

AI Literacy Competencies for L&D Professionals

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This document outlines the competencies associated with the [AI Literacy Framework for L&D Professionals](#).

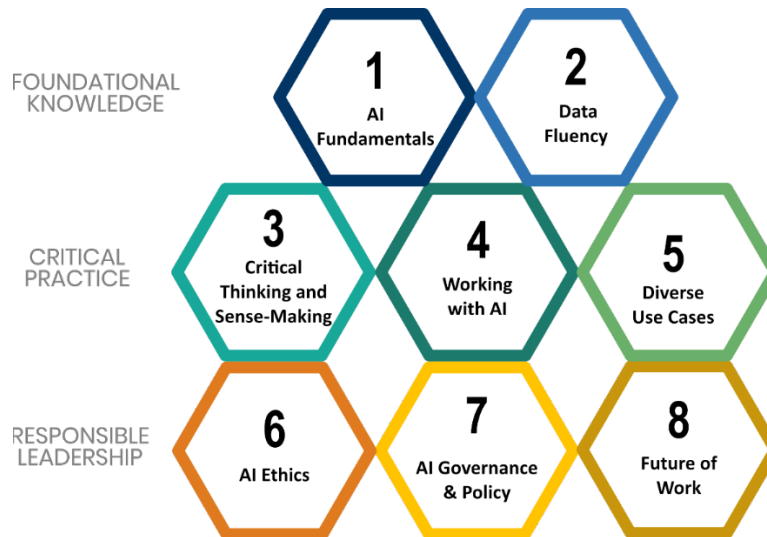


Figure 1: AI Literacy Framework across eight domains.

How to Use These Competencies

These competency descriptors are designed to support honest self-reflection and purposeful development — not performance evaluation.

<p>1. Find your development edge Read across each domain at your current level and identify which descriptors feel true, which feel aspirational, and which feel out of reach. That gap is where your development begins.</p>	<p>3. Revisit periodically AI is moving fast. A descriptor that felt aspirational six months ago may now reflect your practice, and new gaps will have emerged.</p>
<p>2. Focus your effort Two or three targeted areas will serve you better than trying to advance across all eight domains simultaneously. Choose the areas most relevant to your role and growth that will have the most impact.</p>	<p>4. Use it as a conversation starter Share with a colleague or manager to open a conversation about capability, not just tool adoption. The descriptors give shared language for what AI literacy looks like in L&D practice.</p>

Competency Levels

Each domain is described across four levels. These are not rigid stages, rather, they reflect a developmental progression. It is neither necessary nor expected that every L&D professional reaches Pioneer in every domain. The goal is intentional growth that aligns with your role, context, and the needs of those you serve.

Newcomer

Awareness without yet being able to act. At this level, you recognize that a domain area exists and matters, but have not yet developed the knowledge or skills to engage with it meaningfully in practice.

Explorer


Foundational knowledge and early application. You understand key concepts, can identify relevant examples, and are beginning to apply this knowledge in your work with developing confidence.

Integrator

Consistent, context-aware practice. You apply knowledge fluently across your L&D work, adapt your approach to different contexts, evaluate tools and strategies critically, and help colleagues navigate the same territory.

Pioneer

Organizational leadership and field contribution. You lead practice within your organization and contribute outward through publishing, speaking, community participation, policy engagement, or developing tools and frameworks others can use. Pioneers do not just model good practice; they advance what good practice is.

 *It is not necessary to progress to Pioneer in every domain. Choose the level that best serves your professional goals and the needs of your organization.*

DOMAIN 1

AI Fundamentals

Lays the groundwork for understanding AI with core concepts, historical evolution, and how different AI techniques apply to real-world problems in L&D contexts.

Newcomer	Explorer	Integrator	Pioneer
Learn commonly used AI terms, including machine learning, algorithms, and generative AI. Identify broad examples of AI in everyday life	Define and explain core AI concepts such as machine learning, large language models, neural networks, generative AI, and agentic AI systems	Compare and evaluate AI techniques and their trade-offs, and critically assess claims made about specific AI tools and products based on evidence	Translate complex AI concepts for diverse audiences, from frontline learners to senior leaders. Actively shape how the organization engages with AI.
Recognize that different AI techniques exist and that AI has evolved over time, without yet being able to explain distinctions	Distinguish between AI subfields such as machine learning, deep learning, and natural language processing, and describe how models are built and trained	Apply understanding of how AI systems work to make informed, context-specific decisions about AI adoption and use in L&D practice, including communicating limitations clearly to stakeholders	Contribute to the broader L&D field through publishing, presenting, or participating in professional communities in ways that advance collective AI literacy

DOMAIN 2

Data Fluency

Develops the skills to scrutinize and work effectively with data used in AI systems such as understanding data sources, bias, and the specific implications for learner data in AI-powered learning environments.

