Girls’ performance in mathematics now equal to boys (UNESCO report)

Paris, 27 April – In mathematics, the gender gap favouring boys in early grades gradually disappears, according to a new publication by UNESCO’s Global Education Monitoring Report. The report calls for us to think harder about gender inequality and the barriers that still hold girls back from realising their potential.

Deepening the debate on those still left behind, an annual UNESCO gender report, analysed data from 120 countries in primary and secondary education to offer a global picture. The findings show that in the early years, boys perform better than girls in mathematics but, this gender gap disappears later.

This research confirms that the gender gap in learning has closed even in the poorest countries. And in some countries, the gap is now reversed. For example, by grade 8, the gap is in favour of girls in mathematics by 7 percentage points in Malaysia, by 3 points in Cambodia, by 1.7 points in Congo and by 1.4 points in the Philippines.

However, biases and stereotypes are still likely to affect learning outcomes. Even though girls catch up in mathematics in upper primary and secondary education, boys are far more likely to be overrepresented among the highest performers in mathematics in all countries.

In middle- and high-income countries, girls in secondary school are scoring significantly higher in science. Despite this advantage, girls are still less likely to opt for scientific careers, indicating that gender biases could still be obstacles to the pursuit of further education in the science, technology, engineering and mathematics (STEM) fields.

Girls outperform boys in reading

While girls perform well in mathematics and science, they perform even better in reading. More girls achieve minimum proficiency in reading than boys. The largest gap in primary education is in Saudi Arabia, where 77% of girls but only 51% of boys in grade 4 achieve minimum proficiency in reading.

In Thailand, girls outperform boys in reading by 18 percentage points, in the Dominican Republic by 11 points and in Morocco by 10 points. Even in countries where girls and boys are at the same level in reading in the early grades, as in Lithuania and Norway, the gap in favour of girls rises to roughly 15 percentage points by age 15.

“Girls are demonstrating how well they can do in school when they have access to education. But many, and particularly the most disadvantaged, are not getting the chance to learn at all. We shouldn’t be afraid of this potential. We should feed it and watch it grow. For example, it’s heartbreaking that most girls in Afghanistan do not have the opportunity to show the world their skills,” said Malala Yousafzai, co-founder of Malala Fund.

“Although more data is needed, recent releases have helped paint an almost global picture of gender gaps in learning outcomes right before the pandemic. Girls are doing better than boys in reading and in science and are catching up in mathematics. But they are still far less likely to be top performers in mathematics because of continuing biases and stereotypes. We need gender equality in learning and ensure that every learner fulfils their potential,” said Manos Antoninis, Director of UNESCO’s Global Education Monitoring Report.
Notes to editors:

The researchers examined studies by the Latin-American Laboratory for Assessment of the Quality of Education (LLECE), Programme D’Analyse Des Systèmes Educatifs de la CONFEMEN (PASEC), Southeast Asia Primary Learning Metrics (SEA-PLM) and Trends in International Mathematics and Science Study (TIMSS) surveys.

Most of these data have been released in the last 18 months but refer to the situation just before the pandemic struck. We know that learning outcomes were severely affected in those countries that closed schools for long periods and were unable to offer remote learning opportunities to the majority of their students. Comparable learning assessments capturing the situation post-COVID will not start being published for another year and even then, mainly for relatively wealthier countries that offered learning continuity. It will take some time before we can have a truly global picture on the long-term impact of the pandemic, including its gender impact.

****

Please click here to access the full report and the recommendations.

Media Contacts

- Kate Redman, UNESCO GEM Report, +33 671786234, k.redman@unesco.org
- Gina Dafalia, UNESCO GEM Report, +44 7375318760, d.dafalia@unesco.org

**

About UNESCO’s GEM Report

The Global Education Monitoring Report (GEM Report) is developed by an independent team and published by UNESCO. It has the official mandate of monitoring progress in meeting the Sustainable Development Goal on education, SDG 4.