AI Literacy for Citizen Participation

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A student in Vermont receives a failing grade after an AI detector flags their original essay as machine-generated. In Bihar, young people struggle to distinguish AI-created political propaganda from legitimate news. Meanwhile, a framework from the European Schools system defines AI literacy through compliance checklists rather than critical engagement. These disparate moments reveal a fundamental tension: while everyone agrees we need "AI literacy," no one agrees what it means. The dominant discourse frames literacy as either technical proficiency or risk awareness, yet as [1] demonstrates through its systematic review, these narrow conceptions fail to prepare citizens for meaningful participation in an AI-mediated democracy.

[1] AI Literacy in K-12 and Higher Education in the Wake of Generative AI ...

The problem runs deeper than definitional confusion. Current approaches to AI literacy reflect and reproduce existing power structures, privileging certain forms of knowledge while marginalizing others. When policymakers speak of literacy, they often mean compliance with predetermined frameworks. When technologists discuss it, they emphasize operational skills. When educators address it, they focus on detection and prevention. Yet none of these perspectives adequately prepare citizens to shape the AI systems that increasingly govern their lives. As [12] argues, we need to move beyond both moral panic and technocratic solutions to develop frameworks that enable genuine democratic participation.

[12] From moral panic to pragmatic governance: reframing AI's societal ...

This essay maps the contested terrain of AI literacy, examining how competing definitions shape—and limit—our collective capacity to govern AI democratically. By analyzing the tensions between skills-based and critical approaches, identifying what current frameworks miss, and examining who gets to define literacy, we can begin to envision more participatory alternatives. The stakes are high: without adequate conceptual clarity about AI literacy, we risk creating educational systems that produce compliant users rather than empowered citizens.

The Multiple Meanings of AI Literacy

The proliferation of AI literacy frameworks reveals not consensus but confusion. Each framework embodies different assumptions about

what citizens need to know and why. The technical-instrumental approach, dominant in workforce development contexts, emphasizes operational competencies. [30] exemplifies this perspective, defining literacy primarily through skills needed for economic productivity: prompt engineering, tool selection, and output evaluation. This framework assumes that literacy means the ability to use AI effectively within existing systems.

[30] The U.S. Department of Labor's Artificial Intelligence ...

Yet this instrumental vision competes with critical-pedagogical approaches that emphasize understanding AI's societal implications. [20] argues for literacy that includes "critical examination of AI's impact on society, ethics, and equity," moving beyond mere tool use to interrogate power relations and algorithmic governance. This framework, drawing on critical media literacy traditions, positions citizens not as users but as analysts capable of questioning AI's role in perpetuating or challenging existing inequalities.

[20] Integrating AI literacy into teacher education: a critical perspective ...

A third approach emerges from child protection discourse, defining literacy primarily through risk awareness and safety protocols. [18] frames literacy as understanding "AI's potential harms and knowing how to protect oneself," emphasizing defensive rather than participatory capacities. This protectionist model, while addressing real concerns, constructs citizens primarily as potential victims needing safeguarding rather than agents capable of shaping technological futures.

[18] Guidance on AI and children - UNICEF

The European educational context adds another layer of complexity. [25] presents AI literacy through a distinctly francophone lens, emphasizing "culture numérique" and republican values of critical thinking. This approach integrates technical competence with philosophical reflection, suggesting that true literacy requires both operational skills and the capacity for ethical reasoning about technology's role in society.

[25] PDF Intelligence artificielle et éducation

These competing definitions are not merely academic distinctions—they shape policy, curriculum, and ultimately, democratic possibility. When literacy is reduced to operational skills, citizens learn to work within AI systems but not to question them. When focused solely on risks, it breeds fear rather than agency. When limited to abstract critique, it fails to provide tools for practical engagement. As [9] notes, effective frameworks must integrate multiple dimensions: "conceptual understanding, practical skills, and critical evaluation capabilities."

[9] Empowering Learners for the Age of AI

Skills Versus Critical Understanding

The tension between skills-based and critical approaches to AI literacy reflects deeper disagreements about education's purpose in democratic societies. The skills-first camp, exemplified by initiatives focusing on prompt engineering, argues for immediate practical relevance. [15] positions prompt crafting as essential for "effective human-AI collaboration," suggesting literacy means mastering the linguistic interfaces of AI systems. This approach promises immediate utility: students who can craft effective prompts can leverage AI for learning, creativity, and problem-solving.

