg, Eurostat. http://ec.europa.eu/eurostat/web/education-and-training/data/database. (Accessed 15 May 2017.)

___. 2017b. *Participation in Education and Training (based on EU-LFS) (trng_lfs_4w0): Reference Metadata in Euro SDMX Metadata Structure (ESMS)*. Luxembourg, Eurostat. http://ec.europa.eu/eurostat/cache/metadata/en/trng_lfs_4w0_esms.htm. (Accessed 15 May 2017.)

FAO. 2011. *The State of Food and Agriculture: Women in Agriculture – Closing the Gender Gap for Development*. Rome, Food and Agriculture Organization of the United Nations.

Feldhaus, I., Silverman, M., LeFevre, A. E., Mpembeni, R., Mosha, I., Chitama, D., Mohan, D., Chebet, J. J., Urassa, D. and Kilewo, C. 2015. Equally able, but unequally accepted: gender differentials and experiences of community health volunteers promoting maternal, newborn, and child health in Morogoro Region, Tanzania. *International Journal for Equity in Health,* Vol. 14, No. 1, pp. 70.

Finkel, E. 2012. The authoritarian advantage of horizontal accountability: ombudsmen in Poland and Russia. *Comparative Politics,* Vol. 44, No. 3, pp. 291–310.

Fiszbein, A. and Schady, N. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. Washington, DC, World Bank.

Fonner, V. A., Armstrong, K. S., Kennedy, C. E., O'Reilly, K. R. and Sweat, M. D. 2014. School based sex education and hiv prevention in low- and middle-income countries: a systematic review and meta-analysis. *PLoS ONE,* Vol. 9, No. 3, e89692.

Garcia, M. and Moore, C. 2012. *The Cash Dividend: The Rise of Cash Transfer Programs in Sub-Saharan Africa*. Washington, DC, World Bank.

Garg, R., Goyal, S. and Gupta, S. 2012. India moves towards menstrual hygiene: subsidized sanitary napkins for rural adolescent girls – issues and challenges. *Maternal and Child Health Journal,* Vol. 16, No. 4, pp. 767–74.

GBD 2015 Tobacco Collaborators. 2015. Smoking prevalence and attributable disease burden in 195 countries and territories, 1990–2015: a systematic analysis from the Global Burden of Disease Study 2015. *The Lancet,* Vol. 389, pp. 1885–906.

George, A. 2008. Nurses, community health workers, and home carers: gendered human resources compensating for skewed health systems. *Global Public Health,* Vol. 3, No. S1, pp. 75–89.

Gershberg, A. I., Meade, B. and Andersson, S. 2009. Providing better education services to the poor: accountability and context in the case of Guatemalan decentralization. *International Journal of Educational Development,* Vol. 29, pp. 187–200.

Ghana MOE. 2001. *Textbook Development & Distribution Policy for Pre-Tertiary Education*. Accra, Ghana Ministry of Education.

Good Business. 2016. *Using Social Marketing for Prevention: Insights from Expert Practitioners*. London, Good Business.

GPE. 2017. *Girls' Education and Gender in Education Sector Plans and GPE-funded Programs*. Washington, DC, Global Partnership for Education.

GPE and UNGEI. 2017. *Guidance for Developing Gender-Responsive Education Sector Plans*. Washington, DC/New York, Global Partnership for Education/United Nations Girls' Education Initiative.

GPSA. 2016. *Global Partners Forum 2015: Compilation of Case Studies Presented at the GSPA Forum 2015, "Social Accountability for Citizen-Centric Governance: A Changing Paradigm"*. Washington, DC, Global Partnership for Social Development.

Graham, J. P., Hirai, M. and Kim, S.-S. 2016. An analysis of water collection labor among women and children in 24 sub-Saharan African countries. *PLoS one,* Vol. 11, No. 6, e0155981.

Haberland, N. A. 2015. The case for addressing gender and power in sexuality and HIV education: a comprehensive review of evaluation studies. *International Perspectives on Sexual and Reproductive Health,* Vol. 41, No. 1, pp. 311–51.

HakiElimu. 2017. *The State of Accountability in Education Sector in Tanzania: The Case of Primary Education Development Program*. (Background paper for *Global Education Monitoring Report 2017/8*.)

HeForShe. 2018. *Impact 10x10x10*. New York, UN Women. www.heforshe.org/~/media/HeForShe/Files/impactchampion/HeForShe_IMPACT10X10X10_Brief.pdf. (Accessed 5 February 2018.)

Heikkilä, M. 2016. Gender equality in preschools and schools in Sweden. Heikkinen, M. (ed.), *Promising Nordic Practices in Gender Equality Promotion in Basic Education and Kindergartens*. Oulu, Finland, University of Oulu, pp. 105–19.

