



GLOBAL EDUCATION MONITORING REPORT

2016

Gender Review

CREATING SUSTAINABLE FUTURES FOR ALL



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2011 The hidden crisis: Armed conflict and education

Cover photo: Kate Holt

Caption: Young girls wash their hands in schools in Sierra Leone, as part of a hygiene ritual during the Ebola crisis. Good hygiene in schools, including single-sex toilets, ensures that schools teach healthy lifestyles and meet the needs of young women, which increases the likelihood of them completing their education.

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Foreword

In May 2015, the World Education Forum in Incheon (Republic of Korea), brought together 1,600 participants from 160 countries with a single goal in mind: how to ensure inclusive and equitable quality education and lifelong learning for all by 2030?

The Incheon Declaration for Education 2030 has been instrumental to shape the Sustainable Development Goal on Education to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”.

It entrusts UNESCO with the leadership, coordination and monitoring of the Education 2030 agenda. It also calls upon the Global Education Monitoring (GEM) Report to provide independent monitoring and reporting of the Sustainable Development Goal on education (SDG 4), and on education in the other SDGs, for the next fifteen years.

The ultimate goal of this agenda is to leave no one behind. This calls for robust data and sound monitoring. The 2016 edition of the GEM Report provides valuable insight for governments and policy makers to monitor and accelerate progress towards SDG 4, building on the indicators and targets we have, with equity and inclusion as measures of overall success.

This Report makes three messages starkly clear.

Firstly, the urgent need for new approaches. On current trends only 70% of children in low income countries will complete primary school in 2030, a goal that should have been achieved in 2015. We need the political will, the policies, the innovation and the resources to buck this trend.

Secondly, if we are serious about SDG 4, we must act with a sense of heightened urgency, and with long-term commitment. Failure to do so will not only adversely affect education but will hamper progress towards each and every development goal: poverty reduction, hunger eradication, improved health, gender equality and women’s empowerment, sustainable production and consumption, resilient cities, and more equal and inclusive societies.

Lastly, we must fundamentally change the way we think about education and its role in human well-being and global development. Now, more than ever, education has a responsibility to foster the right type of skills, attitudes and behavior that will lead to sustainable and inclusive growth.

The 2030 Agenda for Sustainable Development calls on us to develop holistic and integrated responses to the many social, economic and environmental challenges we face. This means reaching out beyond traditional boundaries and creating effective, cross-sectoral partnerships.

A sustainable future for all is about human dignity, social inclusion and environmental protection. It is a future where economic growth does not exacerbate inequalities but builds prosperity for all; where urban areas and labour markets are designed to empower everyone and economic activities, communal and corporate, are green-oriented. Sustainable development is a belief that human development cannot happen without a healthy planet. Embarking upon the new SDG agenda requires all of us to reflect upon the ultimate purpose of learning throughout life. Because, if done right, education has the power like none else to nurture empowered, reflective, engaged and skilled citizens who can chart the way towards a safer, greener and fairer planet for all. This new report provides relevant evidence to enrich these discussions and craft the policies needed to make it a reality for all.

Irina Bokova
Director-General of UNESCO



Foreword

The 2016 Global Education Monitoring Report (GEM Report) is both masterful and disquieting. This is a big report: comprehensive, in-depth and perspicacious. It is also an unnerving report. It establishes that education is at the heart of sustainable development and the Sustainable Development Goals (SDGs), yet it also makes clear just how far away we are from achieving the SDGs. This report should set off alarm bells around the world and lead to a historic scale-up of actions to achieve SDG 4.

The GEM Report provides an authoritative account of how education is the most vital input for every dimension of sustainable development. Better education leads to greater prosperity, improved agriculture, better health outcomes, less violence, more gender equality, higher social capital and an improved natural environment. Education is key to helping people around the world understand why sustainable development is such a vital concept for our common future. Education gives us the key tools – economic, social, technological, even ethical – to take on the SDGs and to achieve them. These facts are spelled out in exquisite and unusual detail throughout the report. There is a wealth of information to be mined in the tables, graphs and texts.

Yet the report also emphasizes the remarkable gaps between where the world stands today on education and where it has promised to arrive as of 2030. The gaps in educational attainment between rich and poor, within and between countries, are simply appalling. In many poor countries, poor children face nearly insurmountable obstacles under current conditions. They lack books at home; have no opportunity for pre-primary school; and enter facilities without electricity, water, hygiene, qualified teachers, textbooks and the other appurtenances of a basic education, much less a quality education. The implications are staggering. While SDG 4 calls for universal completion of upper secondary education by 2030, the current completion rate in low-income countries is a meagre 14% (Table 10.3 of the full report).

The GEM Report undertakes an important exercise to determine how many countries will reach the 2030 target on the current trajectory, or even on a path that matches the fastest improving country in the region. The answer is sobering: we need unprecedented progress, starting almost immediately, in order to have a shot at success with SDG 4.

Cynics might say, 'We told you, SDG 4 is simply unachievable', and suggest that we accept that 'reality'. Yet as the report hammers home in countless ways, such complacency is reckless and immoral. If we leave the current young generation without adequate schooling, we doom them and the world to future poverty, environmental ills, and even social violence and instability for decades to come. There can be no excuse for complacency. The message of this report is that we need to get our act together to accelerate educational attainment in an unprecedented manner.

One of the keys for acceleration is financing. Here again, the report makes for sobering reading. Development aid for education today is lower than it was in 2009 (Figure 20.7 of the full report). This is staggeringly short-sighted of the rich countries. Do these donor countries really believe that they are 'saving money' by underinvesting in aid for education in the world's low-income countries? After reading this report, the leaders and citizens in the high income world will be deeply aware that investing in education is fundamental for global well-being, and that the current level of aid, at around US\$5 billion per year for primary education – just US\$5 per person per year in the rich countries! – is a tragically small investment for the world's future sustainable development and peace.

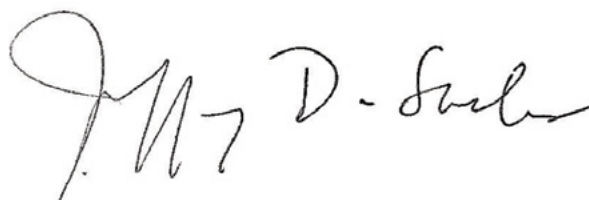
The 2016 GEM Report provides a plethora of insights, recommendations and standards for moving forward. It offers invaluable suggestions on how to monitor and measure progress on SDG 4. It demonstrates by example the feasibility of far more refined measures of education inputs, quality and achievement than the often crude measures of enrolment and completion that we rely on today. Using big data, better survey tools, facility monitoring and information technology, we can get far more nuanced measures of the education process and outcomes at all levels.

Fifteen years ago the world finally recognized the enormity of the AIDS epidemic and other health emergencies and took concrete steps to scale up public health interventions in the context of the Millennium Development Goals. Thus were born major initiatives such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Global Alliance for Vaccines and Immunisation (now Gavi, the Vaccine Alliance) and many other examples. These efforts led to a dramatic upturn in public health interventions and funding. While it did not achieve all that was possible (mainly because the 2008 financial crisis ended the upswing in public health funding) it did lead to many breakthroughs whose effects continue to be felt today.

The 2016 GEM Report should be read as a similar call to action for education as the core of the SDGs. My own view, often repeated in the past couple of years, is the urgency of a Global Fund for Education that builds on the positive lessons of the Global Fund for AIDS, Tuberculosis and Malaria. The financing constraint lies at the very heart of the education challenge, as this report makes vividly clear through every bit of cross-national and household-based data.

This compelling document calls on us to respond to the opportunity, urgency and declared global goal embodied in SDG 4: universal education of good quality for all and opportunities for learning throughout life. I urge people everywhere to study this report carefully and take its essential messages to heart. Most importantly, let us act on them at every level, from the local community to the global community.

Jeffrey D. Sachs
Special Adviser to the UN Secretary-General on the
Sustainable Development Goals

A handwritten signature in black ink, reading "J. Sachs", with a stylized flourish extending from the end.

GENDER REVIEW

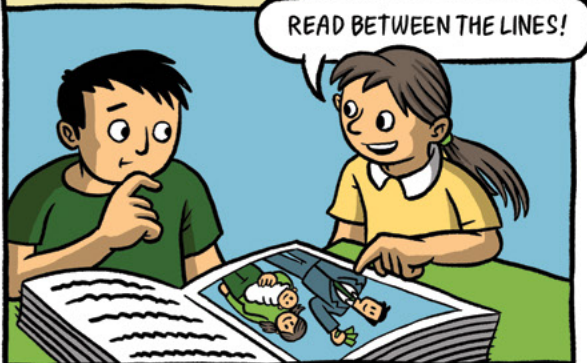
GIRLS AND BOYS, WOMEN AND MEN MUST BE EQUAL IN ALL ASPECTS OF LIFE IF WE'RE TO LIVE IN A HAPPY, PEACEFUL AND SUSTAINABLE WORLD.



EQUALITY IN EDUCATION WOULD MEAN HAVING A GENDER BALANCE IN SCHOOLS, POLITICS, LAWS AND OUR CURRICULA, AND EMPOWERING WOMEN IN THEIR OWN HOMES.



WE CAN'T ASSUME EITHER THAT SCHOOLS ARE GOOD AT TACKLING STEREOTYPES AND DISCRIMINATION. WHY ISN'T ANYONE TAKING MORE NOTICE OF WHAT OUR TEXTBOOKS ARE TEACHING US?



IT'S TIME TO WORK TOGETHER IF WE'RE GOING TO END DISCRIMINATION.

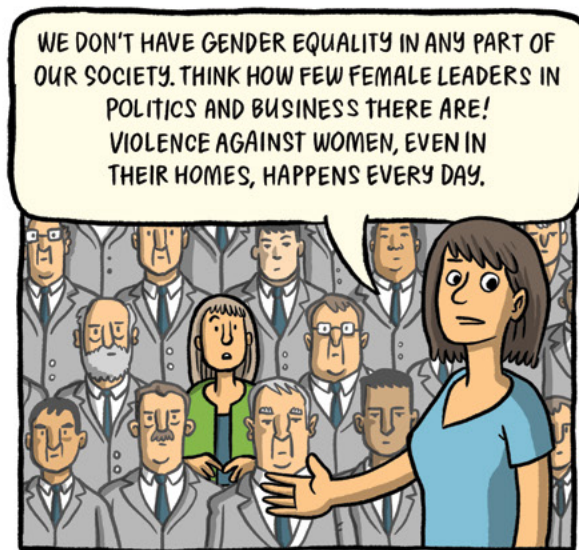


FOR STARTERS, WE NEED TO MAKE SURE ALL BOYS AND GIRLS HAVE AN EQUAL CHANCE AT AN EDUCATION, WHICH IS STILL NOT THE CASE!



IN MANY COUNTRIES, IT'S BOYS WHO ARE DROPPING OUT OF SCHOOL AND DOING LESS WELL BECAUSE OF PRESSURES TO EARN MONEY OR FEELING THAT WHAT THEY'RE LEARNING ISN'T RELEVANT.





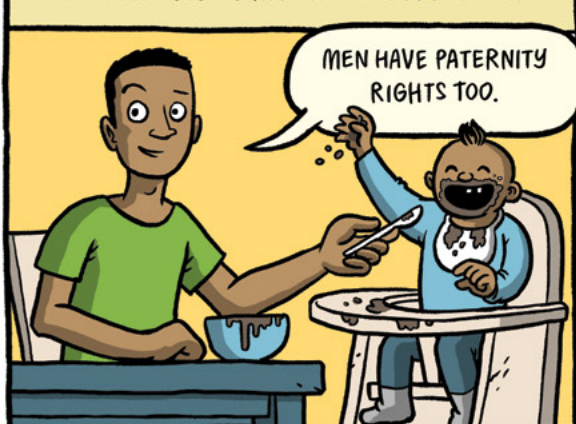
IF WOMEN AND MEN HAD EQUAL CHANCES IN EDUCATION IT'D MAKE IT MORE LIKELY THEY'D BE PAID THE SAME, AND HAVE EQUAL PROFESSIONAL RESPECT.



GIVING GIRLS AND BOYS SCHOLARSHIPS AND ROLE MODELS CAN STOP US THINKING OF CERTAIN JOBS AS BEING JUST FOR MEN, OR JUST FOR WOMEN.



WE ALSO NEED LAWS THAT WOULD PROTECT HOW MUCH PEOPLE SHOULD BE PAID, AND PROTECT WOMEN'S JOBS WHEN THEY GET PREGNANT.



ONE OF THE BIGGEST CHALLENGES TO OUR WELLBEING IS VIOLENCE, WHICH SOMETIMES HAPPENS IN SCHOOL, AND IS OFTEN RELATED TO GENDER AND SEXUALITY.



BUT THERE IS NO RIGHT WAY TO BE YOU!

EDUCATION IS IMPORTANT FOR TEACHING BOYS AND MEN WHAT RESPONSIBLE AND RESPECTFUL SEXUAL BEHAVIOR LOOKS LIKE.



THIS NOT ONLY REDUCES TEENAGERS FALLING PREGNANT, BUT CAN STOP VIOLENCE IN THE HOME.

WHEN WOMEN ARE WELL EDUCATED, THEY KNOW HOW TO LOOK AFTER THEMSELVES AND THEIR FAMILIES. IT'S A SIMPLE WAY TO SAVE CHILDREN'S LIVES!



INTRODUCTION

Gender equality and inequality concern how people live their daily lives, their relationships, choices, decisions and the freedom they do or do not have to live a life they value. Gender equality is a matter of social justice and human rights. It drives development progress. It is vital for achieving peaceful, inclusive, resilient and just societies.

The concept of equality between women and men was articulated in the Universal Declaration of Human Rights in 1948, then reinforced in international agreements including the 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the 1995 Beijing Declaration and Platform for Action. Progress has been made, yet substantive gender equality remains elusive.

At the 70th Session of the United Nations General Assembly in September 2015, the international community adopted a new global development agenda, Transforming our World: the 2030 Agenda for Sustainable Development – a plan of action for people, planet and prosperity that seeks to realize the human rights of all and achieve gender equality and the empowerment of all women and girls (United Nations, 2015a).

“ Transformative action is needed to redress gender inequality that is deeply embedded and complex

Realizing substantive and lasting gender equality requires bold, urgent action in the new agenda (Box 1), including recognition of how societies create and reinforce everyday discriminatory norms, stereotypes and practices

relating to gender. It also requires understanding one's own values, the values of one's community and society, and those of others around the world. Moreover, transformative action is needed to redress complex, deeply embedded inequality.

Education and lifelong learning – broadly defined to include formal, non-formal and informal learning – play a vital role in achieving gender equality. Education can be a locus of gender inequality, where stereotypical behaviour and views are reinforced, or a catalyst of transformation, providing individuals with opportunity and capability to challenge and change discriminatory attitudes and practices. As we move into a new era of international development, framed by progress on the 17 Sustainable Development Goals (SDGs), links between education and gender equality are clearly recognized, building on acknowledgement since the beginning of the Education for All (EFA) movement that improving girls' education and ensuring equitable educational opportunities for all girls and boys is necessary for social justice on a global scale.

Education and gender equality are central concerns in the new sustainable development agenda. The Education 2030 Framework for Action, agreed by the global education community in November 2015 to accompany the SDG agenda, recognizes that gender equality is inextricably linked to the right to education for all, and that achieving gender equality requires an approach that 'ensures that girls and boys, women and men not only gain access to and complete education cycles, but are empowered equally in and through education' (UNESCO, 2016a, p. 8). Women, girls, boys and men all need to be given opportunities for active participation in society, for their voices to be heard and their needs met (UN Women, 2016a).

“ Gender inequality affects us all. Achieving gender equality must involve all of us

To facilitate and achieve this, better evidence-based knowledge and understanding of gender issues in and through education are needed. The Gender Review of the 2016 Global Education

Monitoring Report (GEM Report) recognizes and largely focuses on the challenges facing girls and women because of the disproportionate overall disadvantage they continue to experience in and beyond education. But it also understands that gender disadvantage can be experienced by boys and men, and that gender equality involves males, relationships and power. Gender inequality affects us all. Achieving gender equality must involve us all.

The Gender Review discusses global and regional trends in achieving parity in education access, participation and completion and in selected learning outcomes, stressing that there is much room for progress. It then shifts to an evidence-based discussion of relationships between education, gender and sustainable development by discussing work, civic and political engagement and leadership, as well as health and well-being. It concludes with ways forward: what action is implied by evidence and data for achieving more gender-equal societies and how progress towards such societies is to be measured.

BOX 1

Gender equality and the 2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development unites global development and environmental goals in one framework. It is designed to address key human rights challenges of the 21st century, including poverty and inequality. Its development was commended for wide-ranging consultative and participatory processes involving United Nations (UN) agencies, intergovernmental working groups, academics and technical experts, and women's rights organizations and other civil society representatives. A series of 'global conversations' engaged almost 2 million people across 88 countries.

The 2030 Agenda heralds a new era for women's rights and gender equality. Its content has been praised by those working in gender and development, as has its commitment to realizing the human rights of all people – women, girls, boys and men, including the most marginalized. The 'leave no one behind' principle, which is at the agenda's heart, rests on the collective belief that the benefits of development must be shared by all, shifting the agenda from equality of opportunity to equality of outcome.

The targets of the stand-alone gender goal, SDG 5, are core to achieving gender equality and women's empowerment – a condition for achieving all the SDGs, including SDG 4, quality education for all, which includes a target focused on gender equality in education, and SDG 8, economic growth and decent work for all.

UN Women advocates gender mainstreaming as an essential strategy to achieve SDG 5 and sustainable development, making gender equality a central ideal embodied in the structures and practices of institutions and all of society. In national and local governments, gender mainstreaming can address gender equality within and across a broad range of sectors by integrating a gender perspective in policy, programming and budgeting across ministries. Such initiatives need adequate resources, awareness and training for women and men in gender-sensitive strategy and gender-responsive budgeting.

For the 2030 Agenda to fulfil its potential and for gender equality and the empowerment of women and girls to be achieved, the challenges include addressing complex and intersecting inequality; breaking barriers that cause people, particularly the most marginalized, to be 'left behind'; developing strong, effective policies; ensuring distribution of adequate resources; developing effective data collection, along with monitoring and evaluation systems; and fostering collective and inclusive action.

Sources: Sweetman et al. (2016); UN Women (2014, 2016b); UNESCO (2015b, 2016a); United Nations (2015a).

GENDER PARITY IN ACCESS TO EDUCATIONAL OPPORTUNITIES: UNFINISHED BUSINESS

The fifth EFA goal aimed to achieve gender parity and equality, yet the main measurement of progress between 2000 and 2015 was gender parity in education participation and attainment, simply comparing the number of boys to girls at different levels of education. As a result of decades of advocacy, policy work and investment, there was substantial progress in getting girls into school and improving gender parity in primary and secondary education.

This section discusses trends and progress in gender parity in education throughout life, from early childhood development to adult literacy and numeracy skills, and in ensuring that all girls and boys, from all walks of life, can gain access to and complete as many education levels as they wish and achieve high levels of learning.

IN EARLY CHILDHOOD EDUCATION, THERE IS GENDER PARITY BUT ENROLMENT LEVELS ARE VERY LOW

Access to early childhood development programmes, especially for children from disadvantaged backgrounds, can reduce inequality by ensuring that all children begin formal schooling with equal foundations. Good health and nutrition, early and continuous cognitive stimulation, and supportive home environments are key constituents of early learning that pay lifelong dividends (UNESCO, 2015a). The 2030 Agenda reaffirms that all children deserve the strong foundation provided by early childhood care and education of good quality.

In 2014, the global pre-primary gross enrolment ratio was 44%. Southern Asia is the region with the lowest participation rate (18%), followed by sub-Saharan Africa (22%) and Northern Africa and Western Asia (29%). Much higher rates are observed in Latin America and the Caribbean (73%), Eastern and South-eastern Asia (76%) and Europe and Northern America (85%).

