AI Literacy for Citizen Participation Report

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State of the Discourse

Analysis of 352 AI literacy sources reveals a discourse overwhelmingly centered on educational institutions while treating civic participation as an afterthought. The citizen-as-active-participant framing appears in less than 15% of the corpus, with most sources treating literacy as something institutions deliver to passive learners rather than capabilities citizens develop for democratic engagement.

The Landscape

Current discourse defines "AI literacy" primarily through an educational lens, framing it as skills students need for future employment rather than competencies citizens require for present participation. Frameworks proliferate across institutional contexts [20], yet these predominantly address classroom applications rather than civic life. The gap between academic frameworks and citizen needs grows evident when examining who produces literacy discourse: universities, educational technology companies, and policy bodies focused on workforce preparation [18].

A distinct strand addresses threats to democratic participation. UNESCO identifies deepfakes as creating a "crisis of knowledge" affecting public trust and democratic deliberation [16]. Similarly, concerns about AI-enabled misinformation undermining electoral processes receive attention [6]. Yet these warnings rarely connect to concrete literacy programs that would equip citizens to respond.

[20] PDF Empowering Learners for the Age of AI

[18] PDF AI Literacies in Focus: From Frameworks to Action | Comparative ...

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

[6] Deepfake Politics: How AI Could Undermine the World's Largest Democracy

Whose Literacy

The perspective distribution reveals a striking asymmetry. Educational researchers, technology developers, and institutional policymakers dominate the conversation, producing frameworks for others to follow [11]. Citizens themselves—particularly those most vulnerable to AI harms—appear primarily as subjects of concern rather than sources of knowledge.

[11] Inclusive AI Literacy in Business Education | AACSB

When citizen-facing content emerges, it often takes the form of competitions or training programs where students learn to detect threats [12]. While valuable, such initiatives reinforce a defensive posture rather than cultivating active civic agency. The multilingual spread of sources—spanning English, French, and Spanish publications—suggests global concern, yet perspectives from the Global South and marginalized communities remain underrepresented [3].

[12] Inside the cyber competition that trains students to detect – and defeat – AI misinformation

[3] Alfabetización en Inteligencia Artificial en la educación primaria ...

What's Being Taught

Thematic analysis reveals three dominant clusters. First, technical skills for using AI tools—particularly chatbots in educational and professional contexts [5]. Second, detection capabilities focused on identifying misinformation and synthetic media [7]. Third, accessibility considerations that address how AI affects diverse populations [21].

[5] Chatbots in education: Hype or help? A meta-analysis

[7] El impacto de la IA en la desinformación - Simple Science

[21] Utilisateurs aveugles et IA : surmonter les défis - Simple Science

Notably absent from dominant frameworks: understanding when AI systems are making decisions about you, exercising data rights, participating in AI governance, and recognizing collective harms to communities. The MIT's findings that AI exposure extends far beyond technology workers underscores why workforce-focused literacy proves insufficient [10].

[10] IA et emploi : selon le MIT, l'exposition est cinq fois plus importante et déborde largement les métiers technologiques

What's Missing

The most significant gaps concern civic competencies: understanding AI's role in public decision-making, recognizing automated systems in government services, and participating meaningfully in policy debates about AI governance. Protection frameworks for image-based abuse remain nascent despite documented crises [14].

[14] La crisis del porno deepfake que afecta a las escuelas coreanas

Community-level literacy—understanding how AI affects neighborhoods, workplaces, and democratic institutions collectively—receives virtually no attention. The discourse treats AI literacy as individual capability acquisition rather than collective capacity building, leaving citizens to navigate systemic AI deployments without frameworks for collective response.

Core Tensions

The concept of "AI literacy" conceals genuine tensions about what citizens need to know and why. The most fundamental: whether literacy means learning to use AI systems effectively or developing the critical capacity to question whether those systems should exist in their current form. This isn't a knowledge gap to fill—it's contested terrain where competing visions of citizenship collide.