Herat, J., Hospital, X., Kalha, U., Alama, A. and Nicollin, L. 2014. *Missing the Target: Using Standardised Assessment Tools to Identify Gaps and Strengths in Sexuality Education Programmes in West and Central Africa*. Paper for 20th International AIDS Conference, Melbourne, Australia, 20–25 July.

HIFA. 2017. *1st International Symposium on Community Health Workers*. Kampala, Healthcare Information for All. (Final symposium report.)

Hodgetts, K. 2010. Boys' underachievement and the management of teacher accountability. *Discourse: Studies in the Cultural Politics of Education,* Vol. 31, No. 1, pp. 29–43.

Holvoet, N. 2015. *Local Governance in the Education Sector in Tanzania: Monitoring and Evaluation Actors, Activities and Use in Selected Villages of Mzumbe Ward, Mvomero District*. Antwerp, Institute of Development Policy and Management, University of Antwerp.

Holvoet, N. and Inberg, L. 2015. Gender mainstreaming in sector budget support: the case of the European Commission's sector support to Rwanda's agriculture sector. *Journal of International Women's Studies,* Vol. 16, No. 2, pp. 155–69.

Honeyman, C. A. 2017. *Accountability Practices and Policies in Rwanda's Education System*. (Background paper for *Global Education Monitoring Report 2017/8*.)

Horner, R. H., Sugai, G. and Anderson, C. M. 2010. Examining the evidence base for school-wide positive behavior support. *Focus on Exceptional Children,* Vol. 42, No. 8, pp. 1–14.

HRW. 2014. *'I've Never Experienced Happiness': Child Marriage in Malawi*. New York, Human Rights Watch.

___. 2016. *The Education Deficit: Failures to Protect and Fulfill the Right to Education in Global Development Agendas.* New York, Human Rights Watch.

Hughes, M. M., Krook, M. L. and Paxton, P. 2015. Transnational women's activism and the global diffusion of gender quotas. *International Studies Quarterly,* Vol. 59, pp. 357–72.

Hutchinson, T., Dickson, E. and Chappel, D. 2011. Juvenile justice and truancy legislation: the move towards parental responsibilisation in Queensland. *Alternative Law Journal,* Vol. 36, No. 2, pp. 104–09.

IAEG-SDGs. 2017. *Tier Classification for Global SDG Indicators*. New York, Inter-agency and Expert Group on Sustainable Development Goal Indicators, United Nations Statistical Commission.

Inter-Parliamentary Union. 2017. *Women in Parliaments: World Classification*. http://archive.ipu.org/wmn-e/world.htm. (Accessed 5 October 2017.)

International Water Association. 2014. *An Avoidable Crisis: WASH Human Resource Capacity Gaps in 15 Developing Economies*. London, International Water Association.

___. 2016. *The Untapped Resource: Gender and Diversity in the Water Workforce*. London, International Water Association.

Iritani, B. J., Cho, H., Rusakaniko, S., Mapfumo, J., Hartman, S. and Halfors, D. D. 2016. Educational outcomes for orphan girls in rural Zimbabwe: effects of a school support intervention. *Health Care Women International,* Vol. 37, No. 3, pp. 301–22.

Johnson, L., Calderón, T., Hilari, C., Long, J. and Vivas, C. 2016. *Menstrual Hygiene Management Impacts Girls' School Experience in the Bolivian Amazon*. La Paz, Bolivia, UNICEF/Save the Children.

Julka, A., Bansal, I. K., Sharma, M., Salim, D., Singh, A., Kumar, V. and Ranjan, A. 2013. *Evaluation of the Implementation of the Scheme IEDSS in India*. New Delhi, Department of Education of Groups with Special Needs, National Council of Educational Research and Training.

Kagoda, A. M. 2011. *Assessing the effectiveness of affirmative action on women's leadership and participation in education sector in Uganda.* Conference Paper for Gender Equality in Education: Looking Beyond Parity, Paris, 3–4 October.

Kenya Teachers Service Commission. 2013. *Code of Regulations for Teachers*. Nairobi, Teachers Service Commission.

Ketting, E. and Winkelmann, C. 2013. New approaches to sexuality education and underlying paradigms. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz,* Vol. 56, No. 2, pp. 250–55.

Kher, J., Aggarwal, S. and Punhani, G. 2015. Vulnerability of poor urban women to climate-linked water insecurities at the household level: a case study of slums in Delhi. *Indian Journal of Gender Studies,* Vol. 22, No. 1, pp. 15–40.

Kookana, R. S., Maheshwari, B., Dillon, P., Dave, S. H., Soni, P., Bohra, H., Dashora, Y., Purohit, R. C., Ward, J. and Oza, S. 2016. Groundwater scarcity impact on inclusiveness and women empowerment: insights from school absenteeism of female students in two watersheds in India. *International Journal of Inclusive Education,* Vol. 20, No. 11, pp. 1155–71.

