



LETTER

# Evolving frameworks for responsible and human-centred AI practice in higher education and beyond

Lydia Bach , Ciorsdaidh Watts , Sarah Henry , and Ana Basiri 

University of Glasgow, UK

## ABSTRACT

This letter reflects on the co-creative, cross-disciplinary discussions emerging from the Lovelace-Hodgkin Symposium: Responsible AI and Education at the University of Glasgow. Bringing together academics, professional services, students, external partners and industry representatives, the event explored how artificial intelligence (AI) is transforming education. Participants focused not on technology itself but on people: the ways AI affects learning, teaching and work. Anxiety and opportunity coexisted throughout discussions, revealing the need for reflective frameworks that integrate agility, trust, transparency and inclusion. This letter offers insight on principles for building such frameworks and outlines three recommendations for individuals: to reflect on their AI use, to be transparent and to keep learning. For institutions: create safe spaces, connect policy with practice, extend access to all roles, and engage external partners to create an AI ethics ecosystem. These insights call for a collective, human-centred approach to AI that supports creativity, confidence and equity in education.

**KEYWORDS:** AI framework, critical AI literacy, digital sustainability, ethical integration of AI, inclusive AI literacy, human centred AI, responsible AI.

**ARTICLE HISTORY:** Received 25 November 2025. Accepted 4 February 2026.

The Lovelace-Hodgkin Symposium: Responsible AI and Education, which took place at the University of Glasgow in October 2025, invited open co-creative discussion between academics, professional services, students and delegates from the National Health Service (NHS) Scotland, The Alan Turing Institute, Times Higher Education Supplement, Cancer

Research UK, and Barclays. The event focused not on the mechanics of artificial intelligence (AI) technologies but on the people who work with these tools. Participants explored how AI is reshaping teaching, learning and professional practice and the various ways individuals feel about these changes.

Uncertainty was a shared theme: fear of being replaced, of using AI wrongly, of being left behind (Zhang & Cao, 2025). Yet, alongside fear was a sense of possibility and optimism. Many saw AI as an opportunity to re-examine what education should value, provide routes to express creativity and offer sustainable connection in digital settings. Discussions raised questions about how and what we assess and what educational institutions are ultimately for. In what ways do we cultivate lifelong learning and curiosity while also equipping learners with digital skills for an ever more competitive job market? Across the two days, a common message emerged: frameworks for AI use must continue to develop.

In this letter, we define frameworks as evolving, human-centred scaffolds that support dialogue and responsible action around AI in educational settings, rather than fixed technical models or prescriptive toolkits. They are intended for diverse stakeholders across institutions and function as shared reference points that help connect ethical principles, everyday practice, and institutional culture in the context of ongoing technological change. They need to stay reflective, inclusive and responsive not only to technological change but also to the emotional, ethical and wellbeing dimensions that shape human experiences of AI (Purcell et al., 2024). This letter offers insights as foundational principles for building such frameworks, rather than frameworks themselves.

AI-anxiety spans societal generations as well as institutional job families and seniority. This reflects uncertainty about AI but also deeper fears about visibility, workload and identity. Uncertainty is a natural human response to the unknown, which may in turn expose uneven AI literacies, thus indirectly contributing to AI-related anxiety. When acknowledged, fear can make learning more authentic, by connecting knowledge with human stories. However, uneven AI literacy can reinforce digital learning divides, increase isolation and subsequently stagnate progress. Digital competence and confidence are clearly linked, and this may help to explain the varied emotional responses to AI observed. Confidence varies across grades, disciplines and institutions; some colleagues experiment freely with AI technologies, while others lack time, access, impetus or support. Others express legitimate ethical concerns about



AI sustainability, for example. This inequity of digital literacy risks creating new institutional and societal hierarchies (Khazanchi & Saxena, 2025).

A related symposium insight was that AI-anxiety and uneven literacy must be addressed collectively. Shared spaces for reflection and practice help people realise that uncertainty is universal and that learning is never complete. Frameworks for AI need to develop through dialogue rather than decree, remaining flexible as technologies and understanding evolve.

The symposium also highlighted the value of co-creation. Bringing together academics, professional staff, students and external partners revealed the many ways AI is experienced across learning, teaching, research, administration and support. Responsible practice depends less on authority or compliance and more on dialogue, trust and empathy. Fear and silence recede when people can speak openly about their work and their concerns and when AI technologies are consciously demystified and democratised.

All groups, including children and young learners, should be included in these conversations. Collaborative models like those between the Alan Turing Institute, Scottish AI Alliance and the Children's Parliament offer good practice exemplars of putting children's digital rights and understandings front and centre. Engagement with AI technologies can nurture curiosity, creativity and communication, helping children understand both the possibilities and the limitations of technology (Robayo-Pinzon et al., 2024). AI upskilling at every level must integrate wellbeing, ethics and human connection as core elements. Students need structured opportunities to build critical AI skills to find the best ways to use AI appropriately, question outputs, identify bias and take ownership over their AI use. One example of a course addressing these issues is the University of Glasgow's free, open-access FutureLearn course, AI Ethics, Inclusion and Society.

Participants also raised concerns about reliance on AI for mental health support amongst the student body, which parallels growing social isolation. This highlights the continuing need for human presence and ethical boundaries. In this context, and across discussions, AI was repeatedly described as both a tool and a relationship – something that requires ethical reflection and awareness of local paradigms (Crawford et al., 2024). Participants recognised the potential of AI technologies to enhance creativity, inclusion and access when used critically and consciously, but that potential depends on people feeling equipped, supported and connected.



