

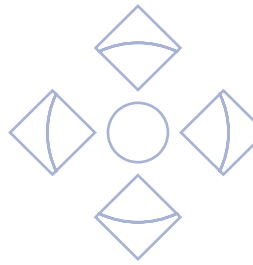
Closing the gender digital learning divide

How policymakers can address gender-based inequality in digital learning strategies for girls



Introduction

Digital learning is a critical tool in delivering quality education for every girl.



It can allow girls to build agency, learn independently and access networks and information. It has the potential to reach students most at risk of being left behind and allow girls to continue learning during interruptions to in-person education.¹

During the COVID-19 pandemic, the accelerated and unplanned shift to emergency remote learning — often reliant on digital technology — reinforced the importance of digital learning and the opportunity it presents to students, teachers and education systems. Global leaders and education researchers now recognise digital learning can be a positive strategy to support — though not replace — in-person learning.^{2 3 4}

However, not all adolescent girls around the world will be able to access the opportunity digital learning presents until policymakers address gender-based inequality in education. Inequality in learning opportunities is persistent; research shows pervasive discrimination in girls' access to learning opportunities in subjects like STEM as well as female teachers' underrepresentation in secondary education and leadership roles in schools.^{5 6} Similarly — and despite global standards to remove stereotypes and bias from learning content — progress is unacceptably slow, and many teaching and learning approaches continue to reinforce discriminatory attitudes.^{7 8} The lack of action by governments to ensure girls' safety also enables high rates of sexual and gender-based abuse in and to school.^{9 10}

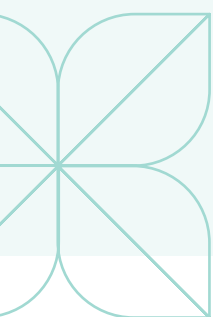


The pandemic exposed how discriminatory gender norms in homes and communities restrict girls' access to remote forms of learning. For example, in India a higher proportion of girls reported being engaged in chores and care work (71%) compared to boys (38%); at the same time fewer girls (46%) than boys (56%) reported spending any time on learning.¹¹ These household pressures exacerbated pre-existing patterns of inequality, preventing adolescent girls from poorer households, those in remote or rural areas and those living with disabilities in particular from learning.¹²

“If another COVID-19 were to happen, I would want something better and more sustainable. The communities that are worst affected by crises like COVID and flooding are often the most vulnerable. There are low digital literacy levels, devices aren’t affordable and there’s no infrastructure. The sudden shift to digital learning adds an extra burden for girls to access education.”

—
Arooj Khalid

Malala Fund Fellow, Pakistan



Recognising that forms of inequality — including discriminatory gender norms — limit students’ ability to take part in digital learning, governments and world leaders are beginning to concentrate explicitly on *inclusive* digital learning. The 2022 U.N. Transforming Education Summit (TES) and preparations for the Global Digital Compact indicate leaders’ increased focus on the equitable, sustained and safe access to quality learning through digital devices.^{13 14 15} But they must do more.

This year, world leaders and governments have an opportunity to make digital learning inclusive and accessible for every girl by taking action at the 67th U.N. Commission on the Status of Women and the 2023 SDG Summit as well as in their preparations for the 2024 Summit of the Future.¹⁶ Instead of primarily focusing on increasing access to devices or platforms, policymakers need to

take bolder action to *ensure* all girls can take part in digital learning. They need to provide space for adolescent girls to meaningfully co-design digital learning strategies and interventions and increase investments in quality, gender-responsive education systems.

This paper proposes a girl-centred framework to help leaders better understand how social norms affect girls’ access and use of quality digital learning. It offers recommendations that policymakers can use at global events this year to address inequalities in digital education.¹⁷ By using this framework and following these recommendations, governments can ensure all girls are able to realise the potential of digital learning and fully participate in in-person and digital education.

What is digital learning?

Malala Fund defines digital learning as curriculum-based learning delivered through digital devices — including computers, phones and tablets — predominantly in schools, homes and other learning spaces.

While in the past policymakers in low- and middle-income countries have focused on digital learning as part of an emergency response, most now see that digital learning is an important strategy to complement in-person formal education.^{18 19} Digital learning can also be an effective strategy for informal learning where governments or regimes fail in education provision, such as the use of “underground schools” in Afghanistan following the Taliban takeover or in refugee-hosting countries such as Syria and Lebanon.