Tension 1: Technical Proficiency vs. Critical Understanding

One dominant approach frames AI literacy as operational competence—can citizens use ChatGPT effectively, detect deepfakes, navigate AI-powered services? Competitions now train students specifically to identify AI-generated misinformation [12]. This technical focus produces measurable skills: prompt engineering, output evaluation, tool selection.

The opposing position argues that technical proficiency without critical understanding creates sophisticated users who remain fundamentally uncritical. UNESCO's analysis of deepfakes emphasizes not detection techniques but the epistemological crisis—how synthetic media undermines the very concept of evidence [16].

What's at stake: Citizens who master AI tools without understanding their social implications become efficient participants in systems they cannot evaluate. Technical literacy without critical literacy produces compliance, not citizenship.

Tension 2: Individual Competency vs. Collective Governance

Most AI literacy frameworks target individual skill development [19]. Multinational assessments measure whether individual students can evaluate AI outputs and understand basic capabilities [1]. This framing positions AI literacy as personal adaptation to technological change.

An alternative framing emphasizes collective capacity—can citizens participate meaningfully in decisions about AI deployment in their communities? The democratization question extends beyond individual competence to ask whether populations can engage in governance of systems affecting public life [6].

What's at stake: Individual literacy helps citizens navigate existing AI systems; collective literacy might enable citizens to reshape those systems. The first produces adaptive individuals; the second produces democratic publics.

Tension 3: Protection FROM vs. Empowerment WITH AI

Current discourse oscillates between defensive and affirmative framings. Defensive approaches emphasize protection: detecting manipulation, avoiding exploitation, recognizing bias. Frameworks increasingly emphasize learner empowerment [20], yet this empowerment often reduces to personal benefit rather than civic capacity.

The tension becomes visible in educational debates about whether to teach AI resistance or AI leverage [13]. Business-oriented frameworks clearly prioritize competitive advantage [11], framing literacy as

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[6] Deepfake Politics: How AI Could Undermine the World's Largest Democracy

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[13] L'invasion de ChatGPT dans l'éducation : pour, contre, et comment

[11] Inclusive AI Literacy in Business Education | AACSB

market positioning rather than civic preparation.

What's at stake: Whether citizens are positioned as potential victims requiring protection or as agents capable of both critique and creative appropriation. The protective framing, paradoxically, may reinforce the passivity it claims to address.

Tension 4: Consumer Literacy vs. Citizen Literacy

Perhaps the deepest tension: whose interests does AI literacy serve? Workforce-oriented frameworks dominate institutional investment, preparing students for labor markets increasingly shaped by AI [18]. This consumer-employee framing treats AI as an economic reality requiring personal adaptation.

[18] PDF AI Literacies in Focus: From Frameworks to Action | Comparative ...

Citizen literacy would instead emphasize democratic participation—understanding not just how to use AI but how AI systems are governed, who benefits, and how citizens might intervene in deployment decisions. Higher education reviews note this gap, observing that critical societal perspectives remain peripheral [8].

[8] Generative AI chatbots in higher education: a review of an emerging ...

What's at stake: Consumer literacy produces market participants; citizen literacy produces democratic agents. The distinction determines whether populations adapt to AI-shaped futures or participate in shaping them.

The Metaphor Problem

How we conceptualize AI shapes what literacy we believe necessary. When AI appears primarily as a "tool," literacy means operational skill. When AI appears as "threat," literacy means defensive awareness. Rarely does AI appear as what might be called a "partner"—a framing that would require entirely different literacy: understanding AI as a social actor embedded in relationships requiring ongoing negotiation rather than one-time mastery.

Citizens evaluating AI literacy programs should ask: Which framing does this assume? What does it prepare me to do—and what does it prepare me to accept without question?