“ In 2014, 44% of children around the world were enrolled in pre-primary school, ranging from about 20% in Southern Asia and sub-Saharan Africa to 85% in Europe and Northern America

Gender parity in pre-primary education has been nearly achieved everywhere except Southern Asia, where 94 girls are enrolled in pre-primary education for every 100 boys. About 63% of all countries with data record gender parity in pre-primary enrolment. In the remaining 37% of countries, more girls

are enrolled in 37 countries and more boys in 22. The percentage of countries that achieved parity in pre-primary education is still below 50% in Caucasus and Central Asia, Northern Africa and Western Asia and sub-Saharan Africa. Djibouti, Morocco, Pakistan and Yemen have the highest disparity at the expense of girls, with fewer than 90 girls enrolled for every 100 boys. By contrast, in Armenia, Mauritania and Saudi Arabia, fewer than 80 boys are enrolled in pre-primary education for every 100 girls.

MAJOR PROGRESS HAS BEEN MADE IN PRIMARY AND SECONDARY EDUCATION, BUT MUCH MORE IS NEEDED

Genuine progress was achieved in gender parity in primary and secondary education, alongside rapid education expansion. In 2014, gender parity was achieved globally, on average, in primary, lower secondary and upper secondary education. But the global averages mask continuing disparity in many regions and countries (**Table 1**).

TABLE 1:**Over one-third of countries are still to achieve gender parity in primary education***Gender parity index of enrolment rates, by region and country income group, 2014*

	Primary education		Lower secondary education		Upper secondary education	
	Gender parity index	Countries with parity (%)	Gender parity index	Countries with parity (%)	Gender parity index	Countries with parity (%)
World	0.99	63	0.99	46	0.98	23
Low income	0.93	31	0.86	9	0.74	5
Lower middle income	1.02	52	1.02	33	0.93	17
Upper middle income	0.97	70	1.00	60	1.06	22
High income	1.00	81	0.99	59	1.01	37
Caucasus and Central Asia	0.99	100	0.99	83	0.98	29
Eastern and South-eastern Asia	0.99	86	1.01	57	1.01	37
Europe and Northern America	1.00	93	0.99	67	1.01	31
Latin America and the Caribbean	0.98	48	1.03	39	1.13	19
Northern Africa and Western Asia	0.95	56	0.93	46	0.96	33
Pacific	0.97	64	0.95	44	0.94	0
Southern Asia	1.06	29	1.04	25	0.94	38
Sub-Saharan Africa	0.93	38	0.88	19	0.82	6

Note: The gender parity index measures relative access to education of females and males, with the value of the indicator for girls divided by that for boys. Thus, a value below one indicates differences in favour of boys, and vice versa for values above one. Countries at gender parity are those with a gender parity index between 0.97 and 1.03.

Source: UIS database; GEM Report team calculations.

DESPITE OVERALL POSITIVE TRENDS, THERE IS STILL GENDER DISPARITY IN ACCESS AT THE PRIMARY LEVEL, MOSTLY AT GIRLS' EXPENSE

At the primary education level, where gender disparity persists in 37% of countries, disparity is at the expense of girls in more than 80% of them. Such gaps are concentrated in Northern Africa and Western Asia, where just 95 girls are enrolled in primary school for every 100 boys, and sub-Saharan Africa, where 93 girls for every 100 boys are enrolled. These regions have, however, made significant progress since 2000, with the gender parity index increasing from 0.88 and 0.85, respectively. Southern Asia is the only region with more girls than boys enrolled in primary education, though there is wide variation among countries. In Afghanistan, 70 girls per 100 boys are in school, while in India, nearly 90 boys for every 100 girls are enrolled.

THE POOREST GIRLS REMAIN THE MOST LIKELY TO NEVER SET FOOT IN A CLASSROOM

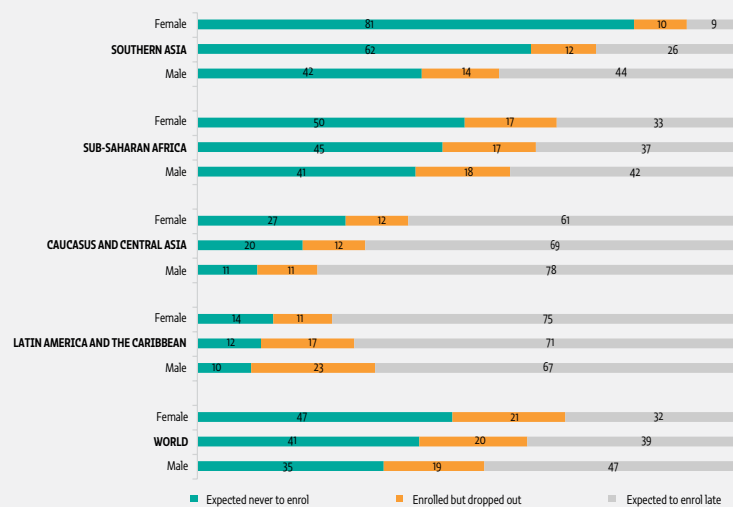
As of 2014, 61 million children of primary school age were not enrolled in school, compared with 100 million in 2000. Girls make up 53% of the global population of children out

“ 1 in 10 girls compared with 1 in 12 boys were out of primary school in 2014

of school, the same share as in 2000, and 1 in 10 girls, compared with 1 in 12 boys, were out of school in 2014. The largest gender gaps are in Northern Africa and Western Asia and sub-Saharan Africa.

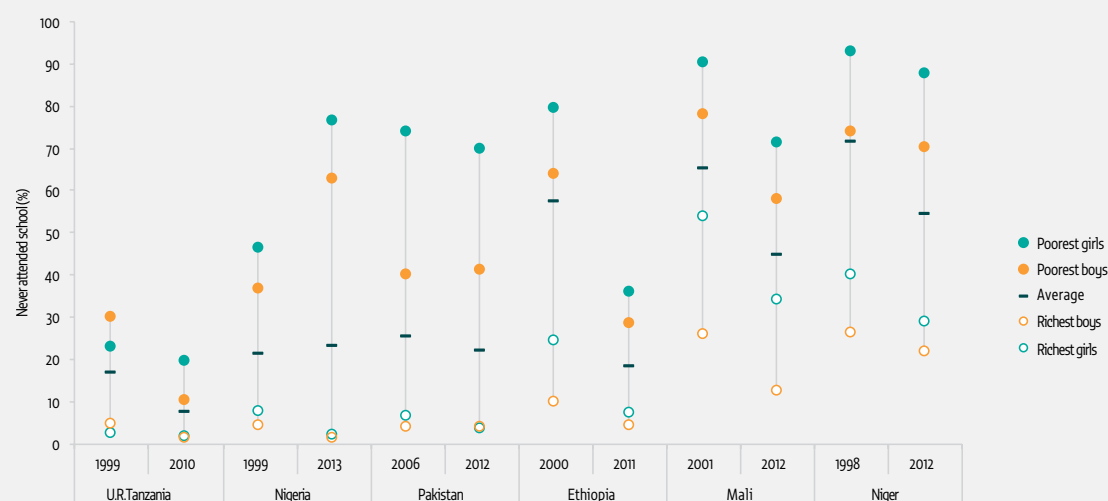
Analysis shows that, globally, 47% of the 32 million girls who were out of school in 2014 are expected to never go to school, compared with 35% of the 29 million boys. More boys than girls – 47%, compared with 32% – are likely to enrol late (**Figure 1**).

Girls face the biggest barriers in sub-Saharan Africa. Of out-of-school girls, 50%, or 9 million, will never enter a classroom, compared with 41% of out-of-school boys (6 million). Compared with 33% of girls, 42% of boys are expected to enter school. Similar trends are found in Southern Asia, where the gender gap is even wider. Of the region's out-of-school girls, 81% are unlikely to start school, compared with 42% of out-of-school boys, most of whom are likely to enrol late (UIS and UNESCO, 2016).

FIGURE 1:**Worldwide, 15 million girls currently out of school are expected never to enrol***Distribution of out-of-school children, by school exposure, world and selected regions, 2014*

Source: UIS database.

Data for six countries in which over one-third of the world's out-of-school population live confirm regional patterns: poor children, especially girls, are at particular risk of being excluded from school. In the countries with high percentages of children out of school, the poorest girls continue to be most likely never to have attended. In Nigeria, where 8.7 million children of primary school age were out of school in 2010, the poorest girls' access to education has worsened since 2000; the percentage of the poorest females who had never attended school increased from 46% in 1999 to 76% in 2013. Even in countries such as Ethiopia that have made good progress since 2000, wide disparity remains and the poorest girls are still more likely never to have attended school (Figure 2).

FIGURE 2:**In countries with large numbers of out-of-school children, the poorest girls are left behind***Percentage of girls and boys who never attended school, by wealth, selected countries, circa 2000 and 2012*

Source: GEM Report team analysis (2016) using household surveys.

GENDER DISPARITY IN PARTICIPATION INCREASES AT THE LOWER AND UPPER SECONDARY LEVELS

“ In 2014, 54% of countries had not achieved gender parity in lower secondary education, and 77% of countries in upper secondary education

Gender disparity is found in more countries in secondary education than in primary. In 2014, 54% of countries had not achieved gender parity in lower secondary education and 77% in upper secondary (Table 1).

Patterns of gender disparity are more complex at the secondary level. While at primary level, girls remain much more likely to be disadvantaged in many countries, at secondary level gender disparity can favour girls. Gender disparity is at the expense of girls in lower secondary education in nearly 60% of countries and in upper secondary in 43%.

Gender disparity at girls' expense is more common in countries with low secondary enrolment ratios. Of the 10 countries with fewer than 80 girls enrolled in lower secondary education for every 100 boys, 7 are in sub-Saharan Africa. In two countries recently affected by conflict, the Central African Republic and Chad, less than half as many girls as boys were enrolled in lower secondary school in 2014.

Lower secondary enrolment rates where boys are disadvantaged are more common in countries with

high overall enrolment. Suriname has achieved a lower secondary enrolment ratio of 97% but has 86 boys enrolled for 100 girls. In most countries with fewer boys than girls in lower secondary education, the disparity is due to higher dropout rates for boys rather than higher transition rates of girls from primary to lower secondary school.

The situation is similar in upper secondary education. Out of the 23 countries with fewer than 80 girls in upper secondary education for every 100 boys, 16 are in sub-Saharan Africa. Gender disparity favouring girls occurs in 25 of the 31 countries in Latin America and the Caribbean with available data. In Brazil and Uruguay, fewer than 83 boys for every 100 girls are enrolled in upper secondary education.

MAKING SURE ALL GIRLS AND BOYS COMPLETE 12 YEARS OF PRIMARY AND SECONDARY EDUCATION: A LONG WAY TO GO

The 2030 Agenda prioritizes universal completion of primary and secondary education, but this seems out of reach in much of the world. Household survey data analysis shows a primary completion rate of 51% in low income countries, 84% in lower middle income countries and 92% in upper middle income countries. Only one in four adolescents in low income countries complete lower secondary education; four in five did so in upper middle income countries. Even in high income countries, only 84% of young people complete upper secondary education. The challenge is greatest, however, in low income countries, where only around 15% complete upper secondary (Table 2).

TABLE 2:
Gender parity in secondary completion is distant for most countries

Completion rates and gender parity index, by education level, region and country income group, 2009–2014

	Primary education		Lower secondary education		Upper secondary education	
	Completion rate (%)	Gender parity index	Completion rate (%)	Gender parity index	Completion rate (%)	Gender parity index
World	...	...	...	...	43.0	0.96
Low income	50.7	0.93	27.1	0.75	14.5	0.66
Lower middle income	83.8	0.99	68.2	0.96	37.9	0.91
Upper middle income	91.7	1.03	78.7	1.04	43.2	1.02
High income	...	...	...	...	84.3	1.06
Caucasus and Central Asia	...	...	...	...	...	...
Eastern and South-eastern Asia	93.5	1.03	79.2	1.04	47.1	0.99
Europe and Northern America	...	...	...	...	86.2	1.05
Latin America and the Caribbean	87.7	1.10	71.9	1.10	41.6	1.10
Northern Africa and Western Asia	83.7	0.95	65.6	0.94	42.2	0.98
Pacific	...	...	99.2	1.01	85.0	1.09
Southern Asia	83.0	0.99	69.0	0.94	31.6	0.89
Sub-Saharan Africa	59.9	0.94	37.8	0.82	23.1	0.72

Source: GEM Report team analysis (2016) using household surveys.

Gender parity trends in completion vary by region, income group and level. Gender parity in primary school completion was achieved only in Eastern and South-eastern Asia and Southern Asia. Fewer girls than boys complete primary school in Northern Africa and Western Asia and sub-Saharan Africa. Yet, in Latin America and the Caribbean, 95 boys per 100 girls complete primary school.

“ Boys are less likely than girls to complete lower and upper secondary school, particularly in Latin America

” In Southern Asia and sub-Saharan Africa, gender disparity is wider at the upper secondary level and more boys than girls complete secondary education. In Latin America and the Caribbean, boys are less likely than

girls to complete lower and upper secondary school. In countries including Honduras and Suriname, fewer than 70 boys complete both levels of secondary school for every 100 girls.

POVERTY AND LOCATION DEEPEN GENDER DISPARITY IN COMPLETION

There is major inequality in school completion in additional respects. In sub-Saharan Africa, gender parity exists among the richest 20% who have completed primary education but among the poorest 20%, 83 females completed primary education for every 100 males, dropping to 73 for lower secondary and 40 females for upper secondary. By contrast, considerable disparity exists at the expense of the poorest males in Eastern and South-eastern Asia in lower and upper secondary completion (**Figure 3**).

FIGURE 3:

Gender disparity in completion is wider among the poorest children than among the richest

Number of females for every 100 males, selected education completion indicators, by wealth, selected regions, 2008–2014



Source: GEM Report team analysis (2016) using household surveys.

In many poor countries, such as Mozambique and the United Republic of Tanzania, less than 2% of young women from the poorest families completed lower secondary school in 2010/11 while over 35% of young men from the richest families did so.

“ Completion rates for adolescents, particularly boys, are a growing concern in many OECD countries ”

Completion rates for adolescents, particularly boys, are a growing concern in many Organisation for Economic Co-operation and Development (OECD) countries. In 2013, among countries participating in the

EU-SILC survey, gender gaps at boys' expense exceeded 20% or more in Malta and Portugal. In some European countries, low socio-economic status amplifies boys' disadvantage in upper secondary completion. Across six European countries, gender gaps among rich children are small but among poor children they are striking: In Latvia, 75% of poor girls but only 55% of poor boys complete upper secondary education (**Figure 4**).

“ In Nigeria, Pakistan and Yemen, about 25% of rural girls complete lower secondary education compared to 50% of rural boys ”

In many countries, living in rural or disadvantaged areas often puts children and adolescents at greater risk of not completing school. Over 2009–2014 in low income countries, 19% of rural children completed

lower secondary education, compared with 48% of urban children.

In Nigeria, Pakistan and Yemen, only about 25% of rural girls complete lower secondary education but nearly 50% of rural boys do. In contrast, in countries including Mexico, Mongolia and the Philippines, boys in rural areas are less likely to complete lower secondary schooling – although in these countries overall levels of completion tend to be higher and gender gaps narrower (**Figure 5**).

“ Only 3% of poor rural young women completed lower secondary school in Nigeria in 2013 as compared with 17% of poor rural males ”

Inequalities linked to location, wealth and gender do not operate in isolation, as analysis of household surveys shows for Brazil, India, Lesotho and Nigeria. In 2013 in Nigeria, over 90% of adolescents from rich households, whether urban or

rural, female or male, were likely to complete lower secondary education. Among poor rural young women, only 3% completed lower secondary school, compared with 17% of poor rural young men. In 2011 in India, upper secondary completion rates of rich urban girls and boys averaged 70%; for poor rural males, the average was 26% and the rate was much lower for poor rural females.

In some countries, the interaction of location, gender and poverty is a potent source of exclusion for girls and boys. In Lesotho, 4% of poor rural males complete lower secondary education, on average, compared with around 60% of rich girls and boys. In Brazil, 9% of poor rural males complete lower secondary school, twice the rate for poor rural females.

FIGURE 4:

In richer countries, poverty amplifies the gender difference in upper secondary completion

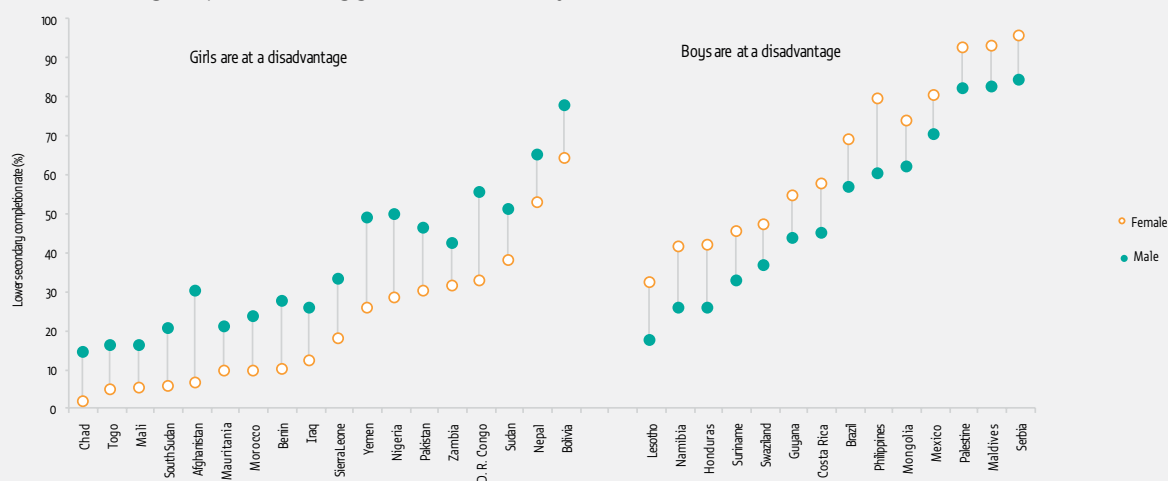
Upper secondary completion rates, by wealth and gender, selected countries, 2013 EU-SILC



Note: EU-SILC is the European Union Statistics on Income and Living Conditions. Source: GEM Report team analysis (2016) using 2013 EU-SILC data.

FIGURE 5:

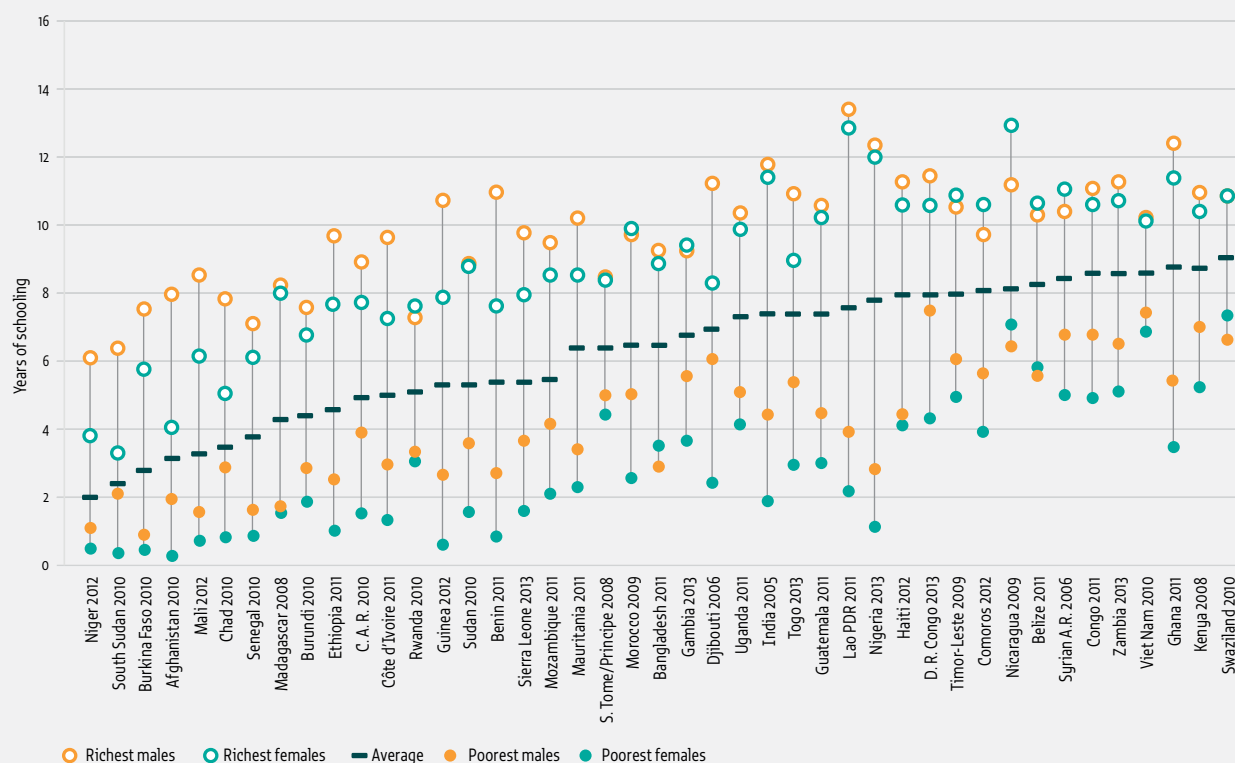
In countries where overall levels of completion are lower, girls in rural areas are often more disadvantaged than boys
Lower secondary completion rates, by gender, in rural areas of selected countries, 2009–2014



Source: GEM Report team analysis (2016) using household surveys.