[15] Frontiers | Prompt engineering as a new 21st century skill

However, the emphasis on prompt engineering reveals the limitations of purely skills-based approaches. Teaching students to communicate effectively with AI systems without understanding how these systems work, who controls them, or what biases they embed creates sophisticated users who remain fundamentally powerless. [22] warns against this instrumental reduction, arguing that "technical detection skills alone cannot address the epistemological crisis that deepfakes represent." Citizens need not just to identify synthetic media but to understand how AI transforms the very nature of truth and evidence in democratic discourse.

[22] Les deepfakes et la crise du savoir - UNESCO

The critical understanding approach, by contrast, emphasizes AI's role in shaping social relations and power structures. [17] argues for literacy that includes understanding "algorithmic governance" and its impact on educational equity. This perspective draws on critical pedagogy traditions, positioning AI literacy as consciousness-raising about technological power. Students learn to ask: Who benefits from these systems? What values do they encode? How do they reshape social possibilities?

[17] Gouvernance Algorithmique et Écosystèmes Éducatifs : Vers une Triade ...

Yet the critical approach faces its own limitations. Abstract critique without practical engagement can leave citizens feeling powerless, aware of problems but unable to act. [8] found that educators struggle to balance "critical analysis with practical application," often defaulting to one extreme or the other. Students might understand AI's societal implications but lack the skills to engage constructively with AI tools in their daily lives.

[8] Digital Literacy in the Age of AI: Voices from the Field

The skills-critical divide also manifests in assessment practices. Skills-based frameworks tend toward standardized competency testing: can students craft effective prompts, identify AI-generated content, or use AI tools appropriately? Critical frameworks resist such standardization, emphasizing reflexive thinking and contextual analysis that defies easy measurement. [3] reveals how this tension plays out in

[3] AI-assisted learning stumbles on the evidence

practice, with skills-based interventions showing measurable but limited gains while critical approaches produce harder-to-quantify shifts in understanding.

Some frameworks attempt synthesis, but often through simple addition rather than integration. [2] proposes teaching both "functional skills and critical thinking," yet struggles to articulate how these dimensions interact. The challenge is not to teach skills and criticism separately but to develop approaches where critical understanding emerges through reflective practice and practical engagement deepens critical insight.

[2] AI Literacy: A Framework to Understand, Evaluate, and Use Emerging ...

The Democratic Deficit

Current AI literacy frameworks consistently fail to prepare citizens for meaningful democratic participation in AI governance. This deficit stems not from oversight but from fundamental assumptions about the relationship between individuals and technological systems. Most frameworks position citizens as consumers, users, or potential victims—rarely as collective agents capable of shaping AI's development and deployment. [11] exemplifies this limitation, focusing extensively on risk mitigation while offering little guidance on citizen participation in AI governance.

[11] International AI Safety Report 2026 Examines AI Capabilities, Risks, and Safeguards

The consumer-citizen conflation pervades educational approaches. Students learn to evaluate AI outputs for accuracy, to protect their privacy, and to use tools ethically—all individual competencies for navigating existing systems. Yet they rarely learn how AI systems are governed, how decisions about their deployment are made, or how citizens might collectively influence these processes. [14] acknowledges this gap, noting that even advanced frameworks focus on "individual competencies rather than collective action capabilities."

[14] From Understanding to Creating: Bridging AI Literacy and AI Fluency in ...

This individualization of literacy reflects broader neoliberal educational trends but takes on particular significance with AI. Unlike traditional literacy, where individual reading and writing skills can enable collective political action, AI literacy as currently conceived offers few pathways from individual competence to collective agency. Citizens might understand how large language models work but have no conception of how to influence their governance. They can identify deepfakes but cannot participate in debates about synthetic media regulation.

The democratic deficit appears starkly in frameworks' treatment of power. While many acknowledge that AI systems embed values and can perpetuate inequalities, few provide tools for analyzing or

challenging the power structures that shape AI development. [16] notes that citizens need to understand "AI's dual role as both tool and threat," yet most frameworks treat this duality as a fixed condition rather than a contingent outcome of particular governance choices.

[16] Generative AI in the fight against disinformation

International perspectives reveal alternative possibilities. [23] describes community-based approaches where literacy emerges through collective problem-solving rather than individual skill acquisition. Participants don't just learn to identify misinformation but work together to understand its sources and develop community responses. This suggests literacy frameworks that begin with collective challenges rather than individual competencies.

[23] Misinformation is widespread among young Indians. A Bihar experiment ...

