AAB-STD-002

AI Literacy Learning Outcome Framework

Version: Draft v0.1

Status: Public Draft for External Review
Classification: AAB Standards Series

Approval Authority: AAB Standards Council

Effective Date: 11/3/2025

Next Systematic Review: 12 months, or earlier when major framework crosswalks are approved

Foreword

This document has been prepared as a draft AAB learning-outcome framework for classifying AI literacy evidence, grade-band progression, and alignment claims.

This document is not a final AAB standard, certification basis, endorsement, or public AAB position until approved through the applicable human review process.

1. Scope

This draft standard defines a structured AI literacy learning outcome framework for K-12, higher education, adult learning, and workforce contexts.

It does not prescribe a curriculum, tool, vendor, pedagogy, or national policy. It defines outcome domains that AAB can use to classify cases, pilots, resources, assessments, and standards alignment.

2. Purpose

AAB needs a shared language for identifying whether an activity is merely tool exposure or contributes to deeper AI literacy.

AI literacy in this framework means the ability to understand, use, evaluate, create with, and govern AI systems responsibly in context.

3. AI Literacy Domains

Domain 1: AI Concepts and Systems

Learners understand that AI systems are designed technologies that use data, models, patterns, rules, or learned representations to produce outputs.

Domain 2: Data, Models, and Evidence

Learners understand that data quality, data representation, model design, and evidence limitations affect AI outputs.

Domain 3: Human-AI Collaboration

Learners understand the difference between human responsibility and AI assistance. They can identify when AI acts as a tool, co-creator, tutor, evaluator, simulator, or automation layer.

Domain 4: Prompting and Communication

Learners can communicate with AI systems using age-appropriate prompts, constraints, examples, revisions, and reflection.

Domain 5: Critical Evaluation

Learners can question AI outputs, identify possible errors, compare sources, recognize uncertainty, and avoid treating AI as final authority.

Domain 6: Ethics, Safety, Privacy, and Responsibility

Learners understand privacy, data protection, bias, fairness, intellectual honesty, appropriate use, and human accountability.

Domain 7: Creative and Computational Production

Learners can use AI and computational tools to create, test, iterate, debug, revise, explain, or present artifacts.

Domain 8: Civic, Workforce, and Policy Awareness

Learners understand that AI affects society, work, institutions, policy, and public responsibility.

4. Grade-Band Progression

K-2

Learners should:

- Recognize that AI is a tool made by people.
- Notice that AI can make mistakes.
- Use AI only with adult guidance.
- Describe what they contributed and what the AI contributed.
- Avoid sharing private personal information.
- Engage through concrete, visual, oral, and story-based activities.

Grades 3-5

Learners should:

- Explain that AI uses examples, patterns, or data to make suggestions.
- Use scaffolded prompts and revise AI outputs with human judgment.
- Compare human-created and AI-generated work.
- Recognize that missing or biased examples can affect AI results.
- Practice privacy-safe use.
- Reflect on whether AI helped, confused, or changed their work.

Grades 6-8

Learners should:

- Explain training data, model behavior, prediction, and feedback using age-appropriate examples.

- Analyze how data quality and representation affect fairness and accuracy.
- Use AI tools for inquiry, creation, simulation, or coding with supervision.
- Identify hallucination, overreliance, privacy, bias, and academic integrity risks.
- Document prompts, revisions, and human decisions.
- Discuss social consequences of AI use.

Grades 9-12

Learners should:

- Explain model training, evaluation, error, bias, privacy, and accountability at a conceptual level.
- Evaluate AI outputs against evidence, sources, task goals, and ethical constraints.
- Use AI tools in projects while documenting human authorship and decision-making.
- Compare AI systems, datasets, and governance approaches.
- Propose safeguards for real-world AI use.
- Connect AI literacy to college, career, civic, and policy contexts.

Adult and Workforce

Learners should:

- Select AI tools responsibly for work or civic tasks.
- Evaluate reliability, security, privacy, and organizational risk.
- Understand human accountability for AI-assisted decisions.
- Use AI to improve productivity without delegating professional judgment blindly.
- Recognize when domain experts, legal review, or institutional policy are required.

5. Minimum Outcome Statement Structure

Every AAB-aligned learning outcome should identify:

- Learner group
- AI concept or practice
- Human action
- Evidence of learning
- Risk or safeguard
- Context of use

Recommended template:

Learners in [grade band/context] can [observable action] in order to [AI literacy purpose], while [safeguard or responsibility condition], as shown by [evidence indicator].

Example:

Learners in grades 3-5 can revise an AI-generated story draft by identifying one human choice and one AI suggestion, while recognizing that AI is a helper rather than the final author, as shown by a revised story and short reflection.

6. Alignment to AAB Collections

Case records should tag which domains appear in the activity.

Pilot records should identify intended domains, evidence indicators, phase artifacts, and observed limitations.

Resource records should identify which domains are covered and which are missing.

Assessment records should identify which domains are measured and how.

Framework records should map external competencies to AAB domains.

Policy records should identify which domains are required, recommended, or absent.

7. Evidence Basis

This draft framework is informed by:

- AAB case registry pages documenting AI storytelling, Scratch-based AI concepts, model training demonstrations, simulation-based coding labs, and ArtChat use.
- The AAB Pilot Framework requirement for alignment, human responsibility, safeguards, evidence, and registry treatment.
- AAB standards notes describing how repeated cases can produce shared design expectations.
- AAB roadmap language calling for evidence before standardization and phased maturity.

8. Limitations

This draft does not yet include a full reviewed crosswalk against UNESCO, AI4K12, aiEDU, Code.org, ETS, TuLIP, OECD, NIST, or state-level AI literacy frameworks.

It should be treated as a working AAB framework until reviewed by education, learning science, assessment, safety, and Standards Council reviewers.

9. Open Review Questions

- Should AAB separate K-2 from PreK in future versions?
- Should adult and workforce AI literacy have a separate standard?
- Which domains should be required for all AI literacy claims?
- Which outcomes are suitable for assessment versus descriptive documentation only?
- How should AAB handle local curriculum standards by jurisdiction?

Revision History

Version	Date	Summary of Changes	Approved By
Draft v0.1	Draft	Initial working document generated from AAB evidence-layer drafts and ISO