Newcomer	Explorer	Integrator	Pioneer
Aware that data influences AI outputs, including that the quality and source of data affects AI performance	Identify potential sources of bias and misrepresentation in datasets, and explain why data quality matters for AI system outputs	Evaluate datasets for completeness, consistency, timeliness, accuracy, and relevance, and apply data governance principles when selecting, implementing, or recommending AI-powered learning tools	Lead data governance conversations within the organization as they relate to AI-powered learning systems, contributing to policy development that protects learner privacy and ensures responsible data use
Recognize that data governance and privacy considerations exist in relation to AI, without yet understanding the specifics	Describe the basics of data governance, including why data provenance and collection context matter for evaluating AI reliability	Identify how learner data is collected, stored, and used within AI-powered learning systems, and communicate data-related risks clearly to organizational stakeholders	Share frameworks, case studies, or practical guidance externally that helps other L&D professionals navigate data fluency challenges in AI contexts

DOMAIN 3

Critical Thinking and Sense-Making

Builds the analytical habits needed to evaluate AI-generated content, identify misinformation and bias, and exercise well-reasoned human judgment.

Newcomer	Explorer	Integrator	Pioneer
Note that AI outputs require critical evaluation, and that AI systems can produce inaccurate or biased content	Identify logical fallacies, misinformation, hallucinations, and overgeneralizations in AI-generated content, and describe why these occur	Assess AI-generated content systematically, interrogating citations, tracking claims to original sources, and weighing outputs against known evidence. Integrate this critical lens consistently into learning design practice	Develop tools, frameworks, or learning resources that help L&D practitioners and their organizations build robust sense-making capabilities in AI contexts
Observe the importance of verifying AI-generated information before using or sharing it, without yet having reliable strategies to do so	Apply basic fact-checking habits when using AI-generated content, including cross-referencing sources and assessing plausibility in context	Model and teach sense-making strategies to learners and colleagues, building organizational capacity to engage critically with AI-mediated information	Contribute to professional discourse on maintaining intellectual rigor and human judgment in AI-mediated environments, through publications, presentations, or community leadership

DOMAIN 4

Working with AI

Focuses on how L&D professionals actually integrate AI into their practice, including prompting, workflow integration, and critically evaluating the pedagogical assumptions embedded in AI tools designed for learning.

Newcomer	Explorer	Integrator	Pioneer
Aware that AI tools are being used in learning design and L&D workflows, and have limited hands-on experience with them	Experiment with AI tools relevant to L&D practice such as content creation, predictive learning analytics, and feedback tools. Describe their primary functions and limitations	Integrate AI tools fluently into L&D workflows to accelerate design, generate options, and support performance. Maintain clear human judgment and oversight throughout.	Establish organizational standards, workflows, and evaluation criteria for how AI tools are selected and used in learning design, and guide colleagues in applying them
Recognize that AI tools have both benefits and limitations in L&D contexts, without yet being able to evaluate or apply them confidently	Recognize that AI tools designed for learning embed pedagogical assumptions, and begin asking what those assumptions are before adopting a tool	Critically evaluate AI-powered learning tools against evidence-based pedagogical principles, assessing whether embedded assumptions align with the learning needs and contexts being served	Contribute to the field by sharing frameworks, critical analyses, or findings that help other practitioners evaluate not just what a tool does, but what it assumes about learning

DOMAIN 5

Diverse Use Cases

Builds the capacity to look beyond L&D for insight by examining how AI is applied across sectors, understanding what works and what has failed, and drawing transferable lessons to inform learning design and organizational practice.

Newcomer	Explorer	Integrator	Pioneer
Aware that AI is being applied across many industries and sectors beyond L&D	Identify and describe specific examples of how AI is being applied in sectors beyond L&D and explain what problems those applications are designed to solve	Analyze AI use cases from other sectors to understand the conditions that made them effective or problematic, and draw transferable insights to inform decisions in L&D practice	Systematically scan cross-sector AI developments as part of professional practice, and produce case analyses, comparative studies, or frameworks that make those insights accessible to L&D audiences
Recognize that developments in other fields may be relevant to L&D practice, without yet knowing how to identify or apply them	Look outside the L&D field as a regular practice of staying current with AI developments, rather than limiting attention to learning design-specific tools and trends	Adapt approaches from other domains to learning design, performance support, and capability building contexts. Avoid known failure patterns and identify relevant innovations	Champion cross-sector learning as a driver of innovation in workplace learning. Model and teach transfer thinking as a core professional capability.