Lahai, B. A., Goldey, P. and Jones, G. 1999. The gender of the extension agent and farmers' access to and participation in agricultural extension in Nigeria. *The Journal of Agricultural Education and Extension,* Vol. 6, No. 4, pp. 223–33.

Lambrecht, I., Vanlauwe, B. and Maertens, M. 2014. *What is the sense of gender targeting in agricultural extension programs? Evidence from eastern DR Congo*. Leuven, Belgium, University of Leuven, Department of Earth and Environmental Sciences, Division of Bioeconomics. (Bioeconomics Working Paper 2014/4.)

Lamontagne-Godwin, J., Williams, F., Bandara, W. M. P. T. and Appiah-Kubi, Z. 2017. Quality of extension advice: a gendered case study from Ghana and Sri Lanka. *The Journal of Agricultural Education and Extension,* Vol. 23, No. 1, pp. 7–22.

Langer, A., Meleis, A., Knaul, F. M., Atun, R., Aran, M., Arreola-Ornelas, H., Bhutta, Z. A., Binagwaho, A., Bonita, R. and Caglia, J. M. 2015. Women and health: the key for sustainable development. *The Lancet,* Vol. 386, No. 9999, pp. 1165–210.

Lenhart, C. M., Hanlon, A., Kang, Y., Daly, B. P., Brown, M. D. and Patterson, F. 2012. Gender disparity in structured physical activity and overall activity level in adolescence: evaluation of youth risk behavior surveillance data. *ISRN Public Health,* Vol. 2012.

Lewis, T. J., Mitchell, B. S., Trussell, R. and Newcomer, L. 2014. School-wide positive behavior support. Emmer, E. T. and Sabornie, E. J. (eds), *Handbook of Classroom Management*. Abingdon, UK, Routledge.

MacWilliams, B. R., Schmidt, B. and Bleich, M. R. 2013. Men in nursing. *AJN The American Journal of Nursing,* Vol. 113, No. 1, pp. 38–44.

Mahfouz, A. A., Shatoor, A. S., Khan, M. Y., Daffalla, A. A., Mostafa, O. A. and Hassanein, M. A. 2011. Nutrition, physical activity, and gender risks for adolescent obesity in Southwestern Saudi Arabia. *Saudi Journal of Gastroenterology: Official Journal of the Saudi Gastroenterology Association,* Vol. 17, No. 5, p. 318.

Mahon, T. and Fernandes, M. 2010. Menstrual hygiene in South Asia: a neglected issue for WASH (water, sanitation and hygiene) programmes. *Gender & Development,* Vol. 18, No. 1, pp. 99–113.

Marine-Street, N. 2012. *Stanford researchers' cigarette ad collection reveals how big tobacco targets women and adolescent girls*. Stanford, Calif., Stanford University, The Clayman Institute for Gender Research. http://gender.stanford.edu/news/2012/stanford-researchers%E2%80%99-cigarette-ad-collection-reveals-how-big-tobacco-targets-women-and. (Accessed 27 November 2017.)

Martinez, R., Irving, M. and Salgado, V. 2017. *Effective Joint Sector Reviews as (Mutual) Accountability Platforms*. Washington, DC, Global Partnership for Education. (Working Paper 1.)

Masue, O. S. 2014. Empowerment of school committees and parents in Tanzania: delineating existence of opportunity, its use and impact on school decisions. Ph.D. dissertation, University of Bergen, Norway.

Masue, O. S. and Askvik, S. 2017. Are school committees a source of empowerment? Insights from Tanzania. *International Journal of Public Administration,* Vol. 40, No. 9, pp. 780–91.

McGuire, J. W. 2013. *Conditional Cash Transfer in Bolivia: Origins, Impact, and Universality.* Paper for 2013 Annual Meeting of the International Studies Association, San Francisco, Calif., 3–6 April.

McKelvie-Sebileau, P. 2011. *Patterns of Development and Use of Codes of Conduct for Teachers in 24 Countries*. Paris, UNESCO International Institute for Educational Planning.

Morely, L. and Crossouard, B. 2014. *Women in Higher Education Leadership in South Asia: Rejection, Refusal, Reluctance, Revisioning*. Sussex, UK, University of Sussex, Centre for Higher Education and Equity Research.

Morgan, C., Bowling, M., Bartram, J. and Kayser, G. L. 2017. Water, sanitation, and hygiene in schools: status and implications of low coverage in Ethiopia, Kenya, Mozambique, Rwanda, Uganda, and Zambia. *International Journal of Hygiene and Environmental Health*, Vol. 220, No. 6, pp. 950–9.