Discussions on digital learning are interconnected with debates around digital literacy — the learning of digital skills and citizenship — and digital ed tech.²⁰



The gender digital learning divide

Gender norms shape expectations and opportunities for girls to learn and access technology in school and at home.

Gender norms fundamentally shape the purpose and design of digital learning devices, platforms and policies — as well as **digital access**, use, ownership and agency.^{21 22 23} In some contexts, girls' use of digital devices or access to the internet fundamentally opposes prevailing social norms.^{24 25} Traditional leaders in some contexts can also perceive access to the internet as a risk to the social order.²⁶ Girls' access to mobile devices — the most commonly available modality for digital learning in low- and middle-income countries — significantly differs from boys' access.²⁷ Girls are less likely

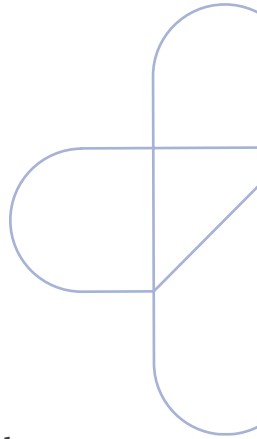
“Learning through digital becomes more and more important as you get higher in education — at university it's essential. But there's such a lack of investment in digital literacy and learning at primary and secondary levels which particularly fails girls and undermines their learning futures.”

—
Dr. Ayesha Kareem

Malala Fund Fellow, Pakistan

to own a mobile phone and are also much more likely to have their activity monitored and to need permission to borrow and use devices.²⁸ Gender and other power dynamics within the home determine to a large extent how, why and under what conditions girls are able to use mobiles and other devices.

Girls' **digital safety** is also critical to creating an enabling learning environment where girls can thrive. Yet online and technology-facilitated gender-based violence has continued to rise and evolve as governments struggle to respond.²⁹ Girls are more at risk of digital harm than boys, facing challenges including privacy abuses, non-consensual image or video sharing, online sexual and gender-based abuse including rape threats and sexual harassment or stalking.^{30 31 32 33 34} In Plan International's 2020 State of the World's Girls report, more than half of the girls surveyed had been harassed or abused online, leaving many feeling physically unsafe and too afraid to freely participate online.³⁵ Lack of adequate digital safety protections are also evident for social media where evidence suggests that girls' social media use can trigger depression and poor self-esteem, negatively impacting their mental health and digital learning; girls' lower levels of digital literacy increases their vulnerability to this phenomenon.^{36 37} Abuse and the internalisation of discriminatory norms can increase girls' self-limiting behaviour and reduce digital participation.^{38 39 40}



“...the lack of clear and deliberate intention to develop gender transformative technology that responds to the needs of women and girls and addresses the underlying structural problems driving gender biases creates vicious circles, where inequalities are amplified and perpetuated through digital tools.”

—

António Guterres
*U.N. Secretary-General*⁴¹

It is also important to acknowledge the role of social norms in shaping perceptions of girls’ digital safety risk and how parents and communities respond to both real and perceived risks. For example, parental justifications for denying or limiting girls’ digital access because *girls* cannot be trusted online reflects norms that place the responsibility burden on girls rather than abusers or governments and reflects the systemic problem of victim blaming found in many instances of gender-based abuse.⁴²



“The digitalization of education also brings serious risks to human rights, including the right to education. Some risks are the exact opposite of potential benefits: heightened exclusion instead of improved access, standardization instead of personalized teaching, enhanced stereotypes instead of diversity, reduced autonomy and freedom instead of creativity and participation, and data mining for the benefits of a few at odds with the public interest.”

Dr. Koumbou Boly Barry

*Former U.N. Special Rapporteur on the Right to Education*⁴³



During the pandemic, students already at risk of falling behind — including girls facing multiple forms of oppression — were less likely to access digital learning.^{44 45} Across Malala Fund’s rapid assessments in India, Nigeria and Ethiopia, girls reported being less likely to both access and engage with all forms of remote learning, citing lack of education support at home, increased care burden and housework during COVID-related school closures.⁴⁶ In Kaduna state in Nigeria, 25% of girls reported receiving no learning support — more than double the number of boys — and boys were twice as likely to have access to a private tutor.⁴⁷ Fathers were 36% more likely to support their sons’ education than their daughters’ education.⁴⁸ Analysis from Young Lives shows that the combination of inequality — on the basis of geography, poverty and other forms of marginalisation — and increased domestic work had a disproportionate impact on adolescent girls’ access to learning, engagement and increased likelihood of dropout, particularly for those more vulnerable to discrimination.⁴⁹

“[During COVID-19] even when there were devices, many of the teachers in rural communities didn’t have skills or knowledge to use them. Government should have trained them, and provided all the necessary equipment like computers, laptops, adequate electricity and provided good network so that teachers and pupils can learn in an easier way.”