FIGURE 6:

There are large disparities within countries in educational attainment by wealth and gender
Years of schooling attained in low and middle income counties by 20- to 24-year-olds, selected countries



Source: GEM Report team analysis (2016) based on Demographic and Health Survey, Multiple Indicator Cluster Survey and national household survey data.

VERY FEW YOUNG WOMEN AND MEN AROUND THE WORLD HAVE ATTAINED AT LEAST 12 YEARS OF EDUCATION

In only 10 of 90 low and middle income countries with data did 20- to 24-year-olds attain, on average, at least 12 years of education (**Figure 6**). In many countries in Southern Asia and sub-Saharan Africa, including Afghanistan, Benin, Chad, Ethiopia, Guinea, Pakistan and South Sudan, the poorest young women attained less than a year of schooling, compared to about two years or more for the poorest young men.

On the other hand, males attain fewer years of education than females in many countries with a relatively high number of average years of schooling in Latin America and the Caribbean and in Europe and Northern America. The poorest boys have less schooling than the poorest girls in almost 20 of the 30 countries where average attainment is at least 9 years, while this is the case in just 3 of the 60 countries with an average of less than 9 years.

Within disadvantaged regions and ethnic groups, gender disparity in years of schooling tends to be greater (**Figure 7**). In Cameroon, where young adults in the Extreme North region average 3.2 years of education, young women have less than half the attainment of young men, compared to the national gender parity ratio of 0.8. In Serbia, young Roma women have two-thirds the educational attainment of their male counterparts, while at the national level, young women average more education than men. On the other hand, in Brazil, indigenous young men have less attainment than their female counterparts, reflecting national patterns.

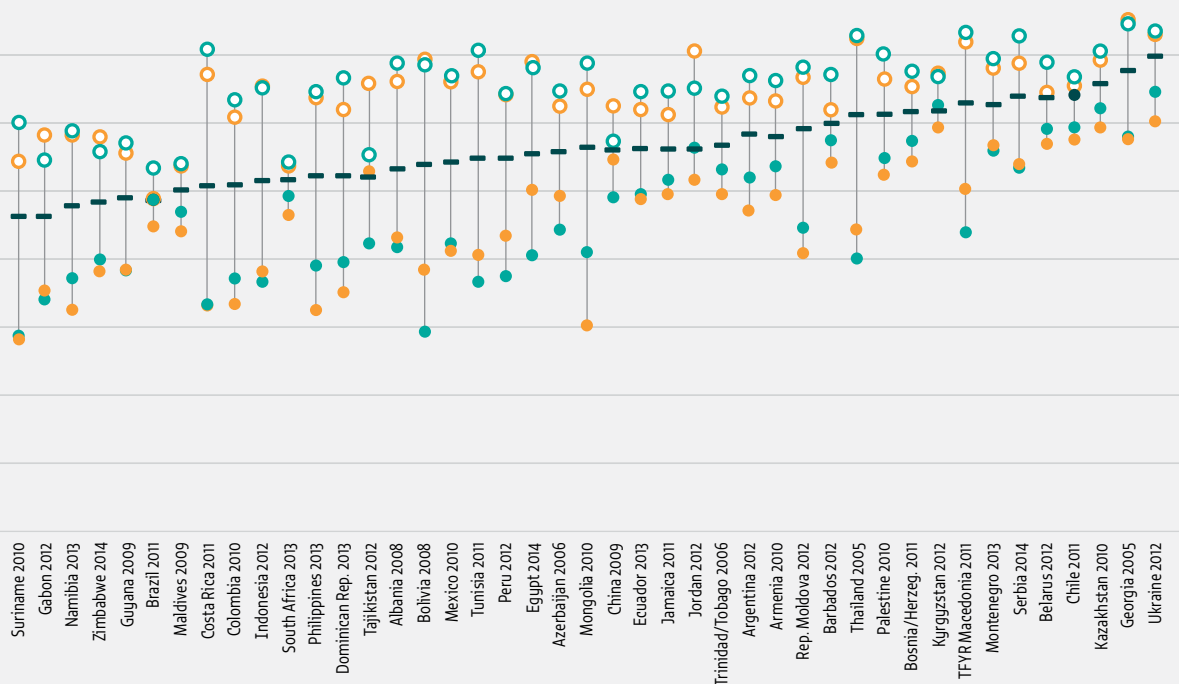
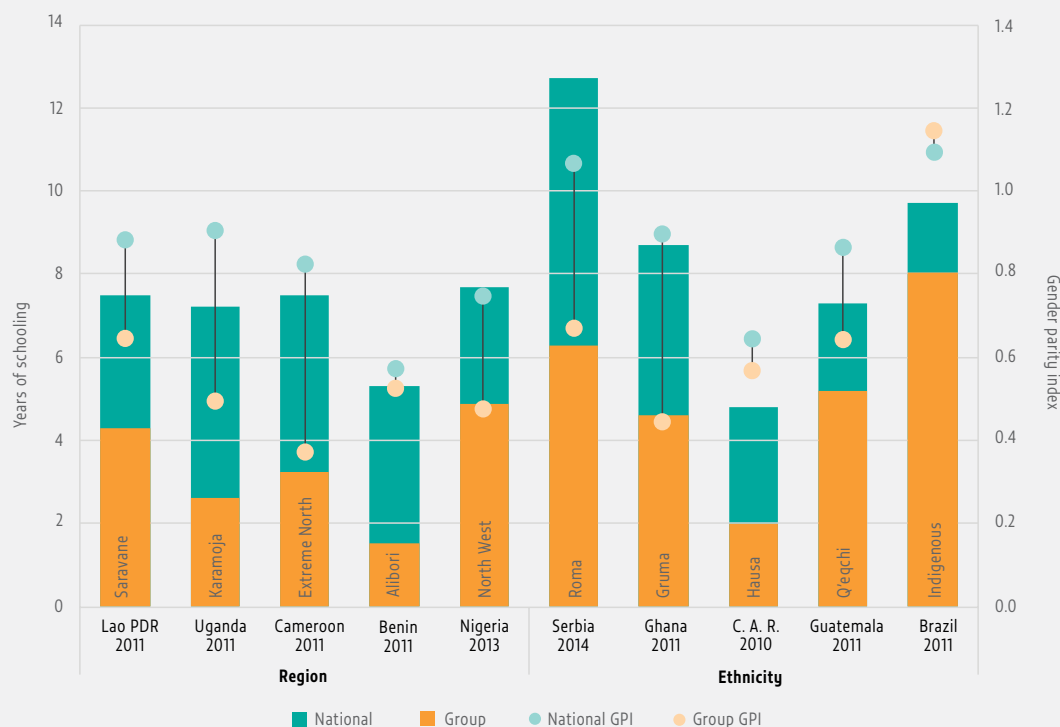


FIGURE 7:

Education marginalization is compounded on ethnic and regional lines, particularly for women
Years of schooling among young adults (ages 20 to 24) and gender parity index (GPI)



Note: A GPI below 0.97 denotes disparity at the expense of females while one above 1.03 denotes disparity at the expense of males.

Source: GEM Report team analysis (2016) based on Demographic and Health Survey, Multiple Indicator Cluster Survey and national household survey data.

CONFLICT-AFFECTED AREAS ARE SITES OF EXTREME DISADVANTAGE IN EDUCATION

“The proportion of out-of-school children of primary school age in conflict-affected countries rose from 29% in 2000 to 35% in 2014

”

countries, where the proportion increased from 29% in 2000 to 35% in 2014; in Northern Africa and Western Asia, it increased from 63% to 91% (UIS and UNESCO, 2016).

In all conflict-affected countries, 21.5 million children of primary school age are out of school. Over the past decade, the problem of out-of-school children has been increasingly concentrated in conflict-affected

Conflict reinforces gender inequality. Girls are almost two and a half times more likely to be out of school if they live in conflict-affected countries (UNESCO, 2015c). Refugee girls are less likely to finish primary education, transition into and complete secondary education. Displacement weakens children's protective environments and families can resort to coping mechanisms that disadvantage girls, including child domestic work and child marriage. In Kakuma camps in Kenya, in 2015 only 38% of primary school students were girls (UNHCR, 2015).

LEARNING OUTCOMES: GENDER PARITY IS YET TO BE ACHIEVED

Girls and boys achieve different outcomes in school, in overall performance and by subject. Regional and international learning assessments at primary and secondary level show wide-ranging gender differences.

Girls continue to outperform boys in reading and language arts. The Programme for International Student Assessment (PISA) 2012 survey of 34 OECD countries and 31 partner countries and economies showed 15-year-old girls achieving significantly higher scores in reading than boys in all locations. In some countries, including Bulgaria, France and Portugal, the gender gap had widened since 2000, largely due to greater improvement in girls' performance (UNESCO, 2015a).

Analysis of the Third Regional Comparative and Explanatory Study (TERCE) showed a strong gender disparity in Latin American countries. Girls scored higher than boys in grades 3 and 6 reading performance, with the reading advantage already evident in grade 3 becoming stronger by grade 6. The reading achievement gap was greater than 20 points in Argentina, Chile and Panama (UNESCO, 2016b).

“ Boys have historically outperformed girls in mathematics in all grades of primary and secondary education – but that is changing

Boys have historically outperformed girls in mathematics in all grades of primary and secondary education – but that is changing. The PISA 2012 results show boys performing better than girls in

”

mathematics in a majority of locations, although the gap has narrowed in some countries, such as Norway and Slovakia (UNESCO, 2015a). Among countries participating in TERCE, there was no gender gap in mathematics performance among third-graders; gender gaps appeared only at higher levels.

In Costa Rica, Nicaragua and Peru, boys performed significantly better than girls, while in Argentina, Brazil and the Dominican Republic girls performed better. But sixth-grade mathematics scores revealed a strong pattern of gender achievement gaps. In most countries – except Chile, Panama, Paraguay and Uruguay – sixth-grade girls performed significantly lower than sixth-grade boys (UNESCO, 2016b).

Girls and boys can perform equally well in reading, mathematics or science under the right conditions: There is no inherent difference in their capacities. To close the gap in reading, parents, teachers and policy-makers need to entice boys to read more. To close the gap in mathematics, progress in gender equality outside the classroom, notably in employment opportunities, could play a major role in reducing disparity.



CREDIT: Fotolia

IF CURRENT TRENDS PERSIST, THE WORLD WILL NOT REACH UNIVERSAL PRIMARY AND SECONDARY EDUCATION BY 2030

New analyses for the 2016 GEM Report show that if past trends continue, not even the EFA goal of universal primary completion, also set in the Millennium Development Goals, is likely to be achieved by 2030.

“ By the 2030 SDG deadline, it is estimated that only 33% of boys and 25% of girls will complete upper secondary education ”

The target of universal secondary completion is clearly beyond reach. If past growth rates continue, 84% of 15- to 19-year-old girls and boys in 2030 will complete lower secondary education and 69% upper secondary (**Table 3**).

At past rates, low income countries would not achieve universal primary and secondary education before the end of the century. Around half of 15- to 19-year-old

girls and boys in 2030 would complete lower secondary education in low income countries, and only 33% of boys and 25% of girls would complete upper secondary.

Achieving universal secondary completion requires an unprecedented and immediate break with past trends. Gender disparity is projected to remain wider at the secondary level. At the primary level, 127 countries (81%) will have achieved parity by 2030. Yet at the lower secondary level, 66% of countries with data are projected to have reached gender parity, while at the upper secondary level only 30% are projected to have done so.



CREDIT: Kate Holt/GEM Report

TABLE 3:

On past trends, not even universal primary completion is likely to be achieved by 2030

Projected attainment rates in 2030 and year of achieving universal attainment based on past trends

	Primary attainment rate by 2030 (%)	Countries with parity by 2030 (%)	Lower secondary attainment rate by 2030 (%)	Countries with parity by 2030 (%)	Upper secondary attainment rate by 2030 (%)	Upper secondary attainment rate by 2030 (%)
World	91.5	81	84.4	66	68.6	30
Low income	69.6	42	50.0	27	29.0	8
Lower middle income	93.2	70	86.8	62	71.8	23
Upper middle income	99.1	95	96.1	74	75.2	21
High income	99.6	98	98.7	82	94.9	53
Caucasus and Central Asia	99.8	100	99.4	100	96.4	86
Eastern and South-eastern Asia	99.3	100	96.9	79	76.5	21
Europe and Northern America	99.7	100	99.5	95	96.8	68
Latin America and the Caribbean	96.6	93	90.0	61	72.7	7
Northern Africa and Western Asia	92.3	81	87.0	56	77.1	6
Pacific	99.7	100	99.3	40	96.8	40
Southern Asia	95.1	86	89.0	57	73.5	14
Sub-Saharan Africa	77.1	41	62.1	30	42.4	10

Source: Barakat et al. (2016).

GENDER DISPARITY IS MORE PREVALENT IN TERTIARY EDUCATION THAN AT LOWER LEVELS

More women than men were enrolled globally in higher education institutions in 2014, when the average gender parity index was 1.11; in 2000, women and men were at par (**Table 4**). Gender disparity favouring women is more frequent than in secondary education but follows similar

“ In some countries, including Afghanistan, Benin, Chad, Central African Republic and Niger, fewer than 40 women were enrolled in tertiary education for every 100 men

patterns. More women were enrolled in upper middle and high income countries, while more men were in low income countries. More women were enrolled in Europe and Northern America, Latin America and the Caribbean and the Pacific, with far fewer female students in tertiary education

in Southern Asia and sub-Saharan Africa. In some countries, including Afghanistan, Benin, the Central African Republic, Chad and Niger, fewer than 40 women were enrolled for every 100 men.

In most countries, disparity for men worsens between tertiary education entry and completion. In Costa Rica, 80 men enrolled but 55 graduated for every 100 women in 2014. In Caribbean countries, including Aruba, and in Northern Africa and Western Asia, including Kuwait, about three times as many women as men graduated from tertiary education.



CREDIT: Nicolas Axelrod/Ruom

TABLE 4:
Tertiary education participation indicators

	Enrolment (000)		Gross enrolment ratio (%)		Gender parity index	
	2000	2014	2000	2014	2000	2014
World	99 516	207 272	19	34	0.99	1.11
Low income	1 237	4 460	3	8	0.43	0.53
Lower middle income	24 996	58 642	11	22	0.79	0.97
Upper middle income	24 798	78 729	14	41	0.94	1.16
High income	48 485	65 441	55	74	1.17	1.25
Caucasus and Central Asia	1 427	1 956	22	24	0.95	1.04
Eastern and South-eastern Asia	24 213	67 351	15	39	0.83	1.11
Europe and Northern America	39 940	51 870	56	75	1.25	1.28
Latin America and the Caribbean	11 318	23 845	22	44	1.17	1.29
Northern Africa and Western Asia	6 854	15 261	20	37	0.83	0.99
Pacific	1 044	1 748	46	62	1.26	1.39
Southern Asia	12 162	38 097	9	23	0.66	0.93
Sub-Saharan Africa	2 557	7 145	4	8	0.66	0.70

Source: UIS database.

In the relatively few countries with enrolment disparity at the expense of women, disparity in graduation is smaller. In 2014 in Egypt, 90 women for every 100 men were enrolled in tertiary education, but graduation rates showed less gender disparity. Worsened disparity between enrolment and graduation is less common. In 2013 in Rwanda, 79 women enrolled but 53 graduated for every 100 men (**Figure 8**).

WOMEN'S ILLITERACY REMAINS PRONOUNCED

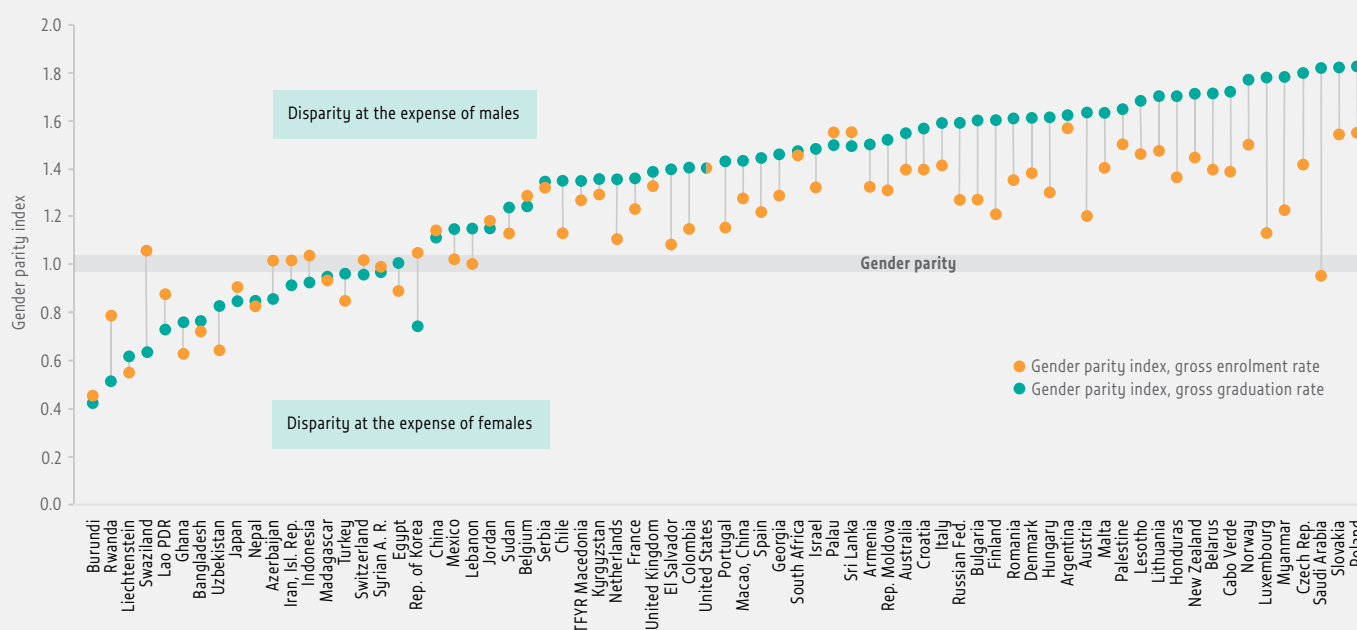
Literacy opens doors to better livelihoods, improved health and expanded opportunity. It empowers people, especially women, to take active roles in their communities and build more secure futures for their families. Children with literate parents have enormous advantages in access to education and in learning achievement. By contrast, illiteracy can entrap households in poverty and diminished opportunity, and undermine national prosperity.

In 2014, the global adult illiteracy rate was 15%, equivalent to 758 million adults (**Table 5**); 63% of adults who are illiterate are women, with almost no progress since 2000 in reducing this share. In Southern Asia and sub-Saharan Africa, around one in three adults are illiterate. In Northern Africa and Western Asia, the proportion is nearly one in five.