Morley, L. 2014. Lost leaders: women in the global academy. *Higher Education Research and Development,* Vol. 33, No. 1, pp. 114–28.

Mulkeen, A., Chapman, D. W., DeJaeghere, J. G. and Leu, E. 2007. *Recruiting, Retaining, and Retraining Secondary School Teachers and Principals in Sub-Saharan Africa*. Washington, DC, World Bank. (African Human Development Series, World Bank Working Paper 99.)

Mzuza, M. K., Yudong, Y. and Kapute, F. 2014. Analysis of factors causing poor passing rates and high dropout rates among primary school girls in Malawi. *World Journal of Education*, Vol. 4, No. 1, pp. 48–61.

Nakagawa, M. and Wotipka, C. M. 2016. The worldwide incorporation of women and women's rights discourse in social science textbooks, 1970-2008. *Comparative Education Review,* Vol. 60, No. 3, pp. 501–29.

Nardi, D. A. and Gyurko, C. C. 2013. The global nursing faculty shortage: status and solutions for change. *Journal of Nursing Scholarship,* Vol. 45, No. 3, pp. 317–26.

Nauges, C. 2017. Water hauling and girls' school attendance: some new evidence from Ghana. *Environmental and Resource Economics,* Vol. 66, No. 1, pp. 65–88.

NCERT. 2014. *ICT@Schools Scheme Implementation in the States: An Evaluation*. New Delhi, Central Institute of Educational Technology, National Council of Educational Research and Training.

Newman, C. 2014. Time to address gender discrimination and inequality in the health workforce. *Human Resources for Health,* Vol. 12, No. 1, p. 25.

Ng, M., Fleming, T., Robinson, M., Thomson, B., Graetz, N., Margono, C., Mullany, E. C., Biryukov, S., Abbafati, C. and Abera, S. F. 2014. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet,* Vol. 384, No. 9945, pp. 766–81.

Ng, N., Weinehall, L. and Öhman, A. 2006. 'If I don't smoke, I'm not a real man': Indonesian teenage boys' views about smoking. *Health Education Research,* Vol. 22, No. 6, pp. 794–804.

Nichter, M., Padmawati, S., Danardono, M., Ng, N., Prabandari, Y. and Nichter, M. 2009. Reading culture from tobacco advertisements in Indonesia. *Tobacco Control,* Vol. 18, No. 2, pp. 98–107.

O'Brien, D. 2012. Quotas and qualification in Uganda. Franceschet, S., Krook, M. L. and Piscopo, J. M. (eds), *The Impact of Gender Quotas*. New York, Oxford University Press, pp. 57–71.

O'Brien, D. and Rickne, J. 2016. Gender quotas and women's political leadership. *American Political Science Review,* Vol. 110, No. 1, pp. 112–26.

OECD. 2013. *Education at a Glance.* Paris, Organisation for Economic Co-operation and Development.

___. 2014. *Women, Government and Policy Making in OECD Countries: Fostering Diversity for Inclusive Growth.* Paris, Organisation for Economic Co-operation and Development.

___. 2017a. *Obesity Update 2017.* Paris, Organisation for Economic Co-operation and Development.

___. 2017b. *The Pursuit of Gender Equality: An Uphill Battle.* Paris, Organisation for Economic Co-operation and Development.

___. 2017c. *Who Does What.* Paris, Organisation for Economic Co-operation and Development. www.oecd.org/about/whodoeswhat. (Accessed 1 October 2017.)

OECD and EUPAN. 2015. *Managing a Diverse Public Administration and Effectively Responding to the Needs of a More Diverse Workforce: 2015 EUPAN Survey.* Paris, Organisation for Economic Co-operation and Development/ European Public Administration Network.

Office of the Ombudsman and NHRI Samoa. 2015. *State of Human Rights Report.* Apia, Samoa, Office of the Ombudsman.

OHCHR. 2015. *Evaluation of the Implementation of the Second Phase of the World Programme for Human Rights Education.* New York, Office of the United Nations High Commissioner for Human Rights.

Olaniran, A., Smith, H., Unkels, R., Bar-Zeev, S. and van den Broek, N. 2017. Who is a community health worker? A systematic review of definitions. *Global Health Action,* Vol. 10, No. 1, p. 1272223.

Oseni, G., Corral, P., Goldstein, M. and Winters, P. 2015. Explaining gender differentials in agricultural production in Nigeria. *Agricultural Economics,* Vol. 46, No. 3, pp. 285–310.

Paccagnella, M. 2016. *Age, Ageing and Skills: Results from the Survey of Adult Skills.* Paris, Organisation for Economic Co-operation and Development. (Education Working Paper 132.)