DOMAIN 6

AI Ethics

Grounded in Ethics as Design methodology¹, this domain positions ethical challenges not as problems to be judged but as problems to be actively solved iteratively and practically, with the same design sensibility L&D professionals bring to their work.

Newcomer	Explorer	Integrator	Pioneer
Observe that AI raises ethical concerns such as bias, privacy, fairness, and accountability - in both general and learning-specific contexts	Define core ethical principles as they apply to AI ; identify common ethical challenges associated with AI use in learning contexts, including data privacy, copyright violation, environmental impact, algorithmic bias, transparency, and informed consent.	Treat ethical challenges in AI as design problems — identifying ethical tensions where values such as personalization, privacy, efficiency, and equity come into conflict, and devising practical remediation that work toward satisfying multiple demands simultaneously	Contribute to devising ethical guidelines, rubrics, or decision tools for the organization or L&D field, grounding that contribution in a practical, iterative problem-solving stance
Recognize that ethical issues exist in AI tools encountered in L&D practice, without yet having strategies to identify or address them	Describe how ethical problems in AI require active, considered responses rather than passive compliance, and begin developing a stance toward ethical practice	Apply an iterative ethical practice, and integrate ethical reasoning explicitly into learning design and tool selection processes	Participate in organizational or sector-level policy development on responsible AI use, and contribute publicly to professional discourse on what ethical AI practice looks like in learning contexts

1. Whitbeck, C. (1996). Ethics as design: Doing justice to moral problems. *Hastings Center Report*, 26(3), 9–16

DOMAIN 7

AI Governance and Policy

Addresses the structures, accountability mechanisms, and regulatory frameworks that govern how AI is used at work, and positions governance as a core L&D professional competency.

Newcomer	Explorer	Integrator	Pioneer
Recognize that organizations are developing AI governance policies and that regulatory frameworks related to AI exist	Describe the purpose of organizational AI governance frameworks and identify key regulatory developments relevant to L&D contexts such as the EU AI Act and emerging national AI policies	Navigate organizational AI governance frameworks confidently in L&D practice, stating what data can and cannot be used with AI tools, applying vendor assessment criteria, and identifying when decisions require escalation or review	Contribute to the development and refinement of organizational AI governance frameworks, bringing an L&D perspective to policies that are frequently developed without it. Advocate for governance structures that explicitly protect learners
Notice that governance responsibilities may extend to L&D professionals, without yet articulating what those responsibilities involve	Explain what data residency, acceptable use policies, and vendor compliance mean in general terms, and connect these considerations to AI tools used in learning design	Communicate governance requirements clearly to colleagues and stakeholders, and integrate compliance considerations into design and procurement processes as a routine practice	Share frameworks, guidance, or analysis externally that helps other L&D professionals understand and engage with AI governance as a core professional competency

DOMAIN 8

Future of Work

Focuses on understanding how AI is reshaping workforce dynamics across industries and on the strategic role L&D plays in supporting people, organizations, and communities through AI-driven change with equity and foresight.

Newcomer	Explorer	Integrator	Pioneer
Know that AI will impact the jobs and skills of the people and organizations being supported, and that L&D has a role in responding to this	Identify specific roles and skill areas being significantly affected by AI-driven change, including tasks being automated, augmented, or newly created, and describe how these trends vary across industries	Analyze how AI is reshaping workforce dynamics within a specific organizational context, such as changes to role structures, skill requirements, and the nature of work, and translate that analysis into actionable learning strategy	Develop workforce foresight analyses, learning strategy frameworks, or capability models that help organizations navigate the transitions with clarity, equity, and long-term sustainability
Recognize that workforce change driven by AI is already underway, without yet having a clear picture of how those changes will unfold or what they mean for L&D practice	Begin upskilling in areas relevant to an AI-human collaboration workplace, and engage with current thinking on workforce trends, future skills, and the evolving nature of work	Design and propose upskilling and reskilling interventions that prepare people not just for the current AI landscape but for continued change, building organizational learning cultures that treat adaptability as a core capability	Participate in external conversations through research, writing, policy engagement, or professional community leadership that advance the field's collective capacity to support people through the future of work