FIGURE 8:

Disparity for men worsens between tertiary education participation and completion

Gender parity index of the tertiary education gross enrolment ratio and gross graduation ratio from first degree programmes, selected countries, 2013 or most recent available year



Source: UIS database.

TABLE 5:**Worldwide, 479 million women are illiterate, two-thirds of the global population of illiterate adults***Literacy rates, gender parity index and number of illiterates, by region and country income group*

	Youth literacy rate	Gender parity index	Illiterate youth (000)	Adult literacy rate (%)	Gender parity index	Illiterate adults (000)
	2005–2014	2005–2014	2005–2014	2005–2014	2005–2014	2005–2014
World	91	0.96	114 127	85	0.91	757 920
Low income	68	0.85	35 027	57	0.74	134 811
Lower middle income	86	0.93	72 405	74	0.83	493 776
Upper middle income	99	1.00	5 854	94	0.95	114 350
High income	...	...	...	...	...	...
Caucasus and Central Asia	100	1.00	15	100	1.00	120
Eastern and South-eastern Asia	99	1.00	3 217	95	0.96	84 135
Europe and Northern America	...	...	...	...	...	...
Latin America and the Caribbean	98	1.00	2 266	93	0.99	33 373
Northern Africa and Western Asia	93	0.96	6 073	82	0.86	52 878
Pacific	...	...	...	...	...	...
Southern Asia	84	0.91	52 848	68	0.76	389 408
Sub-Saharan Africa	71	0.86	48 765	60	0.76	188 315

Source: UIS database.



“

63% of 758 million adults who are illiterate are women, with almost no progress since 2000 in reducing this share

”

Gender disparity in adult illiteracy rates is significant in all three regions. In Afghanistan, literacy rates for males are more than twice those for females. In Yemen, 47% of adult women and 16% of men are illiterate. In the Democratic Republic of the Congo, Mozambique and Togo, women are twice as likely as men to be illiterate.

Youth illiteracy rates are lower overall than those of adults, reflecting improved access to primary and secondary education among younger generations. Globally, about 9% of youth aged 15 to 24 are unable to read or write a sentence, equivalent to 114 million people. Gender disparity among youth is less than among adults in all regions.

GENDER DISPARITY IN LITERACY IS MAGNIFIED BY WIDER DISADVANTAGE

Young people from poorer households are far less likely to possess functional literacy skills needed for everyday life. Among the poor, young women are the most likely to get left behind, while young men, along with women from richer households, are likely to achieve basic literacy skills (**Figure 9**). In Pakistan, only 15% of poor young women aged 15 to 24 are able to read in everyday situations, compared with 64% of poor young men.

In countries in sub-Saharan Africa, including Burkina Faso, Niger and Senegal, people aged 15 to 24 acquire very low levels of literacy skills, and girls from both rich and poor households tend to be less literate.

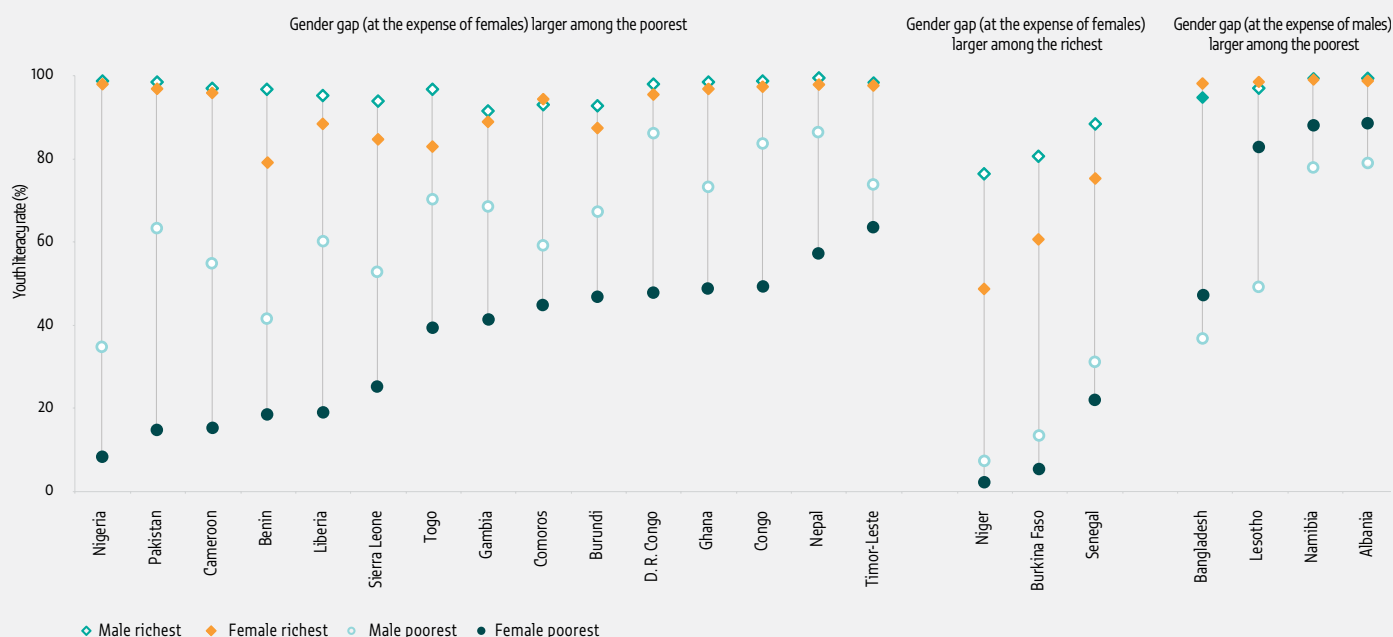
In Niger, 77% of rich young men have basic literacy skills, compared with 49% of rich young women, 7% of poor men and 2% of poor women.

Disadvantage in acquiring basic skills is compounded by poverty, location and ethnicity. In Nigeria, only 4% of poor young women in the North West zone can read, compared with 99% of rich young women in the South East. In Indonesia, rich young women in Bali province have near-universal literacy skills but just 60% of poor young women in Papua province are literate. In Ethiopia, poor young Afar women are among the most disadvantaged in terms of basic literacy skills (**Figure 10**).

FIGURE 9:

The poorest young women are the most likely to be illiterate

Youth literacy rate, by gender and wealth, selected countries, 2008–2014



Source: GEM Report team analysis (2016) using household surveys.

MANY WOMEN AND MEN IN RICHER COUNTRIES HAVE LOW LITERACY AND NUMERACY SKILLS

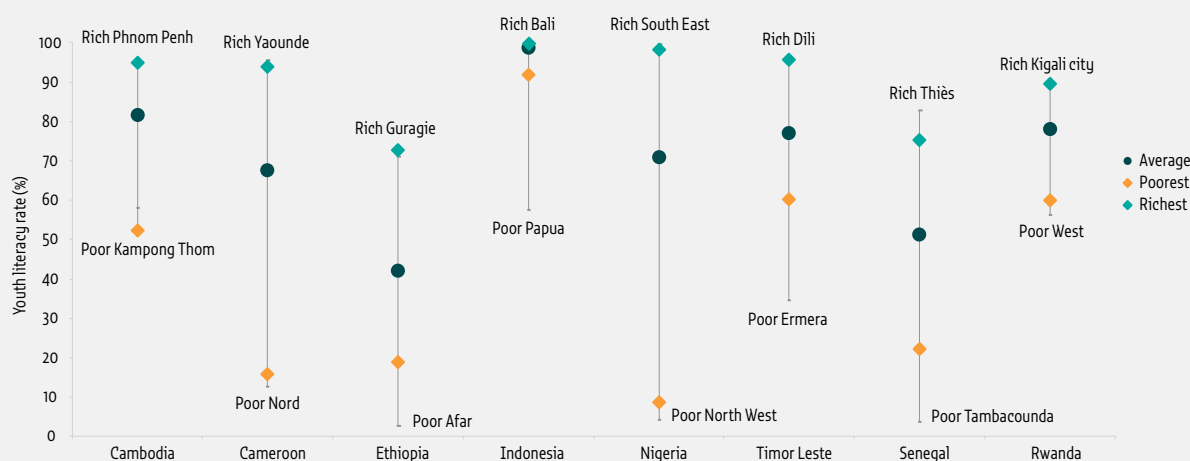
Illiteracy is no longer considered a problem in countries that long ago achieved universal primary education. Yet low levels of adult literacy in richer countries are more prevalent than is generally known. Across the 33 upper middle and high income countries that participated in the 2012–2015 rounds of the OECD Programme for the International Assessment of Adult Competencies (PIAAC) survey, around 20% of women and men aged 16 to 65 were assessed as having low literacy skills, scoring at or below level 1 on the PIAAC proficiency scale.¹ In most countries, there was no significant gender gap in literacy proficiency; even in countries with a statistically significant difference, it was relatively small.

Numeracy proficiency was different. In all participating countries except the Russian Federation, adult men scored higher than women, with the largest gender gaps in Chile, Germany, Northern Ireland (United Kingdom), Spain and Turkey, a country where 59% of women possess low numeracy skills, compared with 42% of men, and fewer women than men achieve the highest levels of numeracy² (OECD, 2016c).

FIGURE 10:

Young women's chances of acquiring literacy skills depend on wealth, location and ethnicity

Female youth literacy rate, by wealth, location and ethnicity, selected countries, 2008–2014



Source: GEM Report team analysis (2016) using household surveys.

ACHIEVING GENDER EQUALITY REQUIRES MAJOR TRANSFORMATION

Ensuring gender equality in health, political and economic leadership and employment, not just gender parity in education, underpins the sustainable development agenda. This section analyses issues related to gender inequality and equality by focusing on three themes – work and economic growth; leadership and participation; and relationships and well-being – all of which are linked with education, gender and sustainable development. The section highlights selected gender-related challenges, practices and trends involving education, along with other dimensions of sustainable development that need to be addressed to enable progress in gender equality and the empowerment of women and girls.

EDUCATION, GENDER AND WORK

Good quality education and lifelong learning can enable women and men to participate equally in decent work, promoting economic growth, poverty reduction and well-being for all.

Sustainable development implies inclusive economic growth focused on human welfare and planetary survival. To achieve social cohesion and transformational change, prosperity must be conceived in ways that leave no one behind.

ADDRESSING GENDER INEQUALITY IN THE LABOUR MARKET

Widespread inequality, including endemic gender discrimination in the labour market, significantly affects women's and men's participation in formal and informal employment. On average, women fare worse than men when employment opportunities are evaluated by

indicators used as proxies of decent work, such as the extent to which people have stable, formal employment with security in the workplace and social protection for families, or employment providing a wage above poverty level (ILO, 2007).

“ Women fare worse than men when proxies of decent work are used to make comparisons ”

In many contexts, women disproportionately work in the informal economy – which is partly outside government regulation and taxation – in countries with high

levels of informality (**Figure 11**), and in agriculture, without owning land and assets. Women also tend to be over-represented in vulnerable employment, working on their own or with one or more partners, or as unpaid family workers. Eliminating women's socio-economic disadvantage is necessary for achieving substantive gender equality (UN Women, 2015c).

“ Informal employment is highest among men in Eastern Europe and Central Asia, but higher among women in Latin America and sub-Saharan Africa ”

Gender disparity in informal and vulnerable employment often varies by country and region. Analysis for the 2016 GEM Report using the World Bank Skills Toward Employment and Productivity (STEP) data on the urban populations of 12 low and middle

income countries found informality to be highest among men in Central Asian and Eastern European countries, but higher among women in Latin American and sub-Saharan African countries (Chua, 2016). Even wage work may not be enough to escape poverty. Across all 12 countries, women are more likely than men to be classified as working and poor (Chua, 2016). On average, working poverty among women is double that of men. Large disparity is also found in many OECD countries, including Austria, Finland, the Republic of Korea and Switzerland, where twice as many women as men work on low pay (OECD, 2016a).

Education can provide skills for work ...

Education has a well-established effect on earnings. The rates of return to education are highest in poorer regions, such as sub-Saharan Africa, reflecting scarcity of skilled workers (Montenegro and Patrinos, 2014). Formal education of good quality equips individuals with skills and knowledge to become more productive. Completion of schooling can also act as a signal of ability to employers, providing access to decent work opportunities, irrespective of actual knowledge and skills acquired during study.

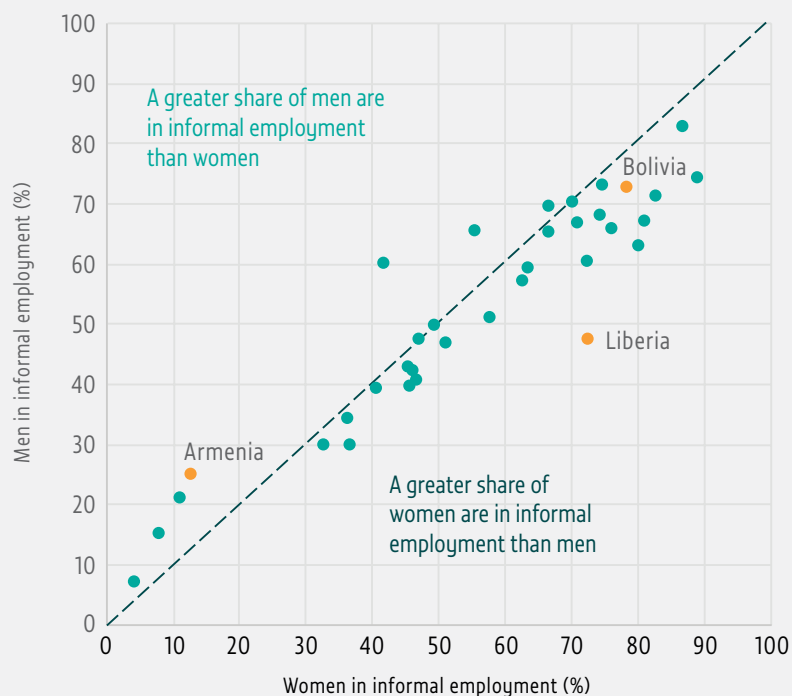
In the OECD, differences in cognitive skills accounted for 23% of the gender gap in wages in 2012 (OECD, 2015b). Marked differences in labour market outcomes,

such as employment rates and wages, tend to decrease among more highly and similarly educated women and men (Ñopo et al., 2012; UNESCO, 2014). But differences in educational attainment account for a significant proportion of employment disparity in some STEP countries where women are most educationally disadvantaged. Analysis suggests that equalizing educational attainment would reduce disparity in informal employment by 50% in Ghana and 35% in Kenya, with working poverty dropping by 14% and 7%, respectively (Chua, 2016).

FIGURE 11:

Women do more unpaid work than men, and often are more likely to be employed in the informal sector

Women's and men's share of informal work in total employment, 2004–2010



Source: ILO and WIEGO (2014); United Nations (2015b).

... but the links between girls' education and labour force participation are not straightforward

Achieving gender parity in education, while important, does not necessarily translate into gender equality in economic activity and employment opportunities. Countries that have seen rapid growth in education attainment among girls have not seen commensurate increases in decent work (**Figure 12**). In Sri Lanka, significant improvement in female enrolment and completion has not translated into workforce advantages; instead, female labour force participation has been stagnant or decreasing (Gunewardena, 2015). In Latin America and the Caribbean, improvements in girls' education at all levels have been a significant factor in women's rising labour market involvement, yet in the Middle East and North Africa, only tertiary education has had a significant effect on increasing employment (ILO, 2012). Similarly, high income Asian countries such as Japan and the Republic of Korea have limited female labour force participation despite high levels of education (Kinoshita and Guo, 2015).

“ Empowering women requires matching education reforms with better access to public-sector jobs or laws ensuring that private employers provide decent work ”

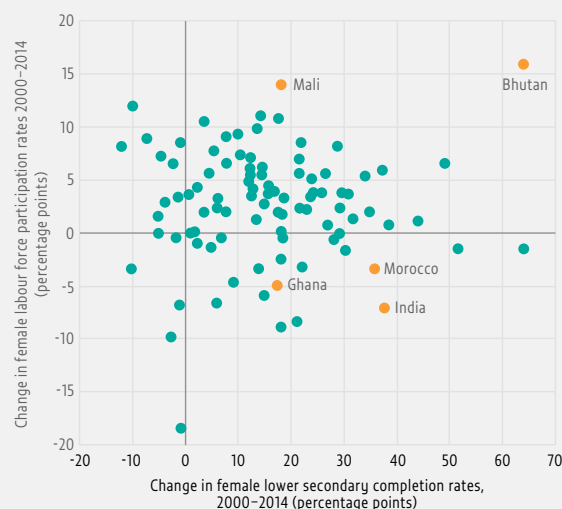
Analysis of STEP data showed that the gender gap in educational attainment did not explain gender differences in informal employment among the sampled countries; other factors, including discrimination and gendered cultural norms, were likely

to contribute to women not having equitable access to stable, decent work (Chua, 2016). In Ghana, women's education and labour force participation increased from the mid-1990s, yet their wage employment stagnated and unemployment rose, along with informal economic activity and self-employment. More years of education did increase chances of wage employment (Sackey, 2005). Research suggests that empowering women requires matching education reforms with better access to public-sector jobs or laws ensuring that private employers provide decent work (Darkwah, 2010).

FIGURE 12:

Growth in female secondary completion rates is not always linked to higher labour force participation among women

Change in female labour force participation rates and female lower secondary completion rates, 2000–2014



Non-formal education can help provide skills for work

Non-formal learning opportunities tailored to local needs – community-based ‘second-chance’ programmes, microfinance initiatives or vocational training, and informal learning – can provide essential skills to young adults who have been failed by low quality education systems. Women and girls, in particular, can benefit from such programmes, as women account for almost two-thirds of the 758 million adults globally who lack literacy skills (UNESCO, 2016d).

In Egypt, the Females for Families programme identified inadequate health and education services, illiteracy, early marriage and poor attitudes towards girls as key challenges for local communities. Community-based training was provided for girls in literacy, health and other skills. Girls then established home literacy classes, which addressed daily problems; gave out health, hygiene and family planning information; trained people in cooking, crafts or agriculture; encouraged children to return to school; and helped community and family members secure small loans and obtain identity and election cards. They became community leaders (UNESCO, 2016c).

In many countries, especially in poorer countries in Asia and Africa, women are a large share of farmers and agricultural workers but are less likely than men to have access to agricultural extension and advisory services (FAO, 2014). In India, over 250,000 women farmers have been supported since the 2010 launch of the government project Mahila Kisan Sashaktikaran Pariyojana (Strengthening Women Farmers), which trains community resource people to enable, support and build capacity among women for sustainable agricultural production (Centre for Environmental Education India, 2016).

ADDRESSING SOCIOCULTURAL GENDER NORMS FOR INCLUSIVE ECONOMIC PROSPERITY

The ways women and men participate differently in labour markets are determined not only by educational attainment but also by other influences that affect wage levels: available job types, access to resources, and bias in markets and institutions (ILO, 2016c; World Bank, 2011). Cultural norms and discrimination limit the extent to which well-qualified women gain access to better-paid occupations and rise within work hierarchies (World Bank, 2011). Within institutions, women can find it difficult to reach senior positions, hitting a 'glass ceiling'. Relatively few women occupy leadership positions in key economic institutions. Significant pay gaps exist between women and men doing the same job in virtually all occupations (UN Women, 2015c). While women's secondary attainment is now higher than men's in many OECD countries, the gender pay gap favouring men remains substantial in many member countries (Figure 13).

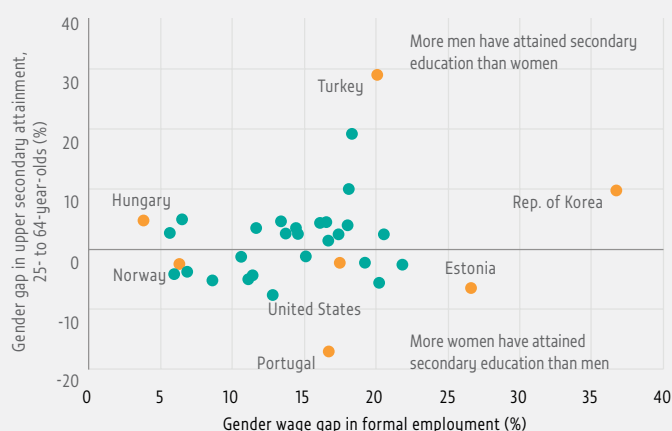
Education can address gender bias in occupations

Analysis of occupational and educational trends shows that women and men continue to be concentrated in different labour market sectors, such as teaching (women) and information and communication technology (ICT) (men), often with different levels of status, remuneration and security (Figure 14). According to the International Labour Organization (ILO), such occupational segregation was decreasing until the 1990s, but has since risen (ILO, 2012, 2016c). This has mainly favoured men overall in terms of pay and status (ILO, 2016c), but not all men benefit.