Paivandi, S. 2008. *Discrimination and Intolerance in Iran's Textbooks.* New York, Freedom House.

Pakistan MOE. 2007. *National Textbook and Learning Materials Policy and Plan of Action.* Islamabad, Pakistan Ministry of Education, Curriculum Wing.

Pampel, F., Legleye, S., Goffette, C., Piontek, D., Kraus, L. and Khlat, M. 2015. Cohort changes in educational disparities in smoking: France, Germany and the United States. *Social Science & Medicine,* Vol. 127, pp. 41–50.

Panday, P. K. and Feldman, S. 2015. Mainstreaming gender in politics in Bangladesh: role of NGOs. *Asian Journal of Political Science,* Vol. 23, No. 3, pp. 301–20.

Parkes, J. L. N., Johnson Ross, F., Heslop, J., Westerveld, R. and Unterhalter, E. 2017. *Addressing School-related Gender-based Violence in Côte d'Ivoire, Togo, Zambia and Ethiopia: A Cross-country Report.* London, University College London, Institute of Education.

Perry, H. B., Zulliger, R. and Rogers, M. M. 2014. Community health workers in low-, middle-, and high-income countries: an overview of their history, recent evolution, and current effectiveness. *Annual Review of Public Health,* Vol. 35, pp. 399–421.

Peterman, A., Behrman, J. A. and Quisumbing, A. R. 2014. A review of empirical evidence on gender differences in nonland agricultural inputs, technology, and services in developing countries. Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A. and Peterman, A. (eds), *Gender in Agriculture*, Cham, Switzerland, Springer, pp. 145–86.

Piper, J. D., Chandna, J., Allen, E., Linkman, K., Cumming, O., Prendergast, A. J. and Gladstone, M. J. 2017. Water, sanitation and hygiene (WASH) interventions: effects on child development in low- and middle-income countries. *Cochrane Database of Systematic Reviews 2017*, Issue 3, Article CD012613.

Poisson, M. 2009. *Guidelines for the Design and Effective Use of Teacher Codes of Conduct.* Paris, UNESCO International Institute for Educational Planning.

Pratley, J. E. 2017. *Agriculture: from macho to gender balance.* Paper for 18th Australian Society of Agronomy Conference, Ballarat, Australia, 24–28 September.

Queen, E. F., Gonzalez, L. and Meehan, S. 2015. Doorways: preventing and responding to school-related, gender-based violence in West Africa. Stacki, S. L. and Baily, S. (eds), *Educating Adolescent Girls Around the Globe: Challenges and Opportunities.* New York, Routledge, pp. 96–117.

Quinn, S. 2016. *Europe: A Survey of Gender Budgeting Efforts.* Washington, DC, International Monetary Fund. (IMF Working Paper WP/16/155.)

Ragasa, C., Berhane, G., Tadesse, F. and Taffesse, A. S. 2013. Gender differences in access to extension services and agricultural productivity. *The Journal of Agricultural Education and Extension,* Vol. 19, No. 5, pp. 437–68.

Ray, R. and Datta, R. 2017. Do separate female toilets in primary and upper primary schools improve female enrollment? A case study from India. *Children and Youth Services Review*, Vol. 79, pp 263–73.

RESULTS Educational Fund. 2016. *Right to Education Index*. Washington, DC, RESULTS Educational Fund. www.rtei.org/en. (Accessed 15 November 2017.)

Right to Education Initiative. 2017. *Tanzania: Stop threatening rights groups. International organisations urge respect for free expression, association*. www.right-to-education.org/news/tanzania-stop-threatening-rights-groups. (Accessed 1 November 2017.)

___. 2018. *Country Commitments to Gender Equality in Education*. (Background paper for *Global Education Monitoring Report: Gender Review 2017/8*.)

Rogers, J. 2014. Aspirational practice: gender equality – the challenges of gender and heterosexual stereotypes in primary education. *The STeP Journal,* Vol. 1, No. 1, pp. 58–68.

Rowe, E. 2017. *Australia Country Case Study*. (Background paper for *Global Education Monitoring Report 2017/8*.)

Russell, N., Karlsson, K., Ashby, J. and Mascarenhas, M. 2015. *Change in the Making: Progress Reports on CGIAR Gender Research: Issue No. 1. Toward gender-equitable control over productive assets and resources.* Cali, Colombia, CGIAR Gender and Agriculture Research Network, CGIAR Consortium Office and International Center for Tropical Agriculture.

Safikhanli, A. 2014. *The Role of the Azerbaijani Ombudsman in the Protection of Women's Rights and Ensuring Gender Equality*. Paper for Human Dimension Implementation Meeting, Organization for Security and Co-operation in Europe, Warsaw, 22 September–3 October. (HDIM.DEL/0168/14.)