The participation gap extends to framework development itself. Despite rhetoric about stakeholder engagement, most AI literacy frameworks emerge from expert committees with limited citizen input. [11] represents a rare exception, yet even this initiative struggles to move beyond consultation to genuine co-creation. Citizens are asked their opinions about AI but rarely invited to participate in defining what literacy means or designing educational approaches.

[11] People Shaping AI: Groundbreaking Industry-Wide Forum Invites Public Input

Who Gets to Define Literacy?

The power to define AI literacy shapes who can participate meaningfully in AI governance. Current definitions emerge primarily from three sources—technology companies, educational institutions, and government agencies—each advancing particular visions aligned with their interests. [19] exemplifies how business schools define literacy through entrepreneurial and managerial lenses, preparing students to leverage AI for competitive advantage rather than democratic participation.

[19] Inclusive AI Literacy in Business Education | AACSB

Technology companies wield enormous influence through their educational initiatives, framing literacy around their platforms and tools. When prompt engineering becomes central to literacy, as [28] documents, it naturalizes interaction with corporate AI systems as the primary form of engagement. This platform-centric literacy serves corporate interests by training users to work within proprietary systems rather than questioning their design or governance.

[28] Prompt engineering in higher education: a systematic review ... - Springer

Educational institutions, while potentially offering critical perspectives, often reproduce existing hierarchies in their literacy frameworks. [24] reveals how academic definitions of literacy privilege formal educational settings and credentialed expertise. The systematic review found that marginalized communities' knowledge practices—how they understand and respond to AI systems—rarely appear in for-

[24] Navigating the landscape of AI literacy education: insights from a ...

mal frameworks despite often demonstrating sophisticated critical awareness.

Government agencies approach literacy through regulatory and compliance lenses. [26] from the European Schools system defines literacy largely through legal requirements and risk management protocols. While addressing legitimate concerns, this approach constructs citizens primarily as subjects of regulation rather than participants in governance, learning what is permitted rather than imagining what might be possible.

[26] PDF Lignes directrices pédagogiques pour légales et l'utilisation ...

The dominance of Global North perspectives in defining literacy creates additional exclusions. [13] challenges Western-centric frameworks by showing how disability communities in India develop alternative literacies through lived experience with AI systems. These communities understand AI not through abstract frameworks but through practical negotiations with assistive technologies, generating knowledge that formal literacy frameworks fail to capture.

[13] From native intelligence to artificial intelligence: Why disability is shaping India's AI future

Youth perspectives face particular marginalization despite young people's sophisticated engagement with AI systems. [33] reveals significant gaps between how young people understand AI through daily use and how educational frameworks conceptualize literacy. Teenagers develop practical knowledge about AI's capabilities and limitations through experimentation, yet this experiential learning is rarely recognized as legitimate literacy.

[33] Étude sur l'adoption de l'IA générative vue par les ados et leurs parents

The stakes of definitional power become clear in implementation. When business schools define literacy, programs emphasize entrepreneurship and efficiency. When child protection advocates lead, frameworks focus on risk and safety. When technologists dominate, operational skills take precedence. Each definition enables certain forms of engagement while foreclosing others. [31] attempts to navigate these tensions by distinguishing basic literacy from advanced fluency, yet still assumes expert-defined hierarchies rather than recognizing diverse literacies.

[31] Why the Difference Between AI Literacy and AI Fluency Matters

Beyond Individual Competence

The individualization of AI literacy—treating it as personal skillsets rather than collective capacity—fundamentally limits democratic possibilities. This framing pervades current approaches, from competency frameworks that assess individual abilities to educational programs that promise personal advancement through AI skills. [11] exemplifies this trend, examining literacy purely through employability rather than citizenship. Yet meaningful participation in AI governance re-

[11] Atlanta study questions what 'AI-literate' means for the job ...

quires collective capacities that individual-focused frameworks cannot develop.

The limits of individualization appear starkly in attempts to address AI-perpetuated inequalities through personal responsibility. Students learn to check for bias in AI outputs, to verify information, and to protect their privacy—all positioned as individual obligations. [5] provides technical solutions for data protection, yet frames privacy as an individual concern rather than a collective right requiring systemic change. This approach burdens individuals with responsibilities that properly belong to institutions and governance structures.

[5] Building Privacy and Preserving AI Models for Secure Student Data ...