—
Amina

Malala Fund Fellow, Nigeria

The widening of the digital learning divide during the pandemic also highlighted the need to interrogate the role of private, for-profit companies in the provision of digital learning; it raised important questions about private companies’ interest in providing *inclusive* digital learning and challenged perceptions that digital learning offers a relatively low-cost alternative to in-person education. Civil society organisations caution that overreliance on digital learning provided on a for-profit basis undermines the purpose of education and risks side-lining issues of inclusion, gender-responsiveness and safeguarding.⁵⁰ UNICEF estimates that governments need to invest a minimum of \$1.4 trillion to provide universal digital learning by 2030.⁵¹ This amount covers costs predominantly associated with connectivity (internet, data, electricity) — more will be required to allow for the tailored approaches that are needed for groups of students more vulnerable to discrimination require disproportionately greater investment.⁵²



Understanding how social norms affect girls' access and use of digital learning

A girl-centred framework

Closing the gender digital learning divide requires governments and education providers to put adolescent girls — their rights, needs, voices and learning environments — at the centre of inclusive digital learning policy and practice. As governments and world leaders implement the TES commitments and develop the Global Digital Compact, it is essential that they partner with girls and understand the realities of their lives in order to ensure that girls have equal access to quality digital learning.

Ahead of these discussions, Malala Fund presents the following framework as a tool to help policymakers better understand how social norms affect girls' access and use of quality digital learning. It incorporates evidence of what works in girls' learning and recognises the diversity in girls' learning experiences. The framework builds on work by Professor Dorothea Kleine (University of Sheffield, U.K.) and Fiona Ssozi (Makerere University, Uganda) in partnership with Malala Fund.⁵³

Malala Fund also recognises that the relationships *between* these spaces will likely affect girls' learning and well-being. For example, effective links between home and school are critical for girls' digital and in-person learning and strong links between homes, schools and education systems are important for effective and resourced safeguarding provisions.



The individual

Social norms affect the extent to which each individual girl is able to partake in digital learning by shaping:

- Girls' psychological resources – including self-efficacy, resilience, motivation and creativity – which are essential to girls' learning and ability to engage with digital devices;^{54 55}
- Girls' expectations for themselves and their futures (i.e., how social norms are internalised by girls);
- Girls' peer relationships and social networks; and
- Girls' opportunities to engage with decision-making processes beyond learning environments.

The home

Social norms affect the extent to which the home can be an enabling learning environment by shaping:

- Who makes decisions around the house and how, particularly in terms of resources such as physical spaces, devices and data;
- Expectations and pressures on girls' time for chores and care burden;
- Prevalence of gender-based violence within the home as well as early and forced marriage;
- Opportunities for women of the household – including education levels – and their role in the home (often as the primary carer for children);
- Behaviours and attitudes that parents or guardians promote and model within a home; and
- Parents' or guardians' perceptions and value of education for girls relative to boys.



The classroom or school

Social norms affect the extent to which the classroom or school can be an enabling learning environment by shaping:

- Relevance of educational content for girls and the extent to which content reproduces or challenges gender stereotypes;
- Whether or not teachers model gender equal norms in the classroom or reinforce their own biases;
- Representation of gender role models and female teachers across subjects;
- Use of inclusive pedagogical approaches;
- Relationships between teachers and students and between peers;
- School policies and practice around student and teacher conduct; and
- Girls' representation in student leadership roles.

The education system

Social norms affect the extent to which education systems can encourage enabling learning environments by shaping:

- Decision-makers' commitment (or lack thereof) to gender-responsive planning and budgeting;
- More progressive – or regressive – education content including challenging (or reinforcing) gender stereotypes in curricula and rights-based content such as comprehensive sexuality education;
- Guidance given to students about subject choices;
- Representation of women in teaching and education administration; and
- Opportunities for girls to engage in education decision-making processes at national or subnational levels.