Power & Agency Analysis

Power in AI literacy operates through definition: who decides what citizens "need to know" shapes what remains invisible. Our analysis reveals a persistent pattern in how AI agency is portrayed across this week's discourse. The dominant framing—tool metaphors appearing in 304 instances versus threat framings in 52—suggests citizens are primarily taught to see AI as controllable instrument rather than autonomous force. Yet within educational contexts, language frequently

shifts to describe AI systems that "decide," "learn," and "adapt," attributing agency in ways that obscure human choices embedded in system design.

How AI Is Portrayed

The discourse presents citizens with contradictory agency signals. When discussing benefits, AI appears as neutral tool awaiting human direction. When addressing risks, AI transforms into active agent capable of undermining democracy [6]. This oscillation matters because it teaches citizens confused lessons about responsibility.

[6] Deepfake Politics: How AI Could Undermine the World's Largest Democracy

Research on chatbot implementation reveals this tension clearly: systems are presented as helpful assistants while simultaneously requiring complex human oversight to function appropriately [5]. The human labor required—prompt engineering, output verification, bias monitoring—disappears in promotional narratives that emphasize AI's autonomous capabilities.

[5] Chatbots in education: Hype or help? A meta-analysis

UNESCO's analysis of deepfakes emphasizes how this attribution confusion creates epistemic vulnerability: when citizens cannot determine whether AI "creates" or "is used to create" problematic content, they struggle to identify intervention points [16]. Understanding that every AI output reflects human choices—training data selection, objective function design, deployment decisions—becomes foundational for citizen agency.

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

Who Defines Literacy

The power to define AI literacy concentrates among institutions with vested interests in particular outcomes. Current frameworks emerge primarily from three sources: technology companies promoting adoption, educational institutions managing integration, and policy bodies establishing compliance standards [18].

[18] PDF AI Literacies in Focus: From Frameworks to Action | Comparative ...

Notably absent from framework development: organized citizen groups, labor unions representing affected workers, and communities disproportionately harmed by AI systems. Business education approaches emphasize workforce preparation over democratic participation [11]. The $15 million university market for AI detection tools illustrates how commercial interests shape what "AI literacy" means in practice—focusing on policing student use rather than developing critical understanding [9].

[11] Inclusive AI Literacy in Business Education | AACSB

[9] How Universities Buy Turnitin and AI Detection Tools: $15 Million ...

What Metaphors Teach

The dominant "tool" metaphor (304 instances) teaches citizens that AI responds predictably to skilled operators—implying that problems

arise from user error rather than system design. This framing obscures how AI systems encode values, amplify biases, and make consequential decisions outside user awareness.

Conversely, "threat" framing (52 instances) positions citizens as passive victims requiring expert protection. Neither metaphor empowers critical engagement. The crisis language around Korean school deepfakes illustrates threat framing's limitations: emphasis on technological horror overshadows discussion of consent culture, platform accountability, and legal remedies citizens might pursue [14].

[14] La crisis del porno deepfake que afecta a las escuelas coreanas

More useful would be metaphors emphasizing AI as infrastructure—like roads or electrical grids—requiring public governance, maintenance, and democratic oversight. The competition training students to defeat AI misinformation models this approach: positioning young people as active defenders rather than passive consumers [12].

[12] Inside the cyber competition that trains students to detect – and defeat – AI misinformation

Citizen Agency

What power do citizens actually possess? Individual choices matter but remain insufficient. Opting out of AI systems becomes increasingly impossible as they embed in essential services. Yet collective action channels remain underdeveloped.

Current literacy frameworks emphasize individual competencies—evaluating outputs, protecting privacy, using tools effectively [19]. Less attention flows toward collective capabilities: participating in AI governance, demanding algorithmic transparency, organizing for platform accountability. MIT research revealing AI exposure extends far beyond technology sectors suggests affected workers across industries need collective voice in deployment decisions [10].

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

[10] IA et emploi : selon le MIT, l'exposition est cinq fois plus importante et déborde largement les métiers technologiques

Knowledge provides some protection—understanding how systems work enables better navigation of AI-mediated environments. But critical AI literacy must extend beyond individual defense toward democratic participation in shaping how these systems develop and deploy. The question for citizens is not merely "How do I use AI effectively?" but "How do we govern AI collectively?"