FIGURE 13:

Women consistently earn less than men in OECD countries, even where the gender gap in secondary attainment favours women

Gender gaps in upper secondary attainment and formal employment wages, circa 2014

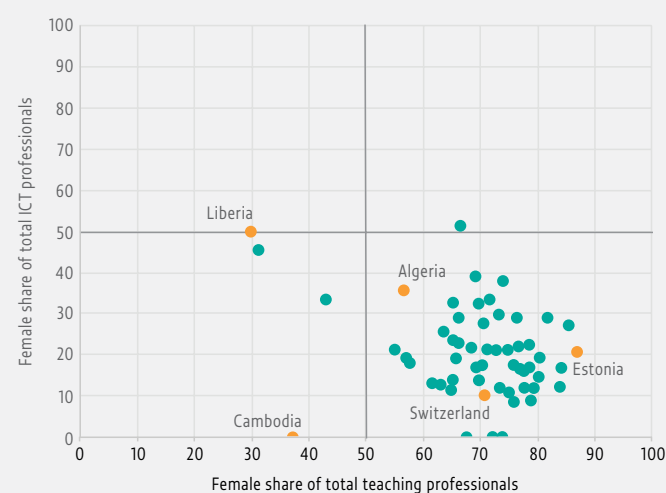


Source: OECD (2016b).

FIGURE 14:

Men and women work in different formal occupations

Female share of total professionals in information and communication technology (ICT) and in teaching



Note: Latest year of available data ranges from 2009 to 2014.
Source: ILO (2016a).

Particularly in developing countries where occupational safety and health standards are weaker, men are more likely than women to work in hazardous occupations, including mining and construction, where injury, work-related diseases and death rates are higher than other occupations (ILO, 2009).

“ In countries with available data, the average female share in tertiary education studying education was over 68% but 25% in engineering, manufacturing and construction ”

Occupational segregation is linked to basic education experience and subject choice at higher levels of education, which are still marked by strong gender differences. In OECD countries, only 14% of young women entering higher education for the first time in 2012 chose science-related fields of

study, compared with 39% of young men. Girls are much less likely to consider a career in computer science, physics or engineering – key sectors in the knowledge

economy (OECD, 2015a). In the United States in 1983/84, 37% of computer science bachelor's degree graduates were women, but by 2010/11 the share had fallen to 18% (US Department of Education, 2012). In countries with data on tertiary education subject choice, the average female share of education majors was over 68%, compared with 25% in engineering, manufacturing and construction (**Figure 15**).

This disparity limits women's access to key professions. It also reduces the potential pool of talent for developing sustainable green innovation (UNESCO, 2016d).

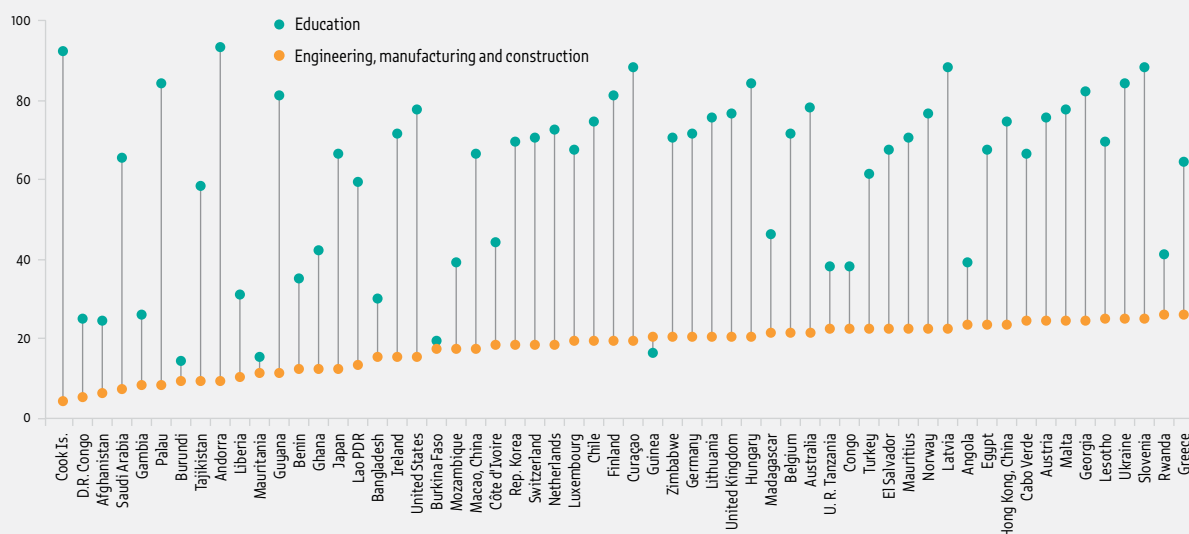
Stereotyped gender roles and expectations in school and at home partly explain educational and occupational segregation. Socialization processes, including poor career counselling, lack of role models, negative familial attitudes, perceived inability in mathematics and fear of being in the minority, may influence girls' willingness to choose specific disciplines.

Teachers can affect subject choice. Lessons can allow students to critically reflect on gendered norms. This in turn can help break occupational stereotypes and help address gendered segregation. Targeted initiatives can encourage more gender-equitable selection of school subjects such as science, mathematics and computing (**Box 2**).

FIGURE 15:

More women study education than engineering, manufacturing and construction in higher education

Female share in education and in engineering, manufacturing and construction at the tertiary level, 2014



Source: UIS database.

BOX 2

Initiatives for girls and women in STEM and STEAM

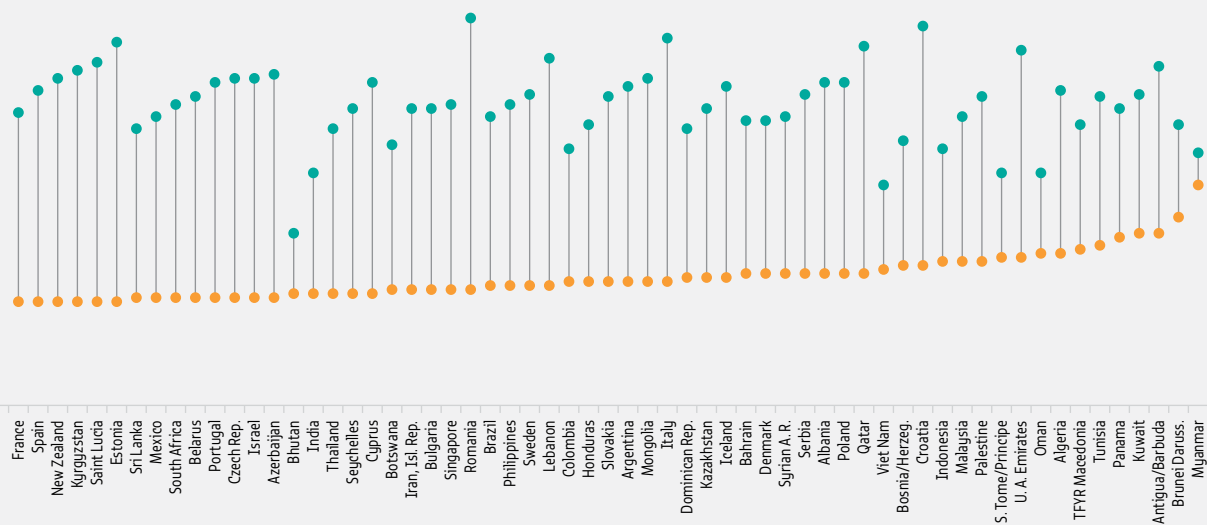
In recent decades, national initiatives have encouraged girls and women to take up science, technology, engineering and mathematics, known as the STEM subjects.

Launched in 1984, the Women in Science and Engineering campaign in the United Kingdom promotes engineering apprenticeship programmes, scholarships for women studying engineering, workshops on careers in construction and engineering, resources for teachers of STEM subjects in schools, and regional networking opportunities to help develop links between schools, universities and industry.

The TechWomen programme uses mentorship, knowledge exchange and networking to connect and support women in STEM from Africa, Central Asia and the Middle East. Participants engage in project-based mentorships at leading technology companies in the United States and are encouraged to inspire other girls and women in their communities to follow their ambitions. Since 2011, 333 women from 21 countries, including Algeria, Cameroon, Lebanon, Kazakhstan, Kenya and Zimbabwe, have participated.

In June 2016, the U.S. Mission to UNESCO and partners launched a comprehensive approach to 'STEAM' education, incorporating 'arts' (and design) in the acronym to encourage innovative cross-disciplinary skills and initiatives.

Sources: TechWomen (2016); WISE (2016); US National Commission for UNESCO (2016).



Policies can support women's employment

While skills and education can help reduce wage differences between women and men, additional policy interventions are required, particularly for those working in low paying, less secure jobs, often in the informal sector, who would benefit more from labour market regulations such as minimum wages and dismissal restrictions.

“ Only 28% of employed women worldwide are likely to receive cash maternity benefits ”

An increasing number of countries have laws and policies to help equalize women's status at work. Virtually all countries have maternity leave legislation of some sort; most also

prohibit maternity-linked discrimination, such as harassing or pressuring pregnant workers or young mothers to resign (ILO, 2014). Measures such as these improve women's employment opportunities and experiences, reduce child mortality and improve mothers' health (ILO, 2015). However, enforcement is an issue. Recent data show only 28% of employed women worldwide are effectively protected through cash maternity benefits (ILO, 2015). And for most women working in informal jobs, maternity leave legislation is meaningless.

The ILO recommends maternity protection along with public spending on work–family measures, which help advance women's opportunities for good quality work and address stereotypes of masculinity that undervalue men's involvement in caregiving (ILO, 2014). A comparison of Finland and Norway with Japan and the Republic of Korea showed that family-friendly policies and flexible work arrangements could enable more women and men to balance work and family lives, promote fertility and encourage continued female labour force participation (Kinoshita and Guo, 2015). Some countries, including Costa Rica, Ethiopia, Mexico and South Africa, support the work–family needs of the most vulnerable by providing public child care services (ILO, 2014).

Equal parental sharing of family responsibilities should also be supported by paternal leave. By 2013, some kind of child-related leave for men in paid work was provided in 78 of 167 countries. Payment for paternity leave, where it exists, is often low (ILO, 2014). Research from countries including Brazil, South Africa and the United Kingdom shows many men are reluctant to take paternity leave due to earnings loss or fear it could damage their careers (Levtov et al., 2015; Williams, 2013). Poor allowances for and uptake of paternity leave can be linked with persistent stereotypes of women as caregivers and men as breadwinners.

Sharing parental responsibilities can challenge the gendered division of child care, empower women economically and increase gender equality in the labour force by helping mothers enter or re-enter paid employment or complete their schooling (Ferrant et al., 2014; Morrell et al., 2012; UN Women, 2008).

Women and girls continue to do more unpaid and caregiving work

“ Women in many countries do at least twice as much unpaid work than men ”

Gendered patterns of unpaid domestic and care work run deep, and seem little affected by rising levels of women's education. A study examining increased school enrolment levels for

girls in Bangladesh and Malawi found no impact on the imbalance of girls' and boys' domestic work (Chisamya et al., 2012). Some see this imbalance as a root cause of women's inequality and unequal access to education, employment and public services (Razavi, 2016). Women in many countries, including Italy, Japan, Mexico and Pakistan, do at least twice as much unpaid work as men (**Figure 16**), and work longer hours than men in almost all countries if paid and unpaid work is combined (UN Women, 2015c).

Girls and women disproportionately bear the burden of household chores, including time-consuming tasks such as collecting water and firewood, even while in school. This affects girls' attendance and educational attainment, thus reducing equality in outcomes. In Ghana, research using four rounds of the Demographic and Health Survey (DHS) (1993/94 to 2008) found that halving water-fetching time increased school attendance by an average of 2.4 percentage points among girls aged 5 to 15, with a stronger impact in rural areas (Nauges and Strand, 2013).

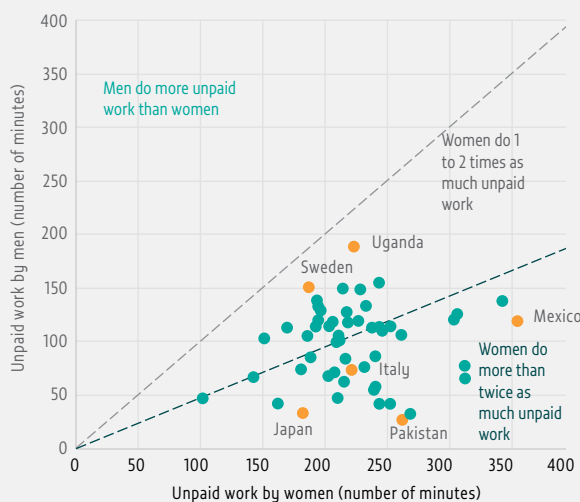
Some small-scale interventions have shown limited success in improving gender-sensitive attitudes and women's unpaid work balance. An adult literacy programme in rural Nepal increased recognition by family and community of women's unpaid work by engaging marginalized women and some men in collecting data on women's use of time. This helped achieve more equitable distribution of women's unpaid care work in some communities (Marphatia and Moussié, 2013).

Adolescent girls do more domestic work than boys, which can hinder their completion of secondary education. Overall, household survey data suggest between 40% to 80% of adolescents do some domestic chores (up to 28 hours a week) in the 17 low and middle countries with available data; the share of adolescent girls involved in domestic work is uniformly higher than boys'.³

FIGURE 16:

Women do more unpaid work than men

Time spent on unpaid work by women and men



Notes: Latest year of available data ranges from 1999 to 2013.
Source: United Nations (2015b).



CREDIT: V Makhorov/GEM Report

Decent work for all requires a lifelong learning perspective

Supportive policies can promote gender equality in the labour market and should be part of an integrated approach that enables gender equality in and through formal schooling and delivers lifelong learning opportunities for all.

Formal, non-formal and informal education throughout life can contribute to substantive gender equality by providing all women, girls, boys and men with timely, responsive and relevant learning opportunities. Good quality lifelong learning opportunities are especially important for girls and women and those who have been marginalized from formal schooling, who make up the global majority of those out of school and/or lacking basic literacy.

Gender gaps in basic proficiencies, such as numeracy, are much worse for older women. In OECD countries, gender gaps in numeracy are narrower among 16- to 24-year-olds than among older cohorts, even after adjusting for educational attainment. In Italy, the adjusted gender gap for women aged 46 to 65 is 11 points; among women aged 16 to 24, the gap vanishes (**Figure 17**).

Lifelong learning opportunities can fill the gaps of inadequate formal schooling through literacy and numeracy acquisition. Vocational training can provide skills for work, facilitate access to wage employment, improve women's status in work, and equalize pay and

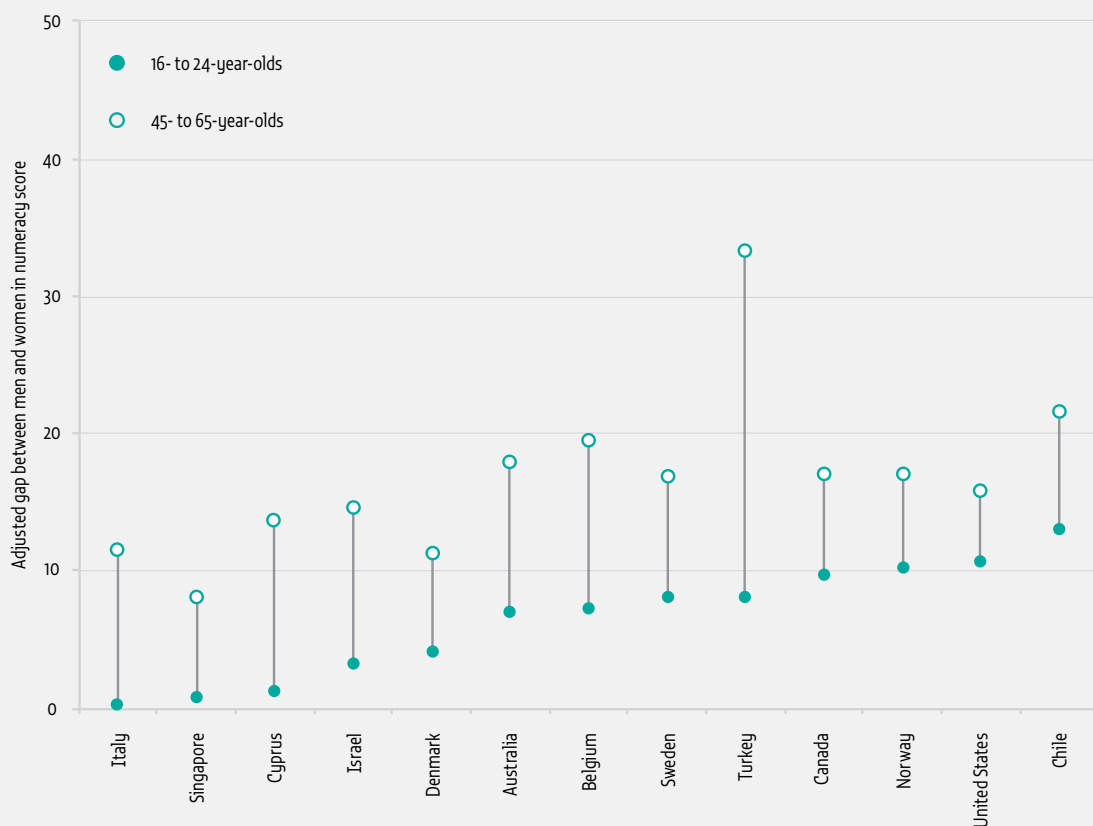
working conditions, e.g. by enabling women to obtain professional qualifications outside the formal education system. Lifelong learning can enhance women's financial autonomy, confidence and self-reliance, as well as their participation in other spheres of life (UNESCO, 2006).

Algeria's Literacy, Training and Employment for Women (AFIF) programme enables women to obtain professional qualifications in trades such as computing, sewing and hairdressing. It has trained and empowered more than 23,000 women aged 18 to 25, helping them with workplace integration or enabling them to generate their own income with government support (UNESCO, 2016c).

Bangladesh's TVET Reform Project, launched in 2006, provided training for women in skills for traditional and non-traditional work, including motorcycle servicing. It included a strategy for women with disabilities, with improved physical access to training institutions, which increased their self-confidence, employment and economic status. The reforms included the 2012 launch of the Bangladesh National Strategy for the Promotion of Gender Equality in Technical and Vocational Education and Training (TVET), which aimed to dismantle gender stereotypes and establish a supportive, gender-responsive environment (European Commission, 2014; ILO, 2013).



CREDIT: Nguyen Thanh Tuan/UNESCO

FIGURE 17:**Older women are more likely to have very poor numeracy skills***Adjusted gap between men and women in average numeracy score, by age group, 2012 or 2015*

Note: Belgium refers to Flanders only.

Source: OECD (2016c).

EDUCATION, GENDER AND PARTICIPATION

Education can help give girls and boys the skills they need to actively participate in society and play leadership roles in public life.

Education and lifelong learning help develop empowered, critical, mindful and competent children and adults of both sexes who can actively participate in and lead processes of social, behavioural and environmental transformation, at the individual and societal levels, that promote sustainable development.