Figure 1: The girl-centred digital learning framework (Malala Fund 2023, adapted from Kleine & Ssozi 2023)

Recommendations



COVID-19 made clear that there is no magic app or cheap laptop that will address the significant challenges in ensuring digital learning reaches all students. Providing inclusive digital learning that reaches *all* adolescent girls requires world leaders and governments to put their rights and agency before technology and ask girls what they need from digital learning *before* prescribing what digital learning can do for girls.

This year, CSW67 and the SDG Summit offer leaders important opportunities to raise ambition and take action to ensure that every girl is able to realise the potentials of digital learning and access 12 years of free, safe, quality education.

“Governments and the international community should promise to take action in financing digital learning for girls and young women in remote areas that are left behind, basic digital literacy skills are very important for this.”

—
Meti

Malala Fund Fellow, Ethiopia

National governments should set clear, time-bound targets to:

1. Provide space for adolescent girls in the national decision-making processes around digital learning.

Include girls in advisory groups for digital learning initiatives, and where possible, engage adolescent girls in co-designing digital learning.

2. Develop and resource gender-responsive digital learning strategies within education sector plans.

Strategies must:

- Prioritise adolescent girls experiencing multiple sources of oppression. Through meaningful partnership with girls and education activists, governments must centre the needs and priorities of girls in the development, monitoring and reviews of digital learning policy.
- In line with the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Convention on the Rights of the Child (CRC), revise curricula to remove stereotypes, and in partnership with girls, ensure content responds to girls' learning priorities and agency, their development of higher-order skills and competencies — such as critical thinking or problem solving — and digital citizenship.
- Develop and implement targeted initiatives to:
 - Provide gender-responsive digital skills training for parents and guardians. By building parents' and guardians' understanding and capacity, governments can alleviate their concerns, strengthen their support for girls, improve digital access and model more equitable gender norms.
 - Achieve gender equality in access to STEM and digital learning opportunities backed by specific programmes and budgets, including for disaggregated data collection (CEDAW General Recommendation 36).
- Anticipate and plan for all digital learning scenarios including crisis preparedness, response and building system resilience.



3. **Strengthen national policy and legal frameworks.**

Under the U.N. Convention on the Rights of the Child, governments are obliged to remove financial, legal and administrative barriers to education, including digital learning. This includes the cessation of government-imposed internet shutdowns, greater investment in public schools and financial investments to improve access to devices and connectivity.⁵⁶ To protect and promote girls' rights, governments should also strengthen safeguarding and regulations for national digital strategies, including for digital learning. Governments should integrate this into efforts to strengthen girls' safety and security to and in schools, in line with international standards (e.g., the Safe Schools Declaration) and guidance to end school-related gender-based violence.^{57 58}

Frameworks also need to better protect girls and women from online and technology-facilitated gender-based violence, including provision of good-quality survivor-centred services, better investigatory capacities of police and fast-track legal processes.

4. **Increase investments in girls' secondary education.**

Most governments are failing to meet international education standards on public expenditure, which is undermining the availability of quality education, in-person and through digital. For adolescent girls with intersecting vulnerabilities, governments should prioritise investment in tailored digital learning approaches — for example, those that are translated or adapted to linguistic minority groups or for students with disabilities — as part of a wider strategy to address inequality through gender-responsive budgeting. In line with the 2015 Incheon Declaration, national governments should allocate 4–6% of GDP and/or at least 15–20% of their total public expenditure to education. Donors should match national commitments and increase fiscal space for education including through debt cancellation, tax reforms and reallocation of funds including special drawing rights.⁵⁹



The international community must take collective action by:

1. **Creating meaningful space for adolescent girls to share their opinions and influence global processes on digital learning.**

The 2023 SDG Summit is a critical moment to raise standards for meaningful engagement with young leaders across the U.N. system. This requires increased space and access — including financial and visa support — as well as ensuring global platforms are inclusive and enabling environments for young feminist leaders to be active partners. Governments must be *required* to include adolescent girls in their delegations to global discussions alongside meaningful, sustained dialogues with adolescent girls nationally.⁶⁰

2. **Ensuring that the Global Digital Compact applies human rights frameworks.**

It must go beyond connecting schools to the internet and reinforce governments' accountability for girls' rights and education commitments. It must demand that governments implement robust and resourced gender-responsive digital strategies — as outlined above — in partnership with adolescent girls and women's rights organisations.