Sen, G. and Mukherjee, A. 2014. No empowerment without rights, no rights without politics: gender-equality, MDGs and the post-2015 development agenda. *Journal of Human Development and Capabilities: A Multi-Disciplinary Journal for People-Centered Development,* Vol. 15, No. 2–3, pp. 188–202.

Sidze, E. M., Stillman, M., Keogh, S., Mulupi, S., Egesa, C. P., Leong, E., Mutua, M., Muga, W., Bankole, A. and Izugbara, C. O. 2017. *From Paper to Practice: Sexuality Education Policies and Their Implementation in Kenya*. New York, Guttmacher Institute.

Singh, J. K. S. 2008. *Whispers of Change: Female Staff Numbers in Commonwealth Universities*. London, Association of Commonwealth Universities.

Sklad, M., Diekstra, R., Ritter, M. D., Ben, J. and Gravesteijn, C. 2012. Effectiveness of school-based universal social, emotional, and behavioral programs: Do they enhance students' development in the area of skill, behavior, and adjustment? *Psychology in Schools,* Vol. 49, No. 9, pp. 892–909.

Smith, A. R. 2014. Cities where women rule: female political incorporation and the allocation of community development block grant funding. *Politics & Gender,* Vol. 10, No. 3, pp. 313–40.

Sojo, V. E., Wood, R. E., Wood, S. A. and Wheeler, M. A. 2016. Reporting requirements, targets, and quotas for women. *The Leadership Quarterly,* Vol. 27, No. 3, pp. 519–36.

Sommer, M., Ackatia-Armah, N., Connolly, S. and Smiles, D. 2015. A comparison of the menstruation and education experiences of girls in Tanzania, Ghana, Cambodia and Ethiopia. *Compare: A Journal of Comparative and International Education,* Vol. 45, No. 4, pp. 589–609.

Sommer, M., Figueroa, C., Kwauk, C., Jones, M. and Fyles, N. 2017. Attention to menstrual hygiene management in schools: an analysis of education policy documents in low- and middle-income countries. *International Journal of Educational Development,* Vol. 57, pp. 73–82.

Sommer, M. and Sahin, M. 2013. Overcoming the taboo: advancing the global agenda for menstrual hygiene management for schoolgirls. *American Journal of Public Health,* Vol. 103, No. 9, pp. 1556–9.

Steiner-Khamsi, G. and Batjargal, B. 2017. *Mongolia Case Study on Accountability in Education*. (Background paper for *Global Education Monitoring Report 2017/8*.)

Stotsky, J. G. 2016. *Gender Budgeting: Fiscal Context and Current Outcomes*. Washington, DC, International Monetary Fund. (IMF Working Paper WP/16/149.)

Stotsky, J. G., Kolovich, L. and Kebhaj, S. 2016. *Sub-Saharan Africa: A Survey of Gender Budgeting Efforts*. Washington, DC, International Monetary Fund. (IMF Working Paper WP/16/152.)

Uganda MOES. 2014. *The Education and Sports Sector Annual Performance Report (FY 2013/14).* Kampala, Uganda Ministry of Education and Sports.

UK DEFRA. 2016. *Environment Secretary Salutes Britain's Women Farmers*. London, Department for Environment, Food and Rural Affairs. www.gov.uk/government/news/environment-secretary-salutes-britains-women-farmers. (Accessed 20 November 2017.)

UN Human Rights Council. 2014. *Report of the Working Group on the Universal Periodic Review: Bhutan*. New York, United Nations Human Rights Council. (A/HRC/27/8.)

___. 2017. *Realization of the Equal Enjoyment of the Right to Education for Every Girl.* New York, United Nations Human Rights Council. (A/HRC/35/11.)

UN Women. 2017. *Facts and Figures: Leadership and Political Participation.* New York, United Nations Women. www.unwomen.org/en/what-we-do/leadership-and-political-participation/facts-and-figures. (Accessed 5 October 2017.)

UNESCO. 2009. *International Technical Guidance on Sexuality Education: An Evidence-informed Approach for Schools, Teachers and Health Educators.* Paris, UNESCO. (Volume II: Topics and Learning Objectives.)

___. 2014. *Girls' and Women's Right to Education: Overview of the Measures Supporting the Right to Education for Girls and Women – Reported by Member States.* Paris, UNESCO.

___. 2015a. *EFA Global Monitoring Report 2015: Gender and EFA 2000-2015 – Achievements and Challenges.* Paris, UNESCO.

___. 2015b. *Emerging Evidence, Lessons and Practice in Comprehensive Sexuality Education: A Global Review.* Paris, UNESCO.

___. 2015c. *From Insult to Inclusion: Asia-Pacific Report on School Bullying, Violence and Discrimination on the Basis of Sexual Orientation and Gender Identity.* Paris/Bangkok, UNESCO.

