

Mariya Stoilova Sonia Livingstone October 27th, 2025

Al literacy in an unequal world: pitfalls and promises

The rapid integration of AI in children's lives sparks both excitement and unease: children's curiosity about new possibilities is mixed with concerns about safety, fairness and bias. Policymakers, educators and parents hope educating children about AI can empower them to use AI meaningfully and safely. But can AI literacy really deliver on that promise? To mark Global Media and Information Literacy Week 2025, Mariya Stoilova and Sonia Livingstone discuss their latest findings from the DFC project on AI and children's rights.

Our RIGHTS.AI research in four global South countries (Brazil, India, Kenya and Thailand) shows that children are encountering generative AI at home and school, in the platforms they use daily. From chatbots like ChatGPT and Copilot to AI embedded in Snapchat, WhatsApp and Google Search, generative AI now powers learning tools, entertainment apps, and even experimental mental health services. It answers questions and creates content – sometimes problematically – and quietly shapes what children see and do online.

Children are fast adopters of AI technologies, but they often lack sufficient understanding of how these systems work, the capacity to ensure their beneficial use, and the competence to understand the implications. Can education about AI facilitate generative AI opportunities for children and mitigate its challenges and risks?

Through collaboration with partners in Brazil, India, Kenya and Thailand, our research methods identified three pressing challenges for AI literacy policies and programmes, which complement findings from UNICEF's research into how AI relates to the best interests of the child. Media and digital literacy practitioners will find them familiar!

Challenge 1: Al is likely to amplify literacy gaps, not close them

Generative AI use reflects and amplifies structural inequalities in digital access, literacy and opportunities. In all four countries, the gaps between children's use and critical understanding were substantial, and many children needed teacher and parent guidance.

We found that children from higher socioeconomic backgrounds – particularly those attending private or well-resourced schools – generally had access to better digital infrastructure, stronger critical literacy skills, and a broader understanding of the possibilities and limitations of generative AI.

In contrast, their peers from rural areas, low-income families, or public school settings often depended on shared devices and free, limited-functionality apps, and received minimal or no formal instruction or guidance. Uptake was constrained by language barriers and teacher and parent attitudes – some encouraging experimentation, others banning it.

Therefore, efforts to enhance digital and AI literacy should support children's enthusiasm for learning with generative AI with targeted educational resources to compensate for pre-existing inequalities, and they should hear children's call for services that speak in their languages, reflect their cultures and meet their developmental needs, so as not to widen prior knowledge gaps.

Challenge 2: Children's engagement with AI opportunities brings multiple risks of harm

The safety risks children identified included misinformation, cyberbullying, gender-based violence, and the circulation of sexualised deepfakes. Brazilian and Kenyan children recounted incidents of manipulated images being shared in school settings. Indian children expressed concern about false or misleading information affecting both academic and health-related contexts. Thai children highlighted how biases or "hallucinations" in AI outputs could harm their wellbeing or create barriers to opportunity.

Although generative AI can facilitate learning, skill development and creativity, children were concerned that overreliance on it could limit their opportunities to build critical social skills and emotional intelligence. For example, Brazilian and Indian children warned against passively copying AI-generated answers, while Thai children pointed out that the dominance of English in many AI tools restricted their ability to deepen subject knowledge. Kenyan children expressed concerns about potential AI misuse for bullying or manipulation through deepfakes and exposure to misinformation.

As with prior offline and online risks, the uncertain and uneven terrain of Al-facilitated benefits means that the accompanying risks can impede or outweigh any gains, especially for vulnerable children.

Children's eagerness to devise self-protective strategies to mitigate risks bodes well for their openness to education that enhances agentic and reflective use, creative activities, and critical knowledge of the AI ecosystem. AI curricula should support these. But AI literacy must go hand in hand with safety by design in AI systems, to limit the educational burden on individuals. Many problems need a more systemic approach through regulation and design – as developed in 5Rights' Children & AI Design Code.

Challenge 3: Al systems are complex, opaque, and biased by design

RIGHTS.AI found that children's agency in using generative AI was shaped – and often limited – by the design of the systems they engaged with. Many AI systems were highly persuasive, leading children to trust their outputs and even form personal "friendships" with them, which could reinforce reliance on AI rather than independent judgment. AI that obscured its limitations further constrained children's ability to make fully informed choices.

Children from the Global South are particularly disadvantaged by generative AI systems that are predominantly designed and trained on data in the global North. Language exclusion and lack of cultural diversity were major concerns for the children in India, Kenya and Thailand, who thought their languages and daily life contexts were poorly represented in generative AI outputs. In contrast, the Brazilian children reported fewer problems and were generally satisfied with Portuguese language results.

The children valued their privacy, but limited transparency left many believing incorrectly that AI does not share their data. While some feared their information could be 'leaked', most trusted the companies developing generative AI tools. Some children expressed resignation, treating privacy loss as inevitable in generative AI use.

Across contexts, these examples show how design features can restrict children's opportunities for critical, autonomous engagement in ways that cannot be addressed by literacy alone. Still, children had many ideas of how these systems can be improved and were keen to be consulted about future developments in AI. Literacy efforts should teach them to how to participate meaningfully in such processes.

The way forward for digital literacy and AI

Given the rapidity of AI innovation, policymakers and educators are reevaluating digital literacy frameworks. Can AI literacy build on existing conceptualisations – recognising that platform literacy and algorithm literacy already address data, algorithms and model design? If so, educators could more rapidly catch up on the rapidity of AI innovation. Prior knowledge is already guiding two

prominent AI literacy frameworks: UNESCO's AI competency frameworks for students and teachers, and the OECD's and European Commission's AI Literacy Framework, which defines AI literacy as:



the technical knowledge, durable skills, and future-ready attitudes required to thrive in a world influenced by AI. It enables learners to engage, create with, manage, and design AI, while critically evaluating its benefits, risks, and ethical implications.



Both adopt a competency-based approach to AI literacy, aiming to equip learners with the technical, cognitive, and social skills needed to engage critically and creatively with AI. Both recognise the importance of understanding AI design – how data, algorithms, and model choices shape outcomes – as a foundation for developing informed and empowered users and creators of AI systems.

As "global" frameworks, both also draw attention to the importance of resourcing local adaptation, teacher capacity, benchmarking and assessment, and the further institutional tasks required to counter enduring inequalities. Put simply, there are no cheap and easy ways of meeting the practical challenges related to AI literacy, but building on prior knowledge is a practical start. This is vital for all children, including those from low- and middle-income countries where nearly two-thirds of the world's children live, as their experiences deserve recognition, their needs should be met, and their voices must be heard.

This post gives the views of the authors and not the position of the Media@LSE blog, nor of the London School of Economics and Political Science.

About the author

Mariya Stoilova

Dr Mariya Stoilova is a Post-doctoral Research Officer at the London School of Economics and Political Science (LSE) and Manager of the Digital Futures for Children centre (DFC).

Sonia Livingstone

Sonia Livingstone OBE is Professor of Social Psychology in the Department of Media and Communications at LSE. Taking a comparative, critical and contextual approach, her research examines how the changing conditions of mediation are reshaping everyday practices and possibilities for action. She has published twenty books on media audiences, media literacy and media regulation, with a particular focus on the opportunities and risks of digital media use in the everyday lives of children and young people.

Posted In: Artificial Intelligence | Children and the Media | Media Literacy



© LSE 2025