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Author

Carron Mann

Reviewer

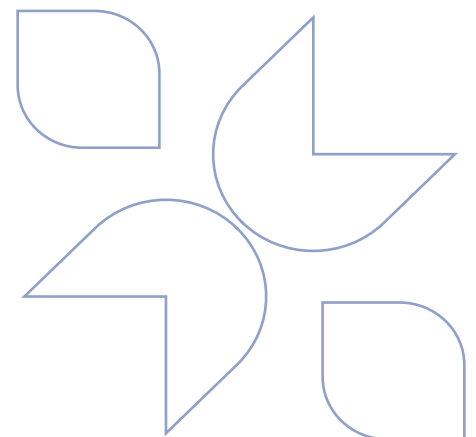
Lucia Fry

Editor

Tess Thomas

Design

Jonathan Haring



Endnotes

1. Malala Fund (2021) *A greener, fairer future: Why leaders need to invest in climate and girls' education*. https://assets.ctfassets.net/0oan5gk9rgbh/OFgutOPKIFoi5lfY2iwFC/6b2fffd2c893ebdebee60f93be814299/MalalaFund_GirlsEducation_ClimateReport.pdf
2. Kleine, D. and Ssozi, F. (2023) "A Girl-centred Approach to Digital Learning: Conceptualisation, Application, and Recommendations (Working Paper)" in *Institute for Global Sustainable Development, Sheffield University*. <https://doi.org/10.15131/shef.data.21977126>
3. Commission on the Status of Women (2022) *Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls: Report of the Secretary General*. <https://undocs.org/Home/Mobile?FinalSymbol=E%2FCN.6%2F2023%2F3&Language=E&DeviceType=Desktop&LangRequested=False>
4. UNICEF (2022) *Pulse Check on Digital Learning*. <https://www.unicef.org/media/132096/file/Pulse%20Check.pdf>
5. Milagros Sáinz Ibáñez (2022) *How to Address Stereotypes and Practices Limiting Access to STEM-Related Education for Women and Girls*. https://www.unwomen.org/sites/default/files/2022-12/EP.3_Milagros%20Sainz.pdf
6. Center for Global Development (2022) *Girls' Education and Women's Equality: How to get the most out of the world's most promising investment*. <https://www.cgdev.org/publication/girls-education-and-womens-equality-how-get-more-out-worlds-most-promising-investment>
7. U.N. Office of the High Commissioner for Human Rights (2019) *Revision of Joint General comment No. 18 of the Committee on the Rights of the Child on harmful practices and General recommendation No. 31 of the Committee on the Elimination of Discrimination against Women*. <https://www.ohchr.org/en/documents/general-comments-and-recommendations/revision-joint-general-comment-no-18-committee>
The U.N. Convention on the Elimination of All Forms of Discrimination against Women (1979) *Article 10*. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women>
8. UNESCO (2020) *Global Education Monitoring Report – Gender Report: A new generation: 25 years of efforts for gender equality in education*. <https://gem-report-2020.unesco.org/gender-report/countries-are-still-falling-short-in-developing-textbooks-free-of-gender-based-stereotypes/>
9. Centre for Global Development (2020) *There's a Global School Sexual Violence Crisis and We Don't Know Enough About It* (blog). <https://www.cgdev.org/blog/theres-global-school-sexual-violence-crisis-and-we-dont-know-enough-about-it>
10. UNGEI (2019) *A whole school approach to prevent school related gender based violence: Minimum Standards and Monitoring Framework*. <https://www.ungei.org/sites/default/files/A-whole-school-approach-to-prevent-school-related-gender-based-violence-Minimum-Standards-and-Monitoring-Framework-2019-eng.pdf>
11. Malala Fund (2020) *Girls' education and COVID-19 in India: Summary Report*. https://assets.ctfassets.net/0oan5gk9rgbh/4KLrwN0US9NY0GgLaKVw9A/376eb9f73496577071f78a95e8fd9824/0oan5gk9rgbh_575SyyaQ9T5cX0b2LuK2BA_eacd2eabf2223b3095abe9f0eb916d15_India_Report_website.pdf
12. UNESCO IS and Global Education Monitoring Report Team (2022) *New estimation confirms out-of-school population is growing in sub-Saharan Africa*. <https://unesdoc.unesco.org/ark:/48223/pf0000382577?posInSet=102&queryId=f96563a5-3446-4ae2-bcdd-725935a9a92d>
13. Working definition presented by the U.N. Secretary General's Envoy on Technology Dr. Amandeep Singh Gill as preparatory work for the Global Digital Compact https://www.un.org/techenvoy/sites/www.un.org.techenvoy/files/general/Definition_Digital-Inclusion.pdf