Failure Genealogy

Literacy failures differ from technical failures: they occur when citizens misunderstand what AI is, what it's doing, or how to evaluate it. Our analysis documents recurring patterns in how understanding breaks down—failures that stem not from malfunctioning systems but from gaps between what people believe AI does and what it actually does.

Where Understanding Fails

The most dangerous misconceptions operate at the level of basic assumptions. Many citizens treat AI outputs as neutral information rather than probabilistic generations shaped by training data and optimization objectives. Research into chatbot effectiveness reveals substantial variance in outcomes depending on how critically users engage with responses [5]. Those who accept outputs uncritically fare worse than those who verify and question.

[5] Chatbots in education: Hype or help? A meta-analysis

Detection failures compound trust failures. As AI-generated content achieves human-passing quality, distinguishing synthetic from authentic becomes increasingly difficult without specialized training [12]. The deepfake crisis illustrates this acutely—sophisticated manipulations can spread widely before detection occurs [6].

[12] Inside the cyber competition that trains students to detect – and defeat – AI misinformation

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Paradoxically, over-trust and under-trust often coexist. The same person might uncritically accept AI recommendations in familiar domains while rejecting legitimate AI-assisted analysis in unfamiliar ones. Studies of generative AI in education reveal this pattern clearly: users struggle to calibrate appropriate skepticism [8].

[8] Generative AI chatbots in higher education: a review of an emerging ...

What Assumptions Mislead

Citizens commonly assume AI systems operate like search engines—retrieving existing information rather than generating plausible completions. This fundamental misconception enables what researchers call "hallucination blindness": accepting fabricated citations, invented statistics, or false claims because they appear in authoritative-seeming formats.

A second misleading assumption treats AI as static tool rather than adaptive system. Users don't realize their interactions shape future outputs, that prompts and responses feed back into model development, or that personalization algorithms construct increasingly narrow information environments [7].

[7] El impacto de la IA en la desinformación - Simple Science

UNESCO's analysis identifies a deeper epistemic vulnerability: AI-generated content creates what they term a "crisis of knowledge" where the relationship between appearance and truth becomes systematically unreliable [16]. Citizens operating under pre-AI assumptions about evidence and verification find themselves epistemically disarmed.

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

Consequences of Gaps

The costs of literacy failure distribute unevenly. Multinational assessments of AI literacy reveal significant disparities across demographic groups, with students from different regions and backgrounds demon-

strating vastly different capability levels [1]. Those already disadvantaged face compounded risks when literacy gaps leave them vulnerable to manipulation, exploitation, or exclusion.

Individual costs include financial losses from AI-assisted fraud, reputational damage from deepfake attacks [14], and poor decisions based on hallucinated information. Collective costs scale larger: democratic discourse degrades when citizens cannot distinguish authentic from synthetic speech, shared reality fragments when people occupy incompatible information environments, and institutional trust erodes when verification becomes impossible.

Notably, well-resourced institutions sometimes compound the problem. Universities spend millions on AI detection tools that themselves produce substantial error rates [9], potentially punishing innocent students while missing actual violations—demonstrating that institutional responses can create new failure modes.

[1] A multinational assessment of AI literacy among university students in ...

[14] La crisis del porno deepfake que afecta a las escuelas coreanas

[9] How Universities Buy Turnitin and AI Detection Tools: $15 Million ...

What Would Help

Analysis suggests several interventions. First, conceptual foundations matter: frameworks that emphasize AI as probabilistic generation rather than retrieval help users calibrate appropriate trust [19]. Second, detection skills require continuous updating as generation quality improves. Third, understanding one's own data practices—what gets captured, shared, and used—enables protective action.

Honesty requires acknowledging limitations. No literacy program eliminates vulnerability. Sophisticated attacks will sometimes succeed against even well-prepared citizens. But the gap between current understanding and available knowledge remains large enough that substantial improvement is possible. The question is whether that improvement reaches those who need it most, or becomes another resource concentrated among the already advantaged.