GENDER EQUALITY IN LEADERSHIP AND DECISION-MAKING

Meaningfully and equitably engaging women and men as leaders and decision-makers in defining policies and processes at the global, national and local levels

significantly contributes to gender equality in society. It is crucial, in and of itself, for realizing gender equality in terms of equal opportunity, as is made explicit in target 5.5 of SDG 5 on gender equality and empowerment. It also builds better understanding of the differing needs and situations of women and men and is thus more likely to result in change that meets these needs (Brody, 2009; O'Neill and Domingo, 2016). Unfortunately, gender inequality in public governance is highly visible, reflecting and reinforcing existing norms on female participation in political and economic life. Limited female participation in governance structures where key policy issues and resource allocations are decided often negatively affects women's political, economic and social opportunities.

Men continue to dominate positions of authority

Across the world, men continue to dominate leadership and decision-making positions in political, economic and public life (**Figure 18**). Only 20% of members of lower or single legislative bodies, 19% of heads of state or government and 18% of ministers are women. Among the 43 countries with data, women hold less than 25% of seats on private company executive boards everywhere but Finland, Norway and Sweden; the share is below 2% in 8 countries of Eastern Asia and Western Asia (United Nations, 2015b). And women are often absent from or peripheral to decision-making in most cultures, social organizations and global institutions, in families and in major religions (Domingo et al., 2015).

In recent years, women's political representation has improved. The latest data show more women than ever elected to national parliaments; the global average has been increasing and as of 1 June 2016 was 22.7%, far from equality but an improvement over 13.8% in 2000 (Inter-Parliamentary Union, 2016).

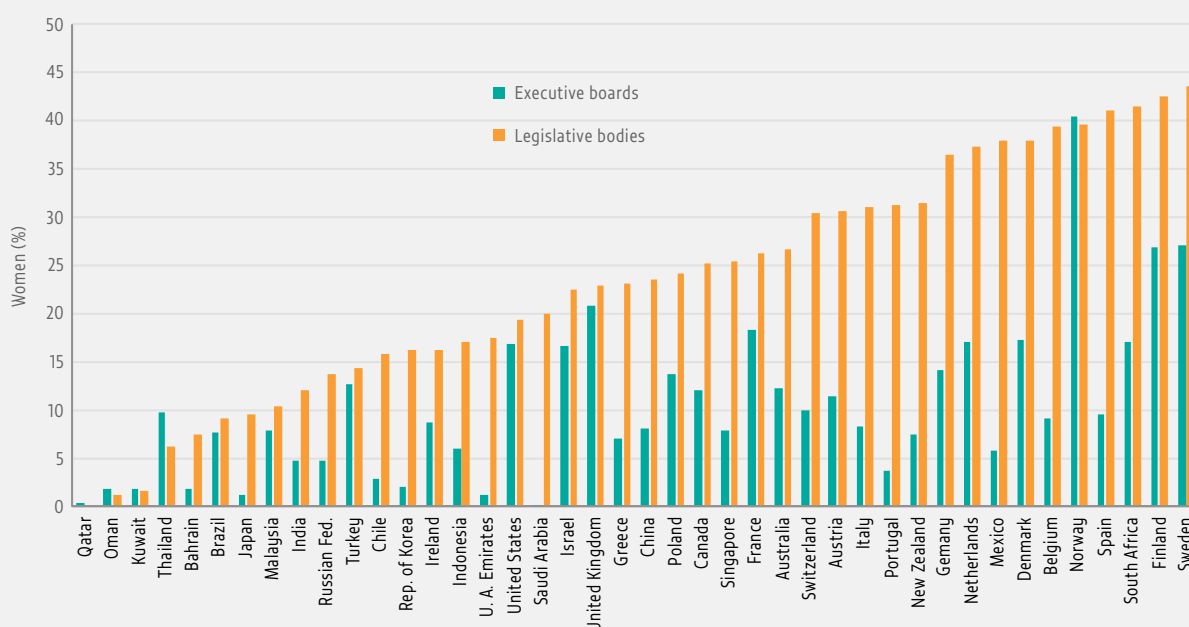
“ Women make up 20% of legislative bodies, 19% of heads of state or government and 18% of ministers ”

Formal requirements for women's representation in local government, such as reservation programmes in India and municipal representation in South Africa, can increase women's visibility (Deininger et al., 2011). But their

impact on underlying power dynamics is unclear (Beall, 2010), and representation does not automatically translate to real authority, influence or autonomy (O'Neill and Domingo, 2016), often more because of gendered prejudices than women's actual ability. Even when chosen for ministerial positions, women are more often given 'soft' policy areas such as education, health, gender and culture, rather than positions considered more influential, such as finance and defence (Krook and O'Brien, 2012).

FIGURE 18:

Few women hold leadership positions in corporations and governments in middle and high income countries
Percentage of women on executive boards and legislative bodies



Note: Data for female share in parliament are from 2015. Data for female share in executive boards come from sources between 2010 and 2014.
Source: United Nations (2015b).

Education is crucial but not enough to facilitate women's participation in leadership positions

From civil society to community councils to national office and international bodies, education and lifelong learning opportunities help give women skills needed to take on public leadership. Basic education can provide women with foundation skills such as literacy and can help foster confidence and communication skills. Further education and professional, technical and legal training are often required for women to be considered credible, influential, high level leaders and decision-makers (O'Neill and Domingo, 2016; Sperling and Winthrop, 2015). A study of women leaders at various government levels in eight countries, including Brazil, Egypt, Ghana and Palestine, found that those with higher education levels held office in the higher tiers of government (Tadros, 2014).

Increasing women's educational attainment, however, does not guarantee greater gender equality in political participation. In Malaysia, female enrolment has increased, particularly in tertiary education, but women's political participation has remained steady over the past 10 years (Salleh, 2012; World Bank, 2015). Some countries with historically high levels of girls' and women's education, such as the United Kingdom and United States, have fewer women in senior political posts than some countries with fewer girls in school (World Bank, 2011).

“
When leaders in India were female, girls' aspirations and advancement in education improved

Nevertheless, higher educational attainment, particularly secondary level and above, can increase knowledge and skills for participation in leadership positions and improve attitudes about gender

equality. Schools can also give young people valuable opportunities for active participation in leadership roles, such as girls' and boys' clubs and school committees (Lloyd, 2013; Sperling and Winthrop, 2015). Non-formal initiatives can provide similar opportunities (**Box 3**).

Greater gender equality in leadership and decision-making in public institutions must be actively demonstrated. When leaders in India are women,

BOX 3

Developing young leaders to promote gender equality through non-formal education

Non-formal education can offer young people opportunities to develop the leadership skills to promote gender equality in their peer groups and communities and throughout their lives.

The Action for Adolescent Girls programme (2013–2017) supports interventions in 12 countries, including Ethiopia, Guatemala, India, Niger, Yemen and Zambia, to develop local networks of young female leaders, training young women and older girls to be leaders within their communities and run programmes for younger adolescent girls. The programme delivers sexual and reproductive health education and life skills training combined with community mobilization and advocacy activities to promote girls' rights.

Two projects, the Power to Lead Alliance and Innovation through Sports: Promoting Leaders, Empowering Youth, reached 196,000 girls and 136,000 boys aged 10 to 14 in 8 countries: Bangladesh, Egypt, Honduras, India, Kenya, Malawi, the United Republic of Tanzania and Yemen. Implemented in 2008, the projects targeted girls but also engaged boys to change gendered attitudes and behaviours and enable participants to advocate for gender equality and girls' rights. Participants developed leadership skills, including decision-making and self-confidence, through engagement in community groups and activities such as sports, drama and environmental clubs. Final evaluations found that the majority of participants showed more appreciation of equal rights and more positive attitudes about gendered responsibilities and social norms.

In March 2016, at the 60th session of the Commission on the Status of Women at UN Headquarters in New York, a youth forum was held for the first time, recognizing that young women and men must be actively involved in implementing the 2030 Agenda and achieving gender equality.

Sources: Adolwa et al. (2012); UN Women (2016c); UNFPA (2014).

girls' aspirations and advancement in education improve. Across the 16 biggest states in India, a 10% increase in the number of women involved in district politics would lead to an increase of nearly 6% in the probability of primary school completion, with a larger impact on girls' education (Burchi, 2013).

Equal representation of women educators and education sector leaders is needed

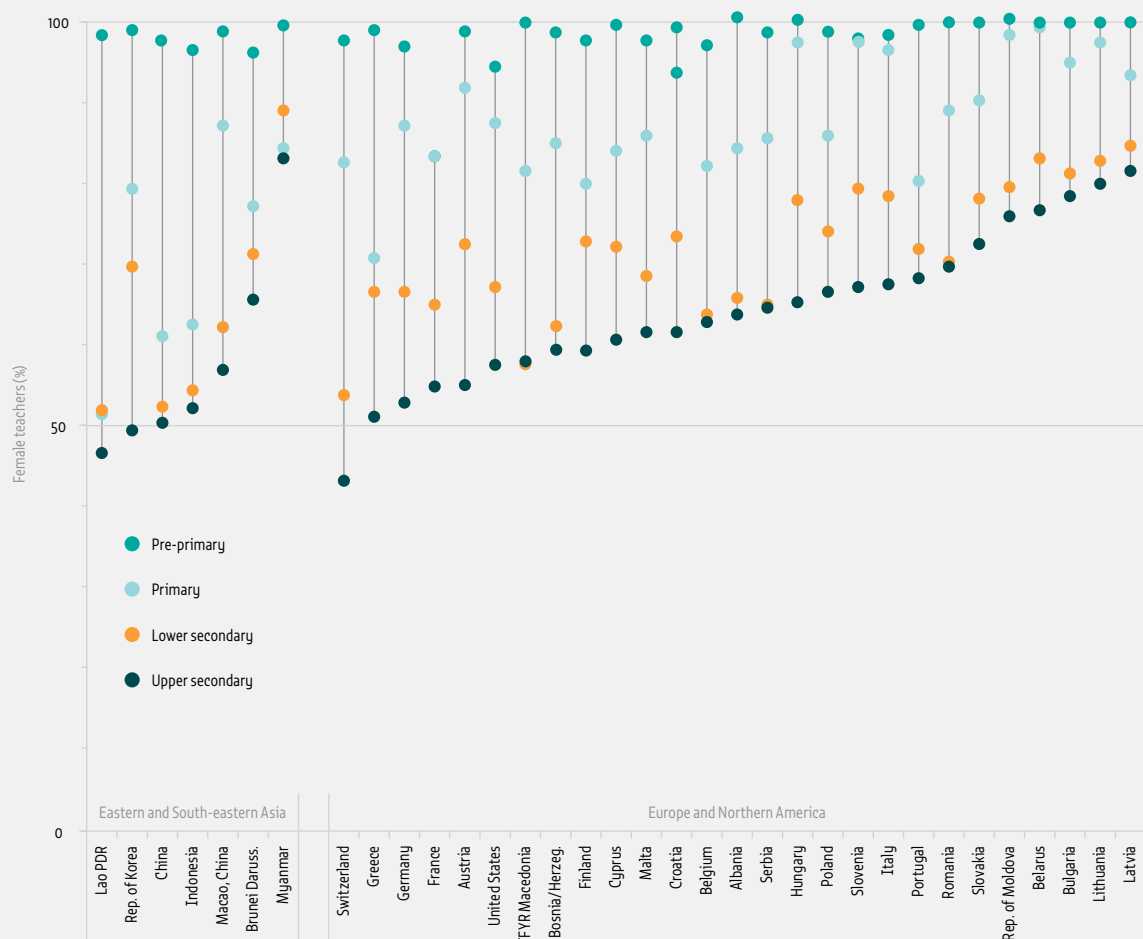
Studies confirm the importance of female role models in schools and professions. Female students in the United States were found to perform better in introductory mathematics and science courses if taught by women, and more likely to pursue careers in STEM fields (Carrell et al., 2009). Observing and interacting with female experts in these fields improved female students' attitudes about the fields (Stout et al., 2011).

The proportion of female teachers is an important indicator of progress towards gender equality, especially in lower income countries. In countries with more rigid

gender norms, female teachers can attract girls to school and improve their learning outcomes (UNESCO, 2015a). Yet the presence of female teachers is heavily unbalanced between levels of education and between countries (**Figure 19**). Globally, 94% of pre-primary teachers are female, compared with 64% in primary, 56% in lower secondary and 50% in upper secondary. At the upper secondary level, the female share in teaching staff ranges from a high of 83% in Myanmar to a low of 4% in Liberia.

FIGURE 19:

The share of women in teaching staff declines between the pre-primary level and upper secondary levels in most countries
Female share in teaching staff, by level of education, 2014



Source: UIS database.

“ In 2015, 69 education ministerial positions were occupied by women

”

in rich and poor countries alike (UNESCO, 2015b). In 2015, just 69 of 191 education ministerial positions were occupied by women (Inter-Parliamentary Union and UN Women, 2015).

Gender-equitable leadership is a major concern in education. Women continue to be under-represented in senior management positions, on school boards and in education ministries

Even in countries with a majority of female teachers, proportionately fewer women than men rise to school leadership positions (UNESCO, 2015b). In most countries with available data, the percentage of women in school management personnel is very high in pre-primary education but falls drastically at the primary, lower secondary and upper secondary levels – even in countries known to be more gender-equitable, such as Finland. The average gap in the female share in school management personnel between the pre-primary and upper secondary levels is 45 percentage points. In the Republic of Korea, women’s share in school management personnel declines from 93% in pre-primary to 23% in lower secondary and 9% in upper secondary in 2013 (**Figure 20**).

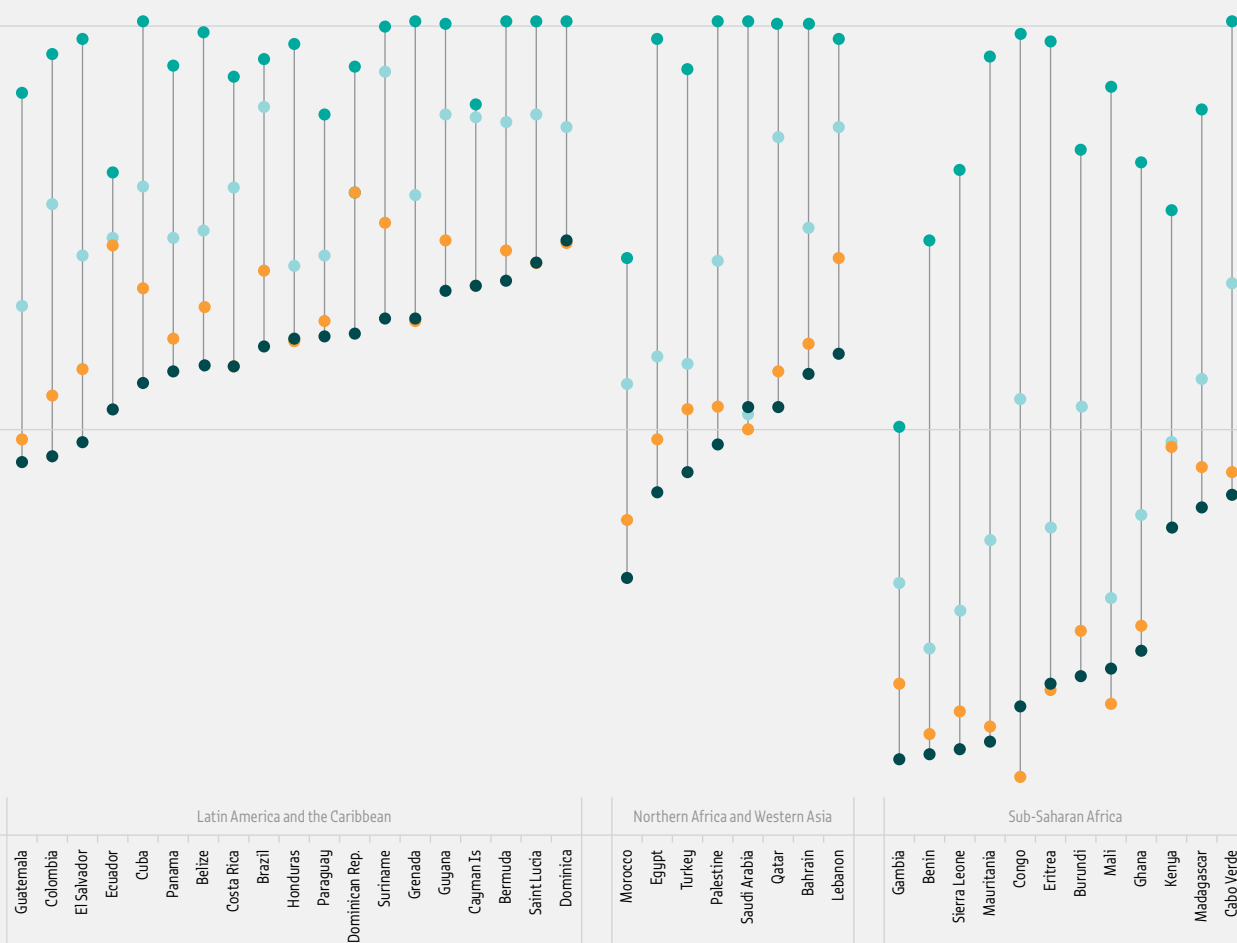
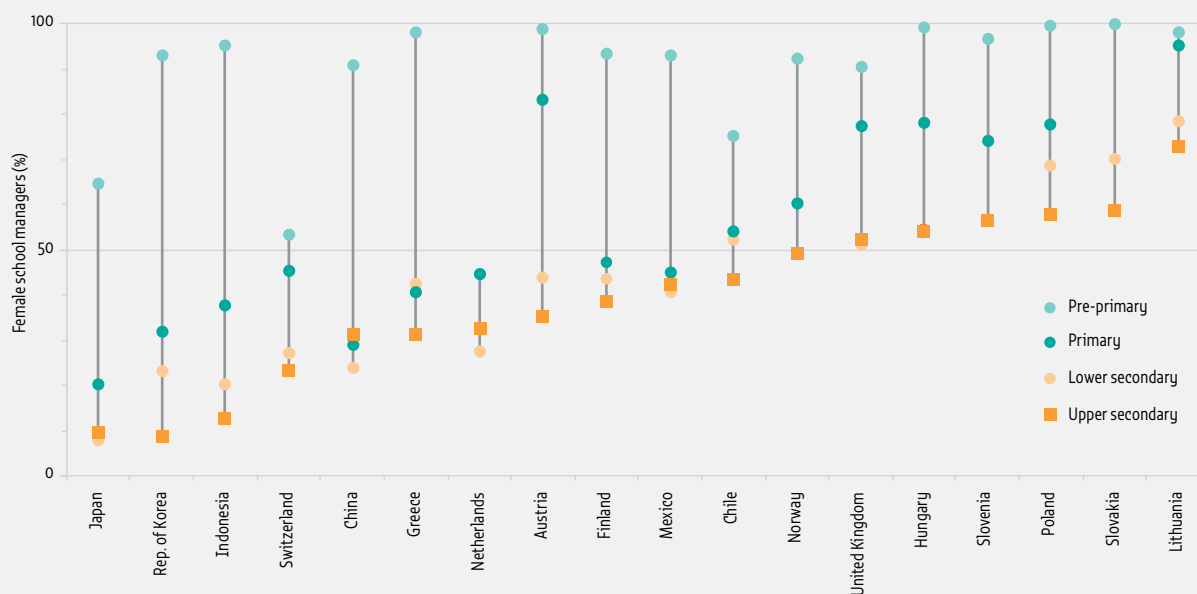


FIGURE 20:

Women hold fewer positions in school management over the course of the pre-primary to upper secondary education cycle
Female share of school management personnel, by level of education, selected countries, 2014



Note: Data from 1999 to 2013.
 Source: UIS database.

These trends have multiple implications for girls and boys and for teachers. The low proportion of male teachers at education's lower levels perpetuates stereotypical notions of caring for young children as women's work and contributes to children's understandings of gender. More male principals or administrators than male teachers at the primary level also suggests that men may be promoted to management positions more often than women (Kubacka, 2014).

Engaging men and boys is critical for challenging and changing gendered power structures

While the involvement of women in leadership and decision-making is crucial, men in positions of influence can and must challenge unequal gendered power dynamics that operate within and across sectors and in formal institutions as well as in communities, families, friendship groups and intimate relationships (MenEngage Alliance et al., 2015). Men and boys can speak out about gender-based violence and discrimination (UNESCO, 2015b) and help develop societies that are more inclusive and just.