___. 2016a. *Global Education Monitoring Report 2016: Education for People and Planet – Creating Sustainable Futures for All.* Paris, UNESCO.

___. 2016b. *Regional Training on Gender Assessment in Teacher Education in Asia.* Bangkok, UNESCO Bangkok. www.unescobkk.org/education/teacher-education-and-training/regional-training-on-gender-assessment-in-teacher-education-in-asia-2016. (Accessed 15 November 2017.)

___. 2016c. *Textbooks Pave the Way to Sustainable Development.* Paris, UNESCO. (GEM Report Policy Paper 28.)

___. 2017a. *Global Education Monitoring Report 2017/8: Accountability in Education – Meeting Our Commitments.* Paris, UNESCO.

___. 2017b. *School Violence and Bullying: Global Status Report.* Paris, UNESCO.

___. 2018. *International Technical Guidance on Sexuality Education: An Evidence-informed Approach.* Paris, UNESCO.

UNFPA. 2012. *Profiles of 10 Countries with the Highest Rates of Child Marriage.* New York, United Nations Population Fund.

UNGEI. 2017. *Addressing Threats to Girls' Education in Contexts Affected by Armed Conflict.* New York, United Nations Girls' Education Initiative. (Policy Note.)

UNICEF. 2015. *Annual Report on the Implementation of the UNICEF Gender Action Plan.* New York, UNICEF. (E/ICEF/2015/8.)

___. 2016. *UNICEF Data: Monitoring the Situation of Children and Women: Child Marriage.* New York, UNICEF. http://data.unicef.org/child-protection/child-marriage.html. (Accessed 12 May 2016.)

UNICEF and UNESCO. 2007. *A Human Rights-Based Approach to Education for All: A Framework for the Realization of Children's Right to Education and Rights Within Education.* New York/Paris, UNICEF/UNESCO.

United Nations. 1945. *Charter of the United Nations.* New York, United Nations. (1 UNTS XVI Article1.)

___. 2017. *System-wide Strategy on Gender Parity.* New York, United Nations.

United States NCES. 2016. *Characteristics of School Principals.* Washington, DC, National Center for Education Statistics.

Universities Australia. 2017. *2016 Selected Inter-Institutional Gender Equity Statistics.* Canberra, Universities Australia.

Unterhalter, E. and Heslop, J. 2012. *Transforming Education for Girls in Nigeria and Tanzania: Cross Country Analysis of Endline Research Studies.* London, University College London, Institute of Education.

Unterhalter, E., Jegede, P., Ezegwu, C., Shercliff, E. and North, A. 2015. *Student Teachers, Gender Equality and Some Problems about Sustainability for EFA in Five Nigerian States.* Paper for UKFIET International Conference on Education and Development, Oxford, UK, 15–17 September.

Unterhalter, E., North, A., Ezegwu, C. and Shercliff, E. 2017. *Teacher Education, Teacher Practice, Approaches to Gender and Girls' Schooling Outcomes: A Study of Five Nigerian States.* Abuja, British Council.

Unterhalter, E., North, A. and Ward, O. 2018. *Gender Equality in Education and Accountability.* (Background paper for *Global Education Monitoring Report: Gender Review 2017/8.*)

USAID. 2014. *Gender Analysis for USAID/Rwanda: Learning Enhanced Across Rwanda Now!* Washington, DC, US Agency for International Development.

___. 2016. *Ethnicity, Race and Gender Direct Hire Workforce Statistics.* Washington, DC, US Agency for International Development. www.usaid.gov/sites/default/files/documents/1874/USAID U.S Direct Hire Workforce Demographics as of 03.30.2016 (Mid Fiscal Year 2016).pdf. (Accessed 5 October 2017.)

Van Damme, D. 2017. *Why Do So Many Women Want to Become Teachers?* Paris, Organisation for Economic Co-operation and Development. http://oecdeducationtoday.blogspot.fr/2017/03/why-do-so-many-women-want-to-become_1.html. (Accessed 15 November 2017.)

Vernos, I. 2013. Research management: quotas are questionable. *Nature,* Vol. 495, No. 7439, p. 39.

Water and Sanitation Program. 2010. *Mainstreaming Gender in Water and Sanitation: Gender in Water and Sanitation.* Nairobi, World Bank. (Water and Sanitation Program Working Paper.)

Webbink, D., Martin, N. G. and Visscher, P. M. 2010. Does education reduce the probability of being overweight? *Journal of Health Economics,* Vol. 29, No. 1, pp. 29–38.

Weldon, S. L. and Htun, M. 2013. Feminist mobilisation and progressive policy change: why governments take action to combat violence against women. *Gender & Development,* Vol. 21, No. 2, pp. 231–47.

