

Critical AI Literacy

Category: Artificial Intelligence in Education

Critical AI literacy extends functional AI literacy by examining the assumptions, power relations and social consequences embedded in AI systems. It asks not only whether a system works, but whose data and categories shape it, whose interests it serves, and which people or perspectives may be excluded.

AI is a sociotechnical system: models operate within institutions, commercial incentives, policies and cultures. Critical literacy therefore combines technical questioning with attention to representation, inequality, labour, environmental cost and the distribution of decision-making power ([Khodabin et al., 2024](#)).

Critical Questions

1. **Provenance:** What data, sources and human labour contributed to the system and its outputs?
2. **Representation:** Which languages, identities and viewpoints are well represented, stereotyped or absent?
3. **Power and purpose:** Who defines success, controls the system and benefits from its adoption?
4. **Evidence and contestation:** What independent evidence supports the claim, and how can an affected person challenge it?
5. **Agency and alternatives:** Should the system be used, redesigned, limited or replaced by a non-AI approach?

Examples in Practice

A student comparing AI-generated accounts of a historical event can examine which languages and archives dominate the responses, whose testimony is missing and how prompts alter the narrative. The task moves beyond correcting factual errors to analysing how knowledge is selected, framed and made authoritative.

Why It Matters

Without a critical perspective, effective tool use can coexist with unexamined bias or unequal outcomes. Critical AI literacy helps university communities question technological inevitability, recognise affected groups and participate collectively in informed decisions about how AI should shape knowledge and education ([Miao et al., 2024](#)).

Further Reading

6. Khodabin, M., Sharifi Poor Bgheshmi, M., & Movahedzadeh, F. (2024). [Critical AI literacy: Preparing learners for algorithmic societies](#). Journal of Cyberspace Studies, 8(2), 371-397.
7. Long, D., & Magerko, B. (2020). [What is AI literacy? Competencies and design considerations](#). CHI Conference on Human Factors in Computing Systems, 1-16.
8. Miao, F., Shiohira, K., & Lao, N. (2024). [AI competency framework for students](#). UNESCO.

Related Terms: AI Literacy | Algorithmic Bias | Data Justice | Digital Citizenship