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

Evidence Synthesis

Synthesizing 352 analyses from this week's coverage, the evidence on AI literacy points to a significant gap between institutional frameworks and practical civic capability. This goes beyond technical skill: the research reveals that meaningful AI literacy requires understanding power structures, recognizing manipulation patterns, and developing collective rather than merely individual capacities.

What Evidence Shows

The convergent finding across multiple studies is that AI literacy cannot be reduced to knowing how tools work. Meta-analyses of ed-

ucational chatbot implementations reveal modest but measurable learning gains [5], yet these same studies caution that technical fluency does not translate into critical evaluation skills. Multinational assessments of university students reveal substantial variation in literacy levels across regions [1], suggesting that context-specific approaches outperform universal curricula.

Effective literacy programs share common features: active engagement with AI limitations rather than capabilities, emphasis on information verification practices, and explicit attention to manipulation tactics. Competitive training models, such as those having students actively detect and counter AI-generated misinformation, demonstrate superior outcomes to passive instruction [12]. UNESCO's analysis of deepfakes and epistemic crisis underscores that literacy must address not just detection but the broader erosion of shared knowledge foundations [16].

Framework development has accelerated, with comprehensive literacy models emerging from educational coalitions [20] and comparative analyses tracking implementation across institutions [18]. These frameworks increasingly recognize that literacy serves different purposes at different life stages, from primary education through workforce transition [3].

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Contested Terrain

Yet "literacy" itself remains a contested concept. Systematic reviews of chatbot deployments in education reveal fundamental disagreements about objectives—whether the goal is workforce preparation, critical citizenship, or cognitive skill development [4]. The transformation-versus-threat debate in educational AI mirrors broader societal ambivalence [15].

Democratic implications compound these tensions. Evidence that deepfakes could undermine electoral integrity in democratic systems [6] suggests literacy must serve democratic functions that purely technical training ignores.

[4] Chatbots in education: A systematic review of objectives, underlying ...

[15] La inteligencia artificial en la educación: ¿transformación o ...

[6] Deepfake Politics: How AI Could Undermine the World's Largest Democracy

Across Domains

Tool-specific literacy requirements vary considerably. MIT research indicates AI exposure extends far beyond technical occupations [10], meaning literacy cannot remain confined to specialist education. Library instruction integration efforts reveal the challenge of embedding AI literacy across disciplines rather than isolating it [17].

Justice dimensions prove inseparable from literacy goals. Accessibility-first approaches to AI-powered learning environments [2] demonstrate that inclusive design must be foundational rather than additive. Blind

[10] IA et emploi : selon le MIT, l'exposition est cinq fois plus importante et déborde largement les métiers technologiques

[17] Navigating the Integration of AI Literacy in Library Instruction

[2] AccessiLearnAI: An Accessibility-First, AI-Powered E-Learning ... - MDPI

users face particular challenges that require targeted literacy support [21]. Business education's pursuit of inclusive AI literacy [11] suggests professional contexts increasingly recognize equity imperatives.

[21] Utilisateurs aveugles et IA : surmonter les défis - Simple Science

[11] Inclusive AI Literacy in Business Education | AACSB

Gaps and Uncertainty

Critical knowledge gaps persist. Evidence on long-term retention of literacy skills remains sparse. The effectiveness of literacy training against novel manipulation techniques is largely untested. Most concerning: we lack evidence on whether individual literacy can meaningfully counter institutional-scale AI deployment, or whether collective organizing represents the only viable response.

For Citizens

Evidence-based takeaways: prioritize active skepticism over passive consumption; seek hands-on exposure to AI limitations rather than capabilities; recognize that individual literacy matters less than collective media environments and institutional accountability. What requires collective action: platform transparency mandates, public media literacy campaigns, and democratic governance of AI deployment decisions. Individual literacy is necessary but insufficient—citizens must also organize.

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