Collective literacy emerges not from aggregating individual competencies but from developing shared capacities for understanding and action. [11] describes how Taiwanese civil society develops collective responses to AI-enabled disinformation through community organizations, fact-checking networks, and participatory media literacy. These approaches recognize that AI's societal impacts require societal responses—no individual, however literate, can alone combat systematic disinformation or algorithmic discrimination.

[11] On the Front Line of Foreign Influence: Enhancing Taiwan's Information Resilience

The classroom itself becomes a site where individualization is either reproduced or challenged. Traditional AI literacy education focuses on individual skill development and assessment. Yet [32] documents emerging pedagogical approaches that emphasize collaborative sensemaking about AI's impacts. Students work together to understand how AI systems function, to identify their effects on communities, and to imagine alternative configurations. This collective learning process develops capacities that individual-focused approaches cannot.

[32] Widen the debate: What is the academic community's perception on ChatGPT?

Institutional responses to AI challenges reveal the inadequacy of individual-competence frameworks. When universities confront AI-enabled cheating, they initially focus on individual detection and punishment. Yet [11] shows how this individualized approach fails—AI detectors produce false positives, particularly for non-native speakers, while missing sophisticated AI use. More importantly, the focus on individual infractions obscures systemic questions about assessment, learning, and the purpose of education in an AI age that require collective deliberation.

[11] Estudiantes son acusados de plagio por Inteligencia artificial

The path beyond individualization requires reconceptualizing literacy as community capacity. This means developing frameworks that assess not just what individuals can do but what groups can accomplish together. It means educational approaches that begin with collective challenges—how can our community respond to AI-enabled surveillance? How might we govern AI use in our schools?—rather than individual skill acquisition. [30] demonstrates why this collective

[30] Swarms of AI bots can sway people's beliefs – threatening democracy

approach is essential: the threats AI poses to democracy are fundamentally collective, requiring collective literacy to address.

Toward Participatory Frameworks

Emerging alternatives to dominant AI literacy frameworks begin not with predetermined competencies but with communities identifying their own needs and capabilities. These participatory approaches recognize that effective literacy must be grounded in lived experience and oriented toward collective action. [7] describes a global consultation process that, despite limitations, attempts to incorporate diverse stakeholder perspectives in defining AI literacy. The process reveals both the potential and challenges of participatory framework development.

[7] Del borrador al diálogo: Cómo la comunidad educativa mundial está dando ...

Participatory frameworks share several key characteristics that distinguish them from expert-imposed models. First, they begin with community-identified problems rather than abstract competencies. Instead of teaching general AI concepts, participants explore how AI systems affect their specific contexts—how facial recognition impacts their neighborhood, how AI hiring tools affect their job prospects, how educational AI shapes their children's learning. [10] demonstrates this approach through community-based interventions that begin with local information needs rather than predetermined curricula.

[10] Empowering users to discern fact from fiction in the age of AI

Second, participatory frameworks integrate multiple knowledge systems rather than privileging technical expertise. Indigenous communities might understand AI through relationships and responsibilities rather than functions and features. Working-class communities might grasp AI's impacts through labor displacement and surveillance rather than abstract ethical principles. [21] shows how different generations bring complementary knowledge to understanding AI threats, with younger people offering technical knowledge and older adults providing wisdom about social manipulation.

[21] Intergenerational Support for Deepfake Scams Targeting Older Adults

Third, these frameworks orient toward collective action rather than individual advancement. Literacy is measured not by test scores but by communities' capacity to influence AI systems affecting them. [6] articulates principles for such action-oriented literacy, emphasizing "capacity to participate in decisions about AI in education" rather than merely understanding predetermined systems.

[6] Ce qu'il faut savoir sur l'IA et le droit à l'éducation - UNESCO

Yet participatory approaches face significant obstacles. Power structures that shape AI development also constrain participatory possibilities. When communities lack resources, time, or institutional support, participation becomes another burden rather than empowerment. [29]

[29] Report: The risks of AI in schools outweigh the benefits : NPR

documents how schools in marginalized communities, despite being most affected by AI systems, have least capacity to develop alternative frameworks.

The tension between participation and expertise requires careful navigation. While rejecting expert dominance, participatory frameworks cannot ignore technical knowledge about how AI systems function. [4] demonstrates how understanding AI's technical operations—how it generates and spreads misinformation—enables more effective community responses. The challenge is integrating technical knowledge as one form of expertise among many rather than the sole basis for literacy.