14. "Sustained access" both recognises nuances in access and its importance to developing digital literacy, skills and agency. See: UNICEF (2021) *What we know about the gender digital divide for girls: A literature review*. <https://www.unicef.org/eap/media/8311/file/What%20we%20know%20about%20the%20gender%20digital%20divide%20for%20girls%20A%20literature%20review.pdf>
15. See also:
Office of the Secretary-General's Special Envoy on Technology (2021) *The Global Digital Compact*. <https://www.un.org/techenvoy/global-digital-compact> (accessed: 9 February 2023)
Transforming Education Summit Call to Action *Assuring and improving quality public digital learning for all*. <https://www.un.org/en/transforming-education-summit/digital-learning-all> (accessed: 9 February 2023)
Human Rights Council (2022) *A/HRC/50/32: Impact of the digitalization of education on the right to education*. <https://www.ohchr.org/en/documents/thematic-reports/ahr5032-impact-digitalization-education-right-education>
Committee on the Rights of the Child (2021) *General comment No. 25 on children's rights in relation to the digital environment*. <https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-25-2021-childrens-rights-relation>
16. Commission on the Status of Women (2019) *Review and appraisal of the implementation of the Beijing Declaration and Platform for Action and the outcomes of the 23rd special session of the General Assembly: Report of the Secretary General*. <https://digitallibrary.un.org/record/385008?ln=en>
17. The framework is based on research that Malala Fund commissioned from Professor Dorothea Kleine and Fiona Ssozi. The researchers carried out a literature review (with Henrietta Nanyonjo) and key informant interviews and developed a girl-centred approach to digital learning in collaboration with Malala Fund, which this paper now builds upon. See: Kleine & Ssozi (2023) "A Girl-centred Approach to Digital Learning."
18. Commission on the Status of Women (2022) *Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls*.
19. UNICEF (2022) *Pulse Check on Digital Learning*.
20. Ed tech: privately or publicly run platforms, software or devices developed to provide educational content. It is not exclusively digital.
21. UNICEF (2021) *What we know about the gender digital divide for girls*.
22. Commission on the Status of Women (2019) *Review and appraisal of the implementation of the Beijing Declaration*.
23. UN Women (2022) *Report of the Expert Working Group: Sixty-seventh session of the Commission on the Status of Women (CSW 67): Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls*. <https://www.unwomen.org/sites/default/files/2022-12/Final%20CSW67%20EGM%20Report%2013%20DEC.pdf>
24. Girl Effect and Vodafone Foundation (2018) *Real girls, real lives, connected: A global study of girls' access and usage of mobile, told through 3000 voices*. <https://www.girlsandmobile.org/>
25. Center for Information Technology and Development (2016) *Overcoming gender-based digital exclusion in northern Nigeria: A strategy document*. <https://www.apc.org/en/pubs/overcoming-gender-based-digital-exclusion-northern>
26. UNICEF (2021) *What we know about the gender digital divide for girls*.
27. UNICEF (2022) *Pulse Check on Digital Learning*.
28. Girl Effect & Vodafone Foundation (2018) *Real girls, real lives, connected*.
29. UN Women (2022) *Report of the Expert Working Group CSW67*.
30. Marvel, N. & I. Makamara (2022) *The Effects of Social Media on Girls: Keeping Children Safe, Preventing Abuse and Cyber-Bullying, and Mental Health Issues: Expert Paper for CSW67 Expert Working Group*. https://www.unwomen.org/sites/default/files/2022-12/EP.13_Nyama%20Marvel%20and%20Ian%20Makamara.pdf
31. UNICEF (2021) *What we know about the gender digital divide for girls*.