WHO. 2008. *Gender and Health Workforce Statistics.* Geneva, World Health Organization. (Spotlight on Statistics.)

___. 2014. *Global Status Report on Noncommunicable Diseases.* Geneva, World Health Organization.

___. 2015a. *Global Health Observatory Data Repository: Tobacco Use.* Geneva, World Health Organization. http://apps.who.int/gho/data/view.main.1805WB?lang=en. (Accessed 5 February 2017.)

___. 2015b. *WHO Report on the Global Tobacco Epidemic, 2015: Raising Taxes on Tobacco.* Geneva, World Health Organization.

___. 2016. *Global Strategic Directions for Strengthening Nursing and Midwifery 2016-2020.* Geneva, World Health Organization.

WHO and UN-Water. 2012. *UN-Water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) 2012: The Challenge of Extending and Sustaining Services.* Geneva, World Health Organization.

___. 2017. *Financing Universal Water, Sanitation and Hygiene under the Sustainable Development Goals: UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) 2017 Report.* Geneva, World Health Organization.

WHO Regional Office for Europe and BZgA. 2010. *Standards for Sexuality Education in Europe: A Framework for Policy Makers, Educational and Health Authorities and Specialists.* Cologne, Germany, Federal Centre for Health Education, BZgA.

Williams, T. P. 2015. *Platform for Engagement: The Impact of Civil Society on Education in Rwanda – The Case of the RENCP.* Kigali, Three Stones Consulting, Ltd. (Report commissioned by UNICEF.)

Wills, G. 2015. *A Profile of the Labour Market for School Principals in South Africa: Evidence to Inform Policy.* Stellenbosch, South Africa, University of Stellenbosch. (Economics Working Paper 12/15.)

World Bank. 2015. *World Bank Group Gender Strategy (FY16-23): Gender Equality, Poverty, Reduction and Inclusive Growth.* Washington, DC, World Bank.

World Vision. 2015. *Changing Lives through Social Accountability: Case Studies from World Vision's UK Government's Department for International Development (DFID) Programme Partnership Arrangement.* Milton Keynes, UK, World Vision UK.

Zambruni, J. P., Rasanathan, K., Hipgrave, D., Miller, N. P., Momanyi, M., Pearson, L., Rio, D., Romedenne, M., Singh, S. and Young, M. 2017. Community health systems: allowing community health workers to emerge from the shadows. *The Lancet Global Health,* Vol. 5, No. 9, pp. e866–e67.

Zhang, J. and Xu, L. C. 2016. The long-run effects of treated water on education: the rural drinking water program in China. *Journal of Development Economics,* Vol. 122, pp. 1–15.

Zulu, J. M., Kinsman, J., Michelo, C. and Hurtig, A.-K. 2014. Integrating national community-based health worker programmes into health systems: a systematic review identifying lessons learned from low-and middle-income countries. *BMC Public Health,* Vol. 14, No. 1, p. 987.

**NOTES**

# Gender review

## MEETING OUR COMMITMENTS TO GENDER EQUALITY IN EDUCATION

The 2030 Agenda for Sustainable Development opened a new chapter in the long struggle towards achieving gender equality. Its commitment to 'leave no one behind' expresses the conviction that boys and girls, men and women should benefit equally from development. It envisages a 'world in which every woman and girl enjoys full gender equality and all legal, social and economic barriers to their empowerment have been removed'.

While the fifth Sustainable Development Goal (SDG) is focused on gender, other goals also support the empowerment of women. The inter-relatedness of the different goals sends a strong message about the realization of gender equality in different sectors. For example, gender equality in education cannot be achieved only through education-specific efforts; it also depends on interventions in other sectors. At the same time, progress toward gender equality in education can have important effects on equality in employment, health and nutrition.

The Education 2030 Framework for Action, a tool aimed at helping the international community achieve SDG 4 on education, explicitly recognizes gender equality as a guiding principle linked to the realization of the right to education. It states clearly that girls and boys, women and men, must be equally empowered 'in and through education'.

In this sixth Gender Review, in a series that began in 2011, the Global Education Monitoring Report team maintains the focus on a broad conception of gender equality that extends beyond counting boys and girls in classrooms. The review's first part examines disparities in participation and skills, in education and political leadership positions, and in selected aspects of infrastructure and curricula. It also examines gender issues in professional development by exploring the role of education in three other SDGs: those concerning agriculture, health, and water and sanitation. The second part of the review analyses institutions, laws and policies to explore ways to determine and enforce accountability for gender equality in education.

Global Education Monitoring Report

UNESCO
United Nations
Educational, Scientific and
Cultural Organization

Sustainable
Development
Goals

4 QUALITY EDUCATION

Sustainable
Development
Goals

9 789231 002656