Two useful examples come from sub-Saharan Africa. Founded in 2006, the Rwanda Men's Resource Centre promotes 'positive masculinity' and addresses gender issues. It has trained 3,000 local male and female elected officials from all levels of local government, who are influential in their communities, to reject violence (UN Women, 2013a). The MenEngage Africa Training Initiative, established in 2012, aims to develop a network of leaders and gender justice advocates to promote gender equality and human rights. It has delivered annual training sessions on gender, public health and human rights to 75 women and men in over 20 African countries, including activists, youth leaders, government officials and media advocates (Sonke Gender Justice, 2016).

GENDER EQUALITY IN POLITICAL PARTICIPATION

Understanding gender issues and gaining the skills to address them are necessary not only for leadership but also for participation in political processes in daily life, such as voting, obtaining access to services and claiming social and legal rights.

Education helps facilitate political participation and representation

Formal education can inform young people about key social and political processes and their right to participate in them. All education and lifelong learning are key for acquiring political knowledge.

Voting is a direct form of political participation, and can prevent and mitigate social tension by providing a democratic alternative to open protest or violence. It also signals societies that are democratic and representative, of women as well as all other groups. But in several young democracies, women are less likely to vote than men, which can be linked to the relatively recent attainment of women's suffrage, particularly in the Middle East. Poor education experiences, problems with access to information, and lack of awareness or understanding about voting's importance may also impede women's (and men's) ability to vote. Other obstacles to women's voting are having to stay home to care for family, cultural norms that restrict women's ability to travel to voting booths, and male family members choosing the candidate they vote for (Brody, 2009).

“ In Pakistan, women participating in a voter awareness campaign before the 2008 national elections were 12 percentage points more likely to vote

Non-formal education initiatives can help raise awareness and knowledge. In Pakistan, preceding the 2008 national election, a non-partisan, door-to-door voter awareness campaign gave women information on the importance of voting and the secrecy of the ballot.

Women who received this information were found to be 12 percentage points more likely to vote than those who did not, and significantly more likely to choose a

candidate independently (Giné and Mansuri, 2011). In Kenya, a merit scholarship programme targeting girls from politically marginalized ethnic groups led to their increased participation in secondary schooling and boosted their political knowledge (Friedman et al., 2011).

Inclusive participation is necessary in all social and political processes

Voting is an important form of political participation, but elections usually only occur every four or five years. Political engagement and participation must be facilitated not only at the time of elections. Education makes it more likely that discontented citizens will channel concerns through non-violent civil movements, such as protests, boycotts, strikes, rallies, political demonstrations, and social non-cooperation and resistance (Østby and Urdal, 2010; Shaykhutdinov, 2011).

From the Arab Spring to the Occupy movement and mass protests on the streets of Brazil and Turkey, people are increasingly using unarmed tactics to challenge oppressive, corrupt and unfair political and economic systems. Active, inclusive participation in political processes enables different voices to be heard and helps both women and men understand and peacefully engage with underlying causes of social problems at the local, national and global levels. It also helps make the electorate and polity more representative of society, holds governments to account more effectively and helps enforce constitutionally guaranteed rights (UNESCO, 2016d).

Another example of non-traditional political participation is in the work of Shack/Slum Dwellers International (SDI), a global network of community-based slum federations from 33 countries in Africa, Asia and Latin America. It promotes the rights of the urban poor through a participatory approach, engaging them in community and civic decision-making processes and seeking to improve women's participation. Women, seen as public decision-makers and agents of change, are encouraged to run community savings groups, which were used to advance women leaders, and get involved in enumerating and mapping informal settlements and making them more visible. Engagement in these processes gives women clear information on community priorities and needs and facilitates their interactions with the municipality (Bradlow, 2015; Patel and Mitlin, 2010).

INCLUSIVE PARTICIPATION IN ENVIRONMENTAL AWARENESS AND PRESERVATION

Achieving peaceful, stable and sustainable development requires addressing climate change and pressures on natural resources. Strategies to this end need cooperation and solidarity between women and men, girls and boys across societies, despite differences of context and ideology, as well as listening to and incorporating a diversity of knowledge and experiences.

Women must be active partners in building resilience and environmental sustainability

“ Research suggests that countries with higher female parliamentary representation are more likely to ratify international environmental treaties ”

Research suggests women express more concern than men for the environment and support more pro-environment policy, and that countries with higher female parliamentary representation are more likely to ratify international environmental treaties (UNDP, 2011,

2012). The UN Office for Disaster Risk Reduction (UNISDR) advocates gender mainstreaming in policy planning and implementation of disaster risk-reduction programmes, recognizing that women as well as men need to be active partners in preventing environmental degradation. In Viet Nam, the initiative Strengthening Institutional Capacity for Disaster Risk Management aims for women to be effectively represented and heard at all levels of disaster risk management, including in leadership positions. In 2014, over 200 women were trained to carry out community-based disaster risk assessments and contribute to local natural disaster prevention and control plans (UNDP, 2016).

Women, girls, boys and men possess important skills and capacity to prepare for, respond to and recover from crisis, and to lead change in building resilience and managing risk (HFA2, 2014; UNISDR, 2016). Meaningful participatory processes are needed to give voice to all community members and promote representative leadership. Wagucha, a grass-roots women's organization in Honduras, trains women leaders to collectively identify challenges for disaster risk reduction, develop sustainable management of natural resources and engage in political

advocacy. Using a collaborative approach, the women reduce communities' vulnerability by using local cultural knowledge and practices to respond to local ecological challenges. To date, 3,200 people in Honduras have directly benefited and 16,000 indirectly benefited from Wagucha's work (Huairou Commission, 2015).

Formal education is important to improve environmental knowledge and change behaviour

Formal education of good quality can help mitigate climate change and change behaviour. It can help people prepare for climate change and respond to its impact. Education can equip young people with skills and knowledge to understand and engage with environmental problems and the actions required to address them, such as recycling, energy conservation and water-use efficiency.

“ Countries with a higher proportion of women with at least secondary education, in particular, have significantly lower rates of disaster fatalities ”

Education can better prepare people for natural hazards. Information is largely lacking about the education characteristics of those affected by natural disasters, but where it is available, it suggests that more educated people tend to have more access to

socio-economic resources, greater risk awareness, a higher degree of preparation and appropriate responses, and smaller average losses when disaster strikes. A recent globally comprehensive analysis on disaster vulnerability found that countries with a higher proportion of women having at least secondary education had significantly lower rates of disaster fatalities (Lutz et al., 2014), possibly due to the role women play in enhancing communication and information exchange among family and community members (Muttarak and Pothisiri, 2013).

Engaging local communities improves environmental awareness

Formal education is not the only means of improving environmental awareness. Traditional, local and indigenous knowledge has proved valuable to early warning systems related to disasters, ecosystem functioning, and climate

change adaptation and resilience (Sheil et al., 2015). Women play a significant role in transmitting knowledge. Women of the Arakmbut group in the Peruvian Amazon pass knowledge to younger generations about conservation methods, sustainable resource use and warning signs from natural phenomena (Magni, 2016). Learning from indigenous communities is important to adapt to climate change, develop greater resilience to disasters and help prevent further planetary degradation.

Innovative projects draw on local and indigenous knowledge while increasing women's skills and participation in environmental initiatives (Centre for Environmental Education Australia, 2016). Since 2002, a campaign called Healthy Kids, Healthy Forests has trained over 14,000 women from 800 villages in Central America in skills related to processing Maya nuts, aiming to revive this ancient foodstuff, and giving information on the nuts' health benefits and the importance of forest conservation (Bovarnick et al., 2010). As of 2013, over 800 women from 64 countries across Africa, Asia, Latin America and the Middle East had been trained through the Barefoot College's Solar Engineer Programme, a six-month course that trains older rural women to use solar equipment to electrify their villages (Remedios and Rao, 2013). In Ethiopia, as part of a programme in the Tigray region, where deforestation and poor land and water management causes land degradation, disadvantaged women received training to improve skills in livestock production, forestry and soil conservation, which increased crop yields and enhanced water and food security (UNDP, 2013).

EDUCATION, GENDER AND WELL-BEING

Healthy lives, equitable relationships and peaceful, inclusive communities are essential for individual and societal well-being.

Equitable relationships in the private and public spheres can help promote gender equality in participation in key economic, political and social activities, as well as in access to essential services. This, in turn, improves individual and societal health and well-being.

GENDER-EQUITABLE RELATIONSHIPS ARE ESSENTIAL FOR INDIVIDUAL AND SOCIETAL HEALTH

Working with young people through education on gender equality, sexuality, and sexual and reproductive health is enormously beneficial for the well-being of individuals, families and communities. It can have intergenerational effects, with families and new parents passing on knowledge and skills to improve children's health and well-being.

Engaging adolescents in formal and non-formal education initiatives is crucial to promote equitable relationships

Engaging with adolescents and addressing their needs is crucial for gender equality. Adolescence is a period of risk and opportunity when young people are forming ideas and behaviour around gender (Peacock and Barker, 2014) and when pressure to engage in sexual activity and intimate relationships is heightened.

“ Better enforcement of early marriage laws would increase average years of schooling attained in sub-Saharan Africa by 39% ”

Decisions about education, marriage and pregnancy can result from combined underlying factors, such as poverty, discriminatory social norms, household composition, and accessibility and quality of education provision. Early

marriage and pregnancy limit adolescent girls' access to and continuation in education. Better enforcement of early marriage laws would result in increasing years of schooling in sub-Saharan Africa by 39% (Delprato et al., 2015). Instances of early marriage have decreased globally, but about 15 million girls annually are married before age 18 (UNICEF, 2014). Many live in the poorest households and rural areas of sub-Saharan Africa and Southern Asia. In 2012, 60% of women aged 15 to 19 in Niger were currently married (United Nations, 2015c).

On present trends, by 2030 almost 950 million women will have been married as children, up from more than 700 million today (UNICEF, 2014).

Formal education needs to impart gender-equitable attitudes towards relationships and sexual behaviour. Comprehensive sexuality education promotes gender sensitivity and equality. It provides culturally relevant, scientifically accurate and non-judgemental information, skills and values to enable young women and men to safely exercise their sexual and reproductive rights. In 2009, UNESCO, along with partners, published a global review of sexuality education, as well as technical guidance for use in school and extra-school initiatives (UNESCO, 2009). Recent evidence indicates that such education helps prevent negative sexual and reproductive health outcomes, promotes respectful, non-violent relationships and offers a platform for discussion of gender issues and human rights (Instituto Promundo et al., 2012).

The most effective sexuality education empowers young people to be agents in their lives and leaders in their communities, and emphasizes gender equality and human rights (Haberland and Rogow, 2015; UNFPA, 2014). Educating boys and men about sexual and reproductive health can ensure safer pregnancy and motherhood, including through access to better health care for pregnant partners (Kato-Wallace et al., 2016; UN Women, 2008).

Programmes combining multiple interventions can be particularly effective in changing young people's behaviour and attitudes (Barker et al., 2007). As discussed in the 2015 *Global Monitoring Report*, the Young Men as Equal Partners worked with communities to ensure young men and women engaged in responsible sexual behaviour by providing sexuality education and awareness training, as well as health services, counselling and condoms (UNESCO, 2015a).

Educated mothers and fathers improve family health and well-being

Education has large, enduring intergenerational benefits (UNESCO, 2014). The expansion of basic education has a significant cross-generational public health dimension, as the long-term relationship between maternal education and child health shows.

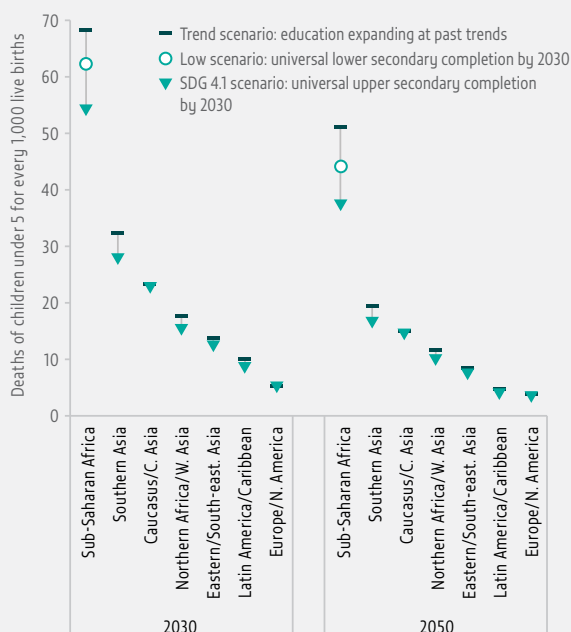
Education and support for new mothers and fathers are important for their own and their children's health and well-being. Programmes supporting mothers of young children can help lessen maternal depression, improve knowledge about child development and

“ Short-term breastfeeding education increased the average share of mothers exclusively breastfeeding by 43% on the day of birth and 90% during months 2 to 6 in a review of 66 studies ”

benefit children's short- and long-term health and nutrition, which in turn can improve schooling outcomes (UNESCO, 2015a). The World Health Organization (WHO) recommends exclusive breastfeeding for infants up to at least 6 months to achieve optimum growth. A systematic review

of 66 studies, including 27 in lower income countries, showed that short-term breastfeeding education increased the average share of mothers exclusively breastfeeding by 43% on the day of birth, 30% during the first month and 90% during months 2 to 6, with the largest increases in lower income countries (Haroon et al., 2013). More educated mothers are more likely to seek prenatal care, birth attendance by a trained medical practitioner, immunization and modern medical care for their young children – and are likelier to protect them from health risks by, for example, boiling water and avoiding unsafe food. Evidence from Guatemala, Mexico, Nepal, Venezuela and Zambia shows that literacy predicts mothers' ability to read printed health messages, comprehend radio messages, seek medical care and explain their child's condition to a health professional (LeVine and Rowe, 2009).

The GEM Report commissioned projections at the country level that confirm that universalizing secondary education for women would help save millions of children's lives by 2050, especially in sub-Saharan Africa. The analysis suggests that achieving universal lower secondary education for women of child-bearing age by 2030 would reduce the under-5 mortality rate from 68 deaths for every 1,000 live births to 62 by 2030 and from 51 deaths for every 1,000 live births to 44 by 2050. With an estimated 25 million children expected to be born annually in the region by 2050, this would be equivalent to between 300,000 and 350,000 fewer child deaths per year by 2050 (**Figure 21**).

FIGURE 21:**Increasing educational attainment for women of child-bearing age would save millions of children's lives***Under-5 mortality rates in the 'trend', 'low' and 'SDG 4.1' scenarios by region, 2030 and 2050*

Source: Barakat et al. (2016).

The presence of fathers and their positive involvement in family and child care responsibilities can be important for the welfare of children and mothers, as well as fathers themselves, who benefit from more nurturing relationships with their children. Research shows that fathers who take time to be involved in the process of childbirth before, during and after birth are more likely to be involved with their young children long term (Huerta et al., 2013; Levtoev et al., 2015), which can be important for child development and family welfare. Fatherhood courses and information campaigns can address men's uncertainty about the demands of parenthood and help them perceive the benefits of active participation in family life (MenEngage Alliance et al., 2015).

Launched in 2011, MenCare is a fatherhood campaign in 40 countries, a type of non-formal education that promotes men's active, equitable and non-violent involvement as fathers and caregivers through media campaigns, parenting groups and community mobilization (MenCare, 2016a). Fathers involved in

Nicaraguan initiatives report improved relationships with their children and partners, and increased participation in household work and child care (MenCare, 2016b). In South Africa, an evaluation of the Fatherhood Project, which encourages men's active caregiving and protection of children, reported that male participants spent more time with their children, were less violent towards their partners, and assumed more household responsibilities (Jain et al., 2011).

GENDER-EQUITABLE RELATIONSHIPS ARE ESSENTIAL FOR INDIVIDUAL WELL-BEING AND PEACEFUL SOCIETIES

Women and men alike benefit from living in peaceful societies where community relations, friendships and intimate relationships are based on equality and mutual respect and care rather than fear, domination and violence.

Interpersonal violence and armed conflict are serious barriers to gender equality

The costs of interpersonal violence and armed conflict are high. The death toll of disputes between individuals, including domestic violence, is estimated at nine times that of war and other such conflicts (Hoeffler and Fearon, 2014). Both women and men suffer from violence across the world but men overwhelmingly hold and use the means of violence (Connell, 2005). This is not to say all men are violent or all boys will grow up to be violent, but socially constructed notions of masculinity and male sexual entitlement play a central role in fuelling violence (Fulu et al., 2013; Wright, 2014).

Gender-based violence is a significant issue in poor and rich countries alike. Around one-third of women worldwide have experienced physical and/or sexual violence from an intimate partner, or sexual violence from a non-partner, at some point in their lives; less than 40% of them sought help at any time (United Nations, 2015b). Much gender-based violence occurs in the home, but the experience or fear of sexual harassment and other forms of sexual violence can curtail individual freedom in public spaces, including access to school and lifelong learning opportunities in urban and rural areas, particularly for girls and women (UN Women, 2015a).

With increasing urbanization, private and public spaces must be ensured as safe spaces for everyone. Neighbourhood characteristics, including access, safety

and proximity of public transport, education institutions and public spaces, can affect people's ability to go to school and work, gain access to essential services, participate in public life and enjoy leisure activities, all of which are central to well-being, health and future life chances. Urban planning should address gender concerns so that the needs of women, girls, boys and men are considered in all aspects of the development of public infrastructure and the economy (UN Habitat, 2012; UN Women, 2015a).

Sexual violence often accompanies armed conflicts, with devastating effects on adolescents' health and education. All 51 countries affected by conflict between 1987 and 2007 have reported sexual violence against adolescent girls (Bastick et al., 2007). Conflict situations can normalize intimate violence during and after conflict. Instability, migration and early experience or witnessing of such violence are strongly linked to men's likelihood of perpetrating it (Peacock and Barker, 2014; Wright, 2014).

Education, gender and violence intersect in multiple ways

The intersection between violence and education is complex: Education can incite violence or help prevent it; schools can be sites of violence; and conflict and localized violence can have a severely negative impact on children's education. Threats to personal safety on the way to and from school, as well as in school, obstruct girls' and boys' access to education. Deliberate destruction of education facilities has been a long-standing practice in conflicts. Attacks on schools increased 17-fold between 2000 and 2014, and girls' schools were targeted 3 times more often than boys' schools (National Consortium for the Study of Terrorism and Responses to Terrorism, 2016; Rose, 2016).

Many kinds of violence and conflict disrupt schooling. Across 18 sub-Saharan African countries, gender-based violence – as measured by intimate partner violence, early marriage and female genital mutilation – had a negative impact on girls' schooling (Koissy-Kpein, 2015).

Mothers' experiences with, and attitudes towards, gender-based violence matter for their children's education outcomes. A mother's acceptance of violence while arguing with her husband is associated with the daughter's lower school attendance. In Comoros, Mozambique and Sierra Leone, the probability of attending school was, respectively, 42%, 25% and 15% lower for girls whose mothers justified intimate

partner violence than for those whose mothers did not (Koissy-Kpein, 2015).

Evidence indicates that men with more rigid views about masculinity are more likely to use violence against women and girls, and to engage in such self-destructive behaviour as drug and alcohol abuse and driving at unsafe speeds (Kato-Wallace et al., 2016). When many young people are denied access to a good quality education, the resulting poverty, unemployment and hopelessness can lead boys and men to adopt risky lifestyles.

“ The World Health Organization estimates that globally in 2012, males accounted for 82% of all homicide victims ”

Analysis of 120 countries over 30 years found that countries with large numbers of young men were less likely to experience violent conflict if their populations had higher levels of education (Barakat

and Urdal, 2009). In Sierra Leone, young people who had no education were nine times as likely to join rebel groups as those with secondary education or above (Humphreys and Weinstein, 2008). In Brazil, rates of violence and violent death are particularly high for young men in urban areas, where lack of education and employment opportunities may lead them into gangs and the drugs trade (Imbusch et al., 2011). WHO estimates that globally in 2012, males accounted for 82% of all homicide victims, and men aged 15 to 29 were victims of homicide at a rate 6 times greater than women aged 15 to 39 (WHO, 2014).

