

WOMEN IN Education, STEAM, Digital and AI

WHY THIS MATTERS

Digital transformation is reshaping education, employment, public life, and democratic participation. Yet women and girls, especially those in rural, low-income, disabled, and otherwise marginalized communities, remain disproportionately excluded from digital access, STEAM pathways, and AI governance.

Closing the gender digital divide is an economic acceleration strategy for G20 economies, not a peripheral inclusion agenda. Expanding women's access to digital tools, skills, and high-growth technology pathways strengthens workforce participation, productivity, innovation, and the return on digital investment.

AI capacity is increasingly central to economic competitiveness, but women remain significantly underrepresented in AI research, development, invention, and technology leadership. Without deliberate action, G20 economies risk embedding existing gender gaps into the technologies, labor markets, and institutions shaping future growth.



W20
Women20 for the G20

ADVOCACY BRIEF
**Education, STEAM,
Digital and AI**

THE CHALLENGE

■ Underinvestment:

Gender-transformative digital inclusion and STEAM-to-employment programs remain underfunded, especially for rural, underserved, and marginalized women and girls.

■ Governance gaps:

National AI strategies often lack gender impact assessments, inclusive data requirements, and safeguards against algorithmic bias.

■ Unequal access:

Affordable devices, connectivity, digital skills, and digital public infrastructure are not reaching women and girls at the same rate as men.

■ Leaking pipeline:

Women remain a minority across many STEM/STEAM pathways and are underrepresented in AI research, patenting, and technology leadership.

■ Data gaps:

Gender-disaggregated data on AI harms, digital safety, participation, and women's leadership in AI governance remains limited, making progress difficult to track and accountability harder to enforce.

G20 governments can address these gaps through three coordinated actions:
invest in access and pathways, measure participation and impact, and strengthen AI and digital governance.

THE RECOMMENDATIONS



1. INVEST in universal digital access and STEAM-to-employment pathways for women and girls

Fund gender-transformative programs that expand affordable access to devices, data, connectivity, and digital public infrastructure, especially for rural, underserved, and marginalized communities. Build pathways into high-growth fields including AI, cybersecurity, data science, and digital innovation through scholarships, mentorship, internships, and safe, gender-responsive learning environments from early childhood through tertiary education.

2. ESTABLISH a Global AI and Gender Equality Index and accountability framework

Track women's participation in AI research, development, invention, leadership, and governance; require gender-representative and intersectional data; and assess gender impacts across the AI lifecycle. Use the Index to benchmark progress, strengthen accountability, and improve competitiveness across G20 countries.

3. ADOPT rights-based, gender-responsive, and future-ready AI and digital governance

Require governments, platforms, and AI developers to prevent, detect, and respond to technology-facilitated gender-based violence, deepfakes, and gendered disinformation. Adopt enforceable platform accountability standards, gender and human rights impact assessments for high-risk AI, and regular audit and oversight mechanisms.

THE CASE IN NUMBERS

- **200 million fewer women than men** are online worldwide; smartphone ownership gap of 13% and mobile ownership gap of 7% in low- and middle-income countries. (GSMA Mobile Gender Gap Report, 2026)
- **Women represent 17.7% of inventors** named in international patent (PCT) applications; women were involved in 23% of applications filed 1999-2020. (WIPO, 2023)
- **No G20 country approaches gender parity among AI researchers and developers**; leading countries remain near or below one-third female representation. (Stanford HAI AI Index, 2026)
- **Women made up 19.5% of ICT specialists** employed in the EU in 2024. (Eurostat)
- **Digital exclusion has already cost the global economy \$1.2 trillion**, with a further \$511 billion at risk without urgent action. (Global Digital Inclusion Partnership, 2026)

The W20 Education, STEAM, Digital and AI full report, in the **W20 Guidebook for Policymakers**, presents additional recommendations, each accompanied by measurable targets, implementation metrics, and illustrative case studies to support adaptation and implementation across diverse national contexts. www.Women20.org