In response, this letter offers foundational principles and outlines recommendations for individuals and institutions committed to developing responsible, trustworthy, democratic and agile AI frameworks, rather than proposing frameworks themselves.

Actions for individuals:

1. Reflect on what AI use means for your role, values and wellbeing. Conscious consumption is also a sustainability question, touching on attention, energy and time.
2. Be transparent about AI use. Openness builds trust and helps others understand where its benefits and limitations lie, keeping us connected.
3. Keep learning through peer groups, buddy systems and communities of practice that support ethical awareness, wellbeing and human connection.

Commitments for institutions:

1. Create safe spaces where staff and students can discuss AI without fear of judgement. Reflection should be recognised as meaningful professional work.
2. Connect policy with lived experience. Institutional decision-makers cannot work apart from those learning, teaching, researching, or supporting daily; institutional policy and grassroots practice need to meet.
3. Make AI learning accessible to all roles and grades, including support staff, technicians and administrators alongside academics, leaders and students.
4. Collaborate proactively with external partners, fostering shared responsibility and insight, to build a robust, cross-sector AI ethics ecosystem.

Our collective task is to cultivate conscious, compassionate and connected use of AI technologies. By finding our individual and collective voices, educationalists can ensure that AI supports creativity, equity and wellbeing rather than undermining them. For learning development practitioners, we suggest actively seeking out, and building, inclusive, engaged communities of practice around AI, prioritising co-development of interdisciplinary digital literacy initiatives (with learners and colleagues) and considering how to embed critical reflection on AI into our professional practice and curriculum design.

The evolution of these frameworks, personal, professional and institutional, is already underway and there is an urgent imperative to shape them for the common good.



## Disclosure statement

The authors used the following generative AI tools in the preparation of this manuscript: ChatGPT. The tasks performed by ChatGPT were limited to initial brainstorming in preparation for developing the paper and as an editing tool for structuring sections of the manuscript. The authors have complied with the journal's principles of AI use.

## Funding

This work was supported by funding for the Lovelace-Hodgkin Symposium received from The Centre of Data Science and AI, University of Glasgow, in 2023, as well as symposium sponsorship received from LearnSci in 2024. The authors declare no competing interests.

## References

- Crawford, J., Allen, K. A., Pani, B., & Cowling, M. (2024). When artificial intelligence substitutes humans in higher education: The cost of loneliness, student success, and retention. *Studies in Higher Education*, 49(5), 883–897. <https://doi.org/10.1080/03075079.2024.2326956>
- Khazanchi, D., & Saxena, M. (2025). Navigating digital human rights in the age of AI: Challenges, theoretical perspectives, and research implications. *Journal of Information Technology Case and Application Research*, 1–14. <https://doi.org/10.1080/15228053.2025.2452028>
- Purcell, S., Brown, C., & McCormick, L. (2024). Glasgow essentials: Redeveloping induction resources to improve students' sense of inclusion and belonging. *Journal of Learning Development in Higher Education*, 32, 1–8. <https://doi.org/10.47408/jldhe.vi32.1448>
- Robayo-Pinzon, O., Rojas-Berrio, S., Rincon-Novoa, J., & Ramirez-Barrera, A. (2024). Artificial intelligence and the value co-creation process in higher education institutions. *International Journal of Human-Computer Interaction*, 40(20), 6659–6675. <https://doi.org/10.1080/10447318.2023.2259722>
- Zhang, H., & Cao, J. (2025). From digital disruption to mental health: The impact of AI-induced educational anxiety on teacher well-being in the era of smart education. *BMC Public Health*, 25, Article 4010. <https://doi.org/10.1186/s12889-025-25372-7>



## Author details

Lydia Bach is Equality, Diversity and Inclusion Officer for the College of Science and Engineering at the University of Glasgow. Her work focuses on culture change, data-driven equality practice, and inclusive approaches to AI and organisational transformation. She supports evidence-informed initiatives that strengthen inclusive practice and strategic development across the College.

Ciorsdaidh Watts is a Senior Lecturer in Organic Chemistry at the University of Glasgow and serves as School of Chemistry Equality, Diversity and Inclusion Chair and AI Champion. Her research interests include technology-enhanced learning, ethics in science education, and widening inclusion within Science, Technology, Engineering and Mathematics (STEM). She works to support inclusive teaching practices and thoughtful integration of emerging technologies in higher education.

Sarah Henry is Manager of the Centre for Data Science and AI at the University of Glasgow, leading strategic initiatives that integrate data-driven research and innovation. With a background in molecular biology and advanced analytics, she brings experience spanning academia, industry, and public policy, supporting collaboration and research development across sectors.

Ana Basiri is Director of the Centre for Data Science and AI at the University of Glasgow and a UK Research and Innovation (UKRI) Future Leaders Fellow. Her research addresses bias and missingness in data to create fairer, more transparent AI systems. She works to improve trust, accountability, and ethical standards in data-driven technologies and decision-making.

## ORCID

Lydia Bach  <https://orcid.org/0000-0002-5483-8891>

Ciorsdaidh Watts  <https://orcid.org/0009-0003-2411-6550>

Sarah Henry  <https://orcid.org/0009-0000-6459-6796>

Ana Basiri  <https://orcid.org/0000-0002-2399-1797>