School-related gender-based violence needs to be eliminated

Gender-based violence occurring in and around schools is serious and widespread. School-related violent acts or threats comprise psychological, physical and sexual violence. They occur on school premises but also to and from school, at home and online. Large-scale, cross-country, school-based surveys are increasingly used to collect data on school violence. Some countries have well-established monitoring mechanisms, but overall, consistent evidence on the global prevalence of school-related violence is lacking (Leach et al., 2012).

School-related gender-based violence severely undermines gender equality. It affects girls' and boys' education attendance and attainment in poor and rich countries (UNESCO, 2015d). For instance, bullied students in Botswana, Ghana and South Africa perform worse academically than non-bullied students (Kibriya et al., 2016). Experiences of such violence are frequently gendered: Boys are more likely to experience particular forms of psychological and physical abuse, such as bullying and corporal punishment, and to be involved in physical fights, whereas girls are more likely to experience sexual violence (Kibriya et al., 2016; Leach et al., 2012; UNESCO, 2015d).

The Global School-based Student Health Survey (GSHS) revealed that many adolescent girls and boys are victims of bullying. Between 2010 and 2012, the rates at which children reported being bullied in the past 30 days varied significantly, from 11% of boys and 15% of girls in Barbados to 69% of boys and 79% of girls in Samoa. Being bullied differs between countries in terms of gender. In Kuwait, Lebanon and Sudan, girls' reports of bullying are higher than boys' by about 17% to 19%, while in the Cook Islands and Algeria, boys' reports are higher by about 5% and 7% respectively (Figure 22).

“Across 96 countries, around 1 billion children ages 2 to 17 experienced some form of violence in the past year

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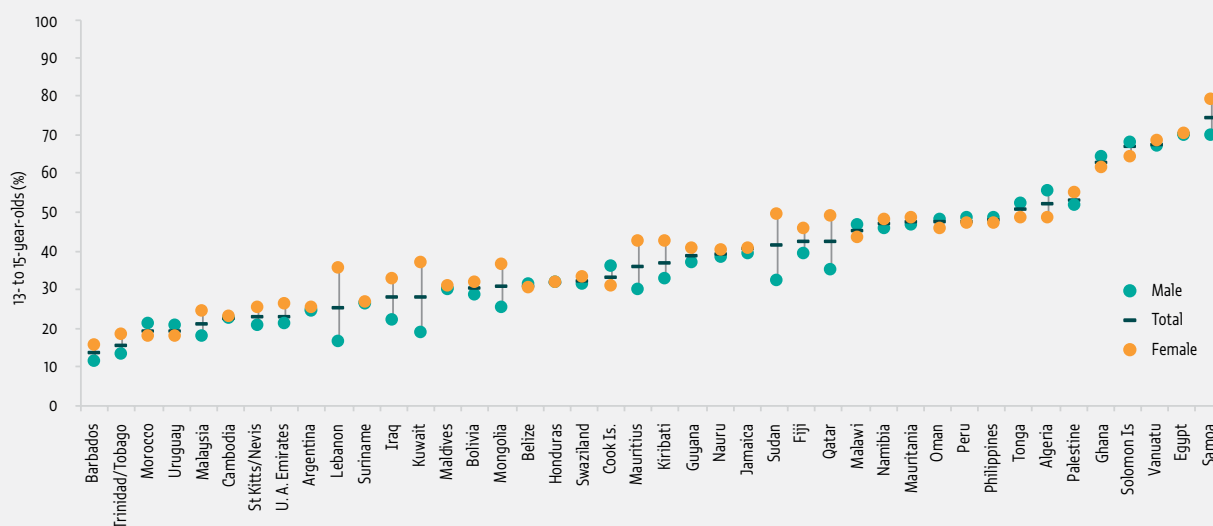
A review of international surveys of violence against children in the past year from 96 countries suggests as many as 1 billion children aged 2 to 17, or around half the world's population

of that age group, experienced some form of violence (Hillis et al., 2016). Sexual violence includes verbal and psychological harassment, sexual assault, rape, coercion, exploitation and discrimination in and around schools. It disproportionately affects girls and women, having a negative, destructive impact on their experiences of education and overall health and well-being. The Violence Against Children Survey reports data from 9 countries, and shows that between 27% and 38% of females experienced sexual violence before age 18 (Sommarin et al., 2014). In many countries, social media are creating new spaces for bullying and sexual harassment, including homophobic harassment (Parkes and Unterhalter, 2015),

FIGURE 22:

Many adolescent girls and boys across the world are victims of bullying

Percentage of 13- to 15-year-olds who reported having been bullied on one or more of the past 30 days, 2010–2012



Note: Data for Palestine refer to the West Bank.

Source: GEM Report team analysis (2016) based on 2010–2012 GSHS data.

in which girls and boys alike are both perpetrators and victims of violence and abuse. Recent reports suggest that many lesbian, gay, bisexual and transgender (LGBT) students experience homophobic and transphobic violence in schools, ranging from 16% in Nepal to 85% in the United States. Students who are not LGBT but do not conform to gender norms can also be targets. As a result, many students feel unsafe in their schools and are more likely to miss class or drop out (UNESCO, 2016e).

EDUCATIONAL CONTENT AND TEACHING AFFECT ATTITUDES AND BEHAVIOUR REGARDING GENDER EQUALITY

Messages on gender equality delivered through educational content can foster or undermine gender-equitable relationships (**Box 4**). In 10 countries of eastern and southern Africa, an in-depth review of curricula found that many overlooked gender-based and intimate-partner violence. And while many focused on human rights, few touched on issues of sexual rights or sexual diversity. The issue of child marriage was omitted or poorly addressed in many countries where it is most prevalent, including Kenya, Lesotho and Malawi (UNESCO and UNFPA, 2012).

“ In Malawi, 28% of almost 5,000 teachers of grades 1 to 3 were found not to use appropriate and gender-sensitive language

”

The perpetuation of gender inequality through schooling can be reduced through good quality pre-service and in-service gender-sensitive training in which teachers query their own gender-related attitudes,

perceptions and expectations of children, and learn ways to diversify their teaching and assessment styles. Classroom observations are necessary to monitor the extent to which pedagogic approaches are gender-responsive, yet these are often costly and not easy to generalize. In Malawi, as part of an early grade reading project, almost 5,000 teachers of grades 1 to 3 were observed in 11 districts in 2014; 28% were found not to use appropriate and gender-sensitive language. In the northern Nigerian states of Bauchi and Sokoto, 25% of teachers did not give equal opportunities to girls and boys to speak in class (RTI International, 2016).

Good quality gender-sensitive education can challenge violence and help build peaceful, inclusive societies

Higher overall levels of education may significantly lessen the likelihood of both perpetrating and experiencing intimate partner violence (Capaldi et al., 2012; Peacock and Barker, 2014; United Nations, 2015b). The International Men and Gender Equality Survey is a cross-national, comprehensive household questionnaire on men's attitudes and practices relating to gender equality, conducted in countries including Brazil, Croatia, India, Mali, Mexico and Rwanda. Men with secondary education were found to demonstrate more gender-equitable attitudes and practices; men with less education expressed discriminatory gender views and were more likely to be violent in the home (Barker et al., 2011; Promundo, 2016a).

The content and quality of education and knowledge provided are key to reducing violence, and formal and non-formal education can help women, girls, boys and men to understand, question and challenge gendered norms and behaviour that underpin forms of violence. Teachers and other educators can promote and validate notions of masculinity that are more caring, favour gender equality and challenge the validation of domination and violence (Wright, 2014). Students need to acquire useful skills for addressing circumstances that may lead to conflict or violence, such as expressing feelings non-violently. They also need support structures to help them take a stand against discriminatory trends and beliefs and manage the potential consequences of doing so (Plan International, 2011).

Voices against Violence, a co-educational non-formal curriculum designed for those aged 5 to 25, gives young people tools and knowledge to understand root causes of violence, advocate for the end of violence in communities, and learn how to get support if they experience violence. Using trained facilitators and youth leaders, the initiative aims to reach 800,000 young people across 27 countries in schools and communities, in partnership with youth organizations and governments (UN Women, 2013b, 2015d).

BOX 4

Assessing gender equality in curricula and textbooks

Gender-responsive teaching is guided by curriculum content, textbooks and other learning materials, which socialize children (Brugeilles and Cromer, 2009) and can be used in challenging gender stereotypes. Yet most curricula are silent about issues related to gender equality. A review of over 110 national curriculum framework documents for primary and secondary education in 78 countries⁴ for 2005–2015, conducted for the GEM Report, focused on five topics in target 4.7: human rights; gender equality; peace, non-violence and human security; sustainable development; and global citizenship/interconnectedness (IBE, 2016). The analysis found that less than 15% of the countries integrated key terms such as gender empowerment, gender parity or gender-sensitive, while half mentioned gender equality.

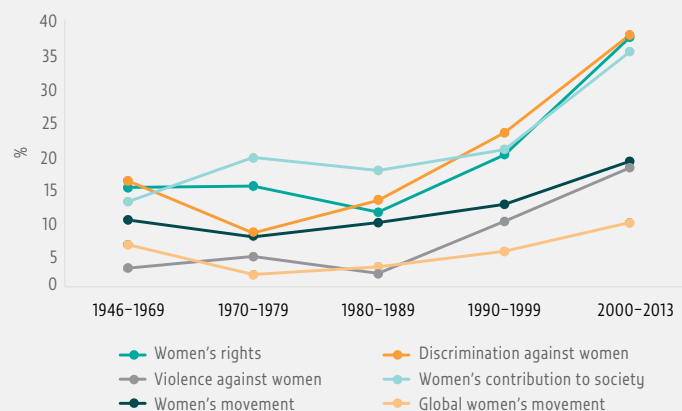
Analysis of content of secondary school textbooks in history, civics, social studies and geography⁵ suggest improvement in coverage of themes related to gender equality over time (Bromley et al., 2016). The proportion of textbooks mentioning women's rights increased from 15% over 1946–1969 to 37% over 2000–2013. The share referring to violence against women increased from 3% to 18% (Figure 23).

Source: Bromley et al. (2016).

FIGURE 23:

Some progress has been achieved in the extent to which textbooks include gender equality

Percentage of textbooks that include an explicit statement on women's rights



Notes: Sample sizes for each period: 54 textbooks over 1950–1959, 88 over 1960–1969, 108 over 1970–1979, 103 over 1980–1989, 131 over 1990–1999 and 219 over 2000–2011 and 2000–2013. The latest data sets on women's rights and discrimination are for 2000–2013; for the other statements, the data sets are for 2000–2011.

Source: Bromley et al. (2016).

Program H, a non-formal education programme, works with men aged 15 to 24 to challenge and transform gender-stereotypical attitudes and behaviour through group sessions and youth-led campaigns and activism. Launched in 2002, it operates in over 22 countries, has been adopted by health ministries in countries including Brazil, Chile, Croatia and Mexico, and has been implemented in over 25,000 schools in India. Young male participants report improved relationships, lower rates of sexual harassment and violence against women, and more gender-equitable attitudes towards domestic work and caregiving. In 2006, Program M was launched to work with women on similar issues. Both programmes promote critical reflection on sexual diversity and homophobia (Promundo, 2016b).

“ The likelihood of preventing conflict increases when gender equality is addressed in peacebuilding processes

Education can promote positive contributions to peacebuilding, access to justice and protection from violence, whether large scale or intimate. But achieving the peaceful societies

crucial to sustainable development requires leaders and citizens committed to gender equality. The likelihood of preventing conflict increases when gender equality is addressed in peacebuilding processes. Initiatives that address harmful forms of masculinity and promote non-violent forms that value respect and equality are needed; they should engage individuals and institutions at all levels, within and across sectors (Messerschmidt, 2010; Wright, 2014).

1. PIAAC defines six levels of proficiency: below level 1, and levels 1 through 5. In literacy, individuals proficient at level 1 can read brief texts on familiar topics and 'locate a single piece of information that is identical to or synonymous with the information given in the question or directive'. In numeracy, adults at level 1 can perform basic mathematical processes in common, concrete contexts, e.g. one-step or simple processes involving counting, sorting, basic arithmetic operations and understanding simple percentages (OECD, 2016c).
2. At the highest levels of numeracy, 4 and 5, adults understand a broad range of mathematical information that may be complex, abstract or found in unfamiliar contexts.
3. Child domestic work refers to household chores such as cooking, cleaning and caring for children, as well as collecting firewood and fetching water (MICS country reports). The data are available in the statistical tables of the 2016 Global Education Monitoring Report.
4. 18 countries in Latin America and the Caribbean, 16 in Europe and Northern America, 15 in sub-Saharan Africa, 11 in the Pacific, 7 in Eastern and South-eastern Asia, 6 in Southern Asia, 3 in Northern Africa and Western Asia, and 2 in the Caucasus and Central Asia.
5. The vast majority of the textbooks were drawn from the world's most extensive textbook collection at the Georg Eckert Institute for International Textbook Research in Germany.

LOOKING AHEAD

SIGNIFICANT IMPROVEMENT IS NEEDED IN HOW TO MEASURE AND MONITOR GENDER EQUALITY IN EDUCATION

This Gender Review has shown that gender parity ensuring similar numbers of girls and boys are in school at all levels of education is a work in progress, especially when it comes to the higher levels of education and to adult literacy and learning outcomes. One recent advance favouring achievement of gender parity is the adoption of the parity index by the Inter-agency and Expert Group on Sustainable Development Goals Indicators, extending the index's use beyond enrolment ratios to all education indicators, including learning outcomes. While improved coverage of parity indicators is an important step, data and evidence suggest the need for a more comprehensive set of indicators that document gender equality. Indeed, the Gender Review has also shown that gender equality in education remains ever elusive and thus must be monitored in the scope of SDG 4.

“ Systematic monitoring of gender norms, values and attitudes is needed as well as improving access to educational opportunities ”

Education for gender equality must be education of good quality that develops the knowledge and skills of all children, including the most marginalized, to support their agency and empowerment. Indicators therefore are required in six domains:

a) systematic monitoring of gender norms, values and attitudes is needed, as well as b) improved access

to educational opportunities. Also crucial is c) the promotion of gender equality by institutions outside the education system, through d) laws and policies in education systems, e) targeted resource distribution and f) better teaching and learning practices (Unterhalter, 2015).

Strong advocacy is needed for a measurement framework and a set of indicators that can track gender equality across all six domains (Table 6).

Improving understanding of practices inside the classroom is key and requires additional monitoring. More comprehensive data on gendered aspects of curricula, textbooks, assessments and teacher education are needed. Consensus is also required on what aspects of gender sensitivity in teaching practice should be included in classroom observation tools. Such efforts would benefit from being embedded within the framework of gender-responsive sector planning, as in the recent collaboration between the Global Partnership on Education and the United Nations Girls' Education Initiative (UNGEI).

Since gender equality in education is so closely related to broader challenges of gender equality, closer links are needed between those working on indicators on gender equality in education and those focusing on broader indicators of gender equality (UN Women, 2015b). Wider dissemination of findings and discussion with international bodies concerned with women's rights are needed. The Commission on the Status of Women would be an appropriate forum to discuss how to enhance links between SDG 5 and education reforms.

To reach consensus on how best to measure substantive gender equality in education, and to establish a process for collaborating and sharing practice, a working group on measurement methodology – including UNESCO Institute for Statistics, UNGEI and UN Women – should be formed, as well as a transnational network allowing groups concerned with gender equality in education to share strategies related to global progress on measurement. Such networks have been successful on other issues, such as domestic violence and HIV.

TABLE 6:
Potential indicators of gender inequality in education, by domain

Domain	Potential indicators
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	• Percentage of population aged 20 to 24 married before age 18 • Percentage of women aged 20 to 24 who had a live birth before age 15 to 18 • Percentage who agree with statement 'A university education is more important for a boy than for a girl' (e.g. World Values Survey) • Percentage who agree with statement 'If a wife burns the food, a husband is justified in hitting her' (e.g. DHS and MICS) • Degree of decision-making on family planning • Degree of decision-making on earnings and household expenditure • Labour force participation rate or employment rate • 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 • Whether the country is a signatory of CEDAW • Social Institutions and Gender Index results
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 • 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 • Gender parity in teacher education graduates by sector and level • Gender parity in teacher employment by sector and level • Gender parity in teacher pay by sector and level • Percentage of single-sex toilets • 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 • 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) with GEM Report team contribution.

ADVANCING GENDER EQUALITY IS KEY TO ACHIEVING SUSTAINABLE DEVELOPMENT FOR ALL

This Gender Review argues that achieving gender equality and empowering women and girls are integral – albeit challenging – facets of inclusive sustainable development, and that good quality education and lifelong learning are a crucial part of this process. They can equip people with capabilities and opportunities to participate fully and meaningfully in all dimensions of their lives – economic, political and social. But more than that, they can enable women and men, girls and boys to contribute to a society with greater equality.

And yet achieving gender equality and sustainable development requires addressing deep-rooted, long-standing gender discrimination and unequal power relations, including in education. It requires adequate and dedicated financial and other resources, political will and support structures to develop synergy, and collaboration within and across sectors, including education, health and environment, to address cross-cutting and intersectional issues.

Structural barriers that women and girls face across all goals and targets need to be understood and addressed to ensure that all people benefit equally from all interventions (Rosche, 2016). Data collection, monitoring and evaluation systems related to measuring gender equality in education need to be scaled up and made more effective and comprehensive. Communities, societies and institutions need to develop networks, share best practices, plan interventions and mobilize local, regional, national and global action.

The commitment of the 2030 Agenda to leave no one behind means that no SDG target can be met if gender equality and empowerment are not realized (Stuart and Woodroffe, 2016). Full integration of these issues in international development policy is long overdue. Creating a more inclusive, just and equitable world – the essence of sustainable development – means ensuring that all people, regardless of gender, can lead empowered and dignified lives.

The full bibliography can be found online at the following link:
<https://en.unesco.org/gem-report/sites/gem-report/files/2016GenderReviewReferences.pdf>

Education for people and planet:

CREATING SUSTAINABLE FUTURES FOR ALL

In September 2015, the international community adopted a new global development agenda, Transforming our World: the 2030 Agenda for Sustainable Development, which included 17 Sustainable Development Goals (SDGs) and 169 targets. This plan of action signals the beginning of a new era for gender equality, calling for the world to become more inclusive and equitable for the sake of social justice and the survival of our planet.

This is the fifth annual Gender Review published by the Global Education Monitoring Report (GEM Report), illustrating the progress of gender equity and equality in education, and remaining challenges, through evidence-based discussions. The 2016 Gender Review responds to the ambitious vision of the 2030 Agenda – to realize substantive gender equality and sustainable development – by highlighting the critical role of good quality education and lifelong learning.

The Gender Review first describes global and regional trends in achieving gender parity in primary, secondary, higher and adult education. It confirms the extent to which the poorest young women are the most likely to be lacking fundamental literacy skills. Using new analysis, it estimates that in low income countries, if current trends continue, only 33% of boys and 25% of girls will complete a full cycle of secondary education by the 2030 SDG deadline.

Gender equality in education is then reviewed against three central pillars of the 2030 Agenda: work and economic growth, leadership and participation, and relationships and well-being. In each of these pillars, gender inequality is reflected and perpetuated; education's role in countering or contributing to this is explored, along with formal and informal measures designed to address these challenges.

The Gender Review goes well beyond previous considerations of gender equality in and through education. It discusses the significant and transformative action needed to redress deeply embedded and complex gender inequality that impacts people within and beyond education and prevents the achievement of gender equality. The ability of society to reform and transform through this action will affect whether the empowerment of women and girls and, ultimately, sustainable development can be realized.

The change needed in order to address deep-rooted gender inequality must occur not only within the education sector but also through collaborative cross-sector initiatives. Substantive changes will require all parties to engage with, listen to and meet the needs of women, men, girls and boys.

The GEM Report is an editorially independent, evidence-based publication that serves as an indispensable tool for governments, researchers, education and development specialists, media and students. Previously known as the EFA Global Monitoring Report, it has assessed education progress in over 200 countries and territories on an almost annual basis since 2002.