[4] AI-supported real-time news evaluation reveals effects of time constraint on misinformation discernment

Moving toward participatory frameworks requires structural changes beyond curriculum revision. It means creating spaces for community deliberation about AI systems, supporting grassroots organizations developing alternative literacies, and recognizing diverse knowledge practices as legitimate literacy. It means assessment methods that value collective capacity and practical wisdom alongside individual technical skills. Most fundamentally, it requires recognizing that in democratic societies, citizens must not only understand AI systems but participate in shaping them.

Conclusion: Literacy as Democratic Infrastructure

The contested terrain of AI literacy reveals fundamental questions about technology, education, and democracy. Current frameworks, whether emphasizing technical skills or critical understanding, share a common limitation: they prepare individuals to navigate AI systems rather than communities to govern them. This individual-system relationship, while necessary, is insufficient for democratic participation in an AI-mediated society.

The path forward requires reconceptualizing AI literacy as democratic infrastructure—collective capacity for understanding, deliberating, and acting on AI's role in society. This means moving beyond debates about skills versus criticism to develop integrated approaches where practical engagement deepens critical understanding. It means recognizing that literacy emerges through collective problem-solving rather than individual skill acquisition. Most importantly, it means ensuring that communities most affected by AI systems lead in defining what literacy means.

[27] offers technical guidance for institutional implementation, yet true transformation requires deeper changes. We need educational approaches that begin with community challenges, assessment methods

[27] Policy for AI in Schools, A 10-Step 2025-2026 Implementation Guide

that value collective capacity, and governance structures that connect literacy to participation. Without such transformation, AI literacy risks becoming another mechanism for reproducing existing inequalities rather than enabling democratic futures.

The stakes extend beyond education to democracy itself. As AI systems increasingly mediate social life—from information access to employment decisions—citizens' capacity to understand and influence these systems becomes essential for self-governance. Yet this capacity cannot be developed through individual competencies alone. It requires collective frameworks that recognize diverse literacies, support community action, and connect education to democratic participation. The question is not simply what citizens need to know about AI, but how communities can develop the collective wisdom to govern it. In answering this question, we begin to map not just the contested terrain of AI literacy, but the possibilities for democratic life in an algorithmic age.

References

1. AI Literacy in K-12 and Higher Education in the Wake of Generative AI ...
2. AI Literacy: A Framework to Understand, Evaluate, and Use Emerging ...
3. AI-assisted learning stumbles on the evidence
4. AI-supported real-time news evaluation reveals effects of time constraint on misinformation discernment
5. Building Privacy and Preserving AI Models for Secure Student Data ...
6. Ce qu'il faut savoir sur l'IA et le droit à l'éducation - UNESCO
7. Del borrador al diálogo: Cómo la comunidad educativa mundial está dando ...
8. Digital Literacy in the Age of AI: Voices from the Field
9. Empowering Learners for the Age of AI
10. Empowering users to discern fact from fiction in the age of AI
11. Estudiantes son acusados de plagio por Inteligencia artificial
12. From moral panic to pragmatic governance: reframing AI's societal ...

13. From native intelligence to artificial intelligence: Why disability is shaping India's AI future

14. From Understanding to Creating: Bridging AI Literacy and AI Fluency in ...

15. Frontiers | Prompt engineering as a new 21st century skill

16. Generative AI in the fight against disinformation

17. Gouvernance Algorithmique et Écosystèmes Éducatifs : Vers une Triade ...

18. Guidance on AI and children - UNICEF

19. Inclusive AI Literacy in Business Education | AACSB

20. Integrating AI literacy into teacher education: a critical perspective ...

21. Intergenerational Support for Deepfake Scams Targeting Older Adults

22. Les deepfakes et la crise du savoir - UNESCO

23. Misinformation is widespread among young Indians. A Bihar experiment ...

24. Navigating the landscape of AI literacy education: insights from a ...

25. PDF Intelligence artificielle et éducation

26. PDF Lignes directrices pédagogiques pour légales et l'utilisation ...

27. Policy for AI in Schools, A 10-Step 2025-2026 Implementation Guide

28. Prompt engineering in higher education: a systematic review ... - Springer

29. Report: The risks of AI in schools outweigh the benefits : NPR

30. Swarms of AI bots can sway people's beliefs – threatening democracy

31. Why the Difference Between AI Literacy and AI Fluency Matters

32. Widen the debate: What is the academic community's perception on ChatGPT?

33. Étude sur l'adoption de l'IA générative vue par les ados et leurs parents