



The Intersection of Gender, Education and Technology

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Online experiences and opportunities are critical for children's and young people's development across a range of areas. These include engagement in online education, both formal and information learning, access to critical information and support for health and well-being, participation in creative and cultural practices, civic engagement and expression of ideas and opinions, leisure and connecting with peers, and search for employment, career information and entrepreneurship opportunities. Over 90% of jobs worldwide have a digital component, making digital literacy and access to technology essential for employability and civic engagement.¹

The *gender digital divide* describes the ways in which gender inequality in the physical world is replicated in the digital world. This translates into large gaps in women and girls' digital adoption, access, and meaningful use compared to men and boys. Conflict,² instability³ and the COVID-19 pandemic⁴ have exacerbated the gender digital divide in many regions of the world.

The COVID-19 pandemic led to a surge in the use of digital technologies in education. However, harmful gendered social norms that exist in the "offline" world have impacted women's and girls' access to and potential benefits of new digital realities. Lack of confidence and lower levels of digital literacy reduce their use and control over technology. This leaves women and girls more vulnerable to online risks than men and boys. Education is key to reducing the gender digital divide, but to date, most research has focused on adult women, leaving little information on girls' digital realities. More research and data are needed to effectively design educational programs and initiatives that work to close the gender digital divide for girls.

Fast Facts

- Less than 50% of the population of the so-called Global South nations has internet access, compared with 90% in the most advanced regions or countries from the Global North.⁵
- Even when women have the same levels of education, income, literacy, and employment as men, they are 7% less likely to own a mobile phone and 15% less likely to use mobile internet.⁶
- When it comes to digital skills, women are less likely than men to have advanced digital skills. In the workplace, female workers make up an estimated 26% of workers in data and artificial intelligence roles, 15% of workers in engineering roles, and 12% of workers in cloud computing roles.⁷
- Gender stereotypes that STEM careers are for boys negatively affect girls' interest, aspirations, engagement, and achievement in STEM.⁸
- The gender digital divide community of knowledge is overwhelmingly focused on women (above 18 years), leaving a significant knowledge gap on the digital realities for today's generation of girls.⁹

Recommendations

A) *Create gender-responsive learning environments.* Whether virtual or in-person, classrooms and learning environments must be freed from harmful gender stereotypes and norms that discriminate against girls.

B) *Prioritize digital connectivity and affordable digital services for girls particularly in hard to reach or conflict areas.* Girls must be given the opportunity to access world-class digital learning solutions and have the tools to engage with digital technologies.

C) *Fund digital skills training and access to technology for young girls.* Providing community-based digital skills training for in-school and out-of-school girls using community groups or STEM clubs can boost digital literacy and engagement in STEM.

D) *Increase representation of positive female role models in technology.* Girls' interest and confidence in their ambition increases when exposed to positive role models, such as female teachers and STEM professionals.

Suggested Readings

GSMA. 2022. *The Mobile Gender Gap Report 2022.*

Tyers-Chowdhury, A. and Binder, G. 2021. *What We Know about the Gender Digital Divide for Girls: A Literature Review.* Girls. UNICEF.

UNESCO. 2021. *Advancing Girls Education and Gender Equality through Digital Learning.*

¹ United Nations. 2018. *United Nations E-Government Survey 2022: Gearing E-Government to Support Transformation toward Sustainable and Resilient Societies.* Available at: <https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2022>

² INEE. 2019. *Guidance Note: Gender Equality in and through Education.* Available at: <https://www.ungei.org/what-we-do/gender-education-emergencies>

³ UNESCO. 2021. *Advancing Girls Education and Gender Equality through Digital Learning.* Available at: <https://www.unicef.org/documents/advancing-girls-education-and-gender-equality-through-digital-learning>

⁴ Tyers-Chowdhury, A. and Binder, G. 2021. *What We Know about the Gender Digital Divide for Girls: A Literature Review.* Girls. UNICEF. Available at: <https://www.unicef.org/eap/media/8311/file/What%20we%20know%20about%20the%20gender%20digital%20divide%20for%20girls:%20A%20literature%20review.pdf>.

⁵ UNICEF. 2017. *State of the World's Children 2017: Children in a Digital World.* Available at <https://www.unicef.org/reports/state-worlds-children-2017>

⁶ GSMA. 2022. *The Mobile Gender Gap Report 2022.* https://www.gsma.com/r/wp-content/uploads/2022/06/The-Mobile-Gender-Gap-Report-2022.pdf?utm_source=website&utm_medium=download-button&utm_campaign=gender-gap-2022

⁷ McKinsey Global Institute. 2019. *The Future of Women at Work: Transitions in the Age of Automation.* <https://www.mckinsey.com/~media/mckinsey/featured%20insights/gender%20equality/the%20future%20of%20women%20at%20work%20transitions%20in%20the%20age%20of%20automation/mgi-the-future-of-women-at-work-report-july-2019.pdf>

⁸ EIGE. 2019. *Gender Equality and Youth: Opportunities and Risks of Digitalisation.* Available at: <https://eige.europa.eu/publications/gender-equalityand-youth-opportunities-andrisks-digitalisation>.

⁹ GSMA. 2022. *The Mobile Gender Gap Report 2022.* Available at: https://www.gsma.com/r/wp-content/uploads/2022/06/The-Mobile-Gender-Gap-Report-2022.pdf?utm_source=website&utm_medium=download-button&utm_campaign=gender-gap-2022