32. Human Rights Watch (2022) "How Dare They Peep into My Private Life?" *Children's Rights Violations by Governments that Endorsed Online Learning During the Covid-19 Pandemic*. <https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments>
33. Committee on the Rights of the Child (2021) *General comment No. 25 on children's rights in relation to the digital environment*.
34. UN Women (2020) *Online and ICT-facilitated violence against women and girls during COVID-19*. <https://www.unwomen.org/en/digital-library/publications/2020/04/brief-online-and-ict-facilitated-violence-against-women-and-girls-during-covid-19>
35. Plan International (2020) *The State of the World's Girls 2020 Report: Free to be online? Girls' and young women's experiences of online harassment*. <https://plan-international.org/uploads/2022/02/sotwgr2020-commsreport-en-2.pdf>
36. Marvel & Makamara (2022) *The Effects of Social Media on Girls*
37. UNICEF (2021) *What we know about the gender digital divide for girls*.
38. Ibid.
39. Sonia Jorge (2022) *What Policies Do We Need to Make the Internet Affordable to All?: Expert Paper for CSW67 Expert Working Group* https://www.unwomen.org/sites/default/files/2022-12/EP.1_Sonia%20Jorge.pdf
40. World Wide Web Foundation (2020) *There's a pandemic of online violence against women and girls* (blog). <https://webfoundation.org/2020/07/theres-a-pandemic-of-online-violence-against-women-and-girls/>
41. Commission on the Status of Women (2022) *Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls*.
42. Girl Effect & Vodafone Foundation (2018) *Real girls, real lives, connected*.
43. Human Rights Council (2022) *Impact of the digitalization of education on the right to education*.
44. UNICEF (2022) *Pulse Check on Digital Learning*.
45. Jones, N. et al (2021) "Intersecting barriers to adolescents' educational access during COVID-19: Exploring the role of gender, disability and poverty" in *International Journal of Educational Development*. <https://www.sciencedirect.com/science/article/pii/S073805932100081X>
46. Malala Fund (2020) *Malala Fund COVID-19 Initiative*. <https://covid.malala.org> (accessed: 9 February 2023)
47. Malala Fund (2020) *Girls' education and COVID-19 in Nigeria: Summary Report*. <https://malala.org/newsroom/girls-education-and-covid-19-in-nigeria>
48. Ibid.
49. Young Lives (2021) *Addressing the gender digital divide is critical to ensure no one is left behind from COVID-19* (blog). <https://www.younglives.org.uk/news/addressing-gender-digital-divide-critical-ensure-no-one-left-behind-covid-19> (accessed: 9 February 2023)
50. Human Rights Council (2022) *Impact of the digitalization of education on the right to education*.
51. UNICEF (2021) *How much does universal digital learning cost: Policy brief*. <https://www.unicef-irc.org/publications/pdf/How-Much-Does-Universal-Digital-Learning-Cost.pdf>
52. Kleine & Ssozi (2023) "A Girl-centred Approach to Digital Learning."
53. Kleine & Ssozi (2023) "A Girl-centred Approach to Digital Learning."
54. Kleine, D. (2019) "A decade of applying the capabilities approach via the choice framework: practical tools and critical reflections" in *Proceedings for the 2019 HDCA Conference*. <https://eprints.whiterose.ac.uk/157682/1/Kleine%20HDCA2019%20CF%20Practical%20Tools.pdf>
55. Kleine, D. (2013) *Technologies of choice? ICTs, development, and the capabilities approach*. Cambridge: The MIT Press. <https://mitpress.mit.edu/9780262018203/technologies-of-choice/>
56. Human Rights Council (2022) *Impact of the digitalization of education on the right to education*.
57. Global Coalition to Protect Education from Attack *The Safe Schools Declaration*. <https://ssd.protectingeducation.org/> (last accessed 15 February 2023)
58. UNGEI (2019) *A whole-school approach to prevent school-related gender-based violence*. See also: UNESCO and UN Women (2016) *Global guidance on addressing school-related gender-based violence*. <https://unesdoc.unesco.org/ark:/48223/pf0000246651>
59. Malala Fund (2022) *Girls' Education Report Cards: Grading governments' progress towards getting every girl in school*. <https://malala.org/newsroom/girls-education-report-cards-grading-governments-progress-towards-getting-every-girl-in-school>
60. U.N. General Assembly (2022) *Modalities of the Summit of the Future*. <https://www.un.org/pga/76/wp-content/uploads/sites/101/2022/09/Summit-of-the-Future-modalities-resolution-Rev-3-silence-procedure-06092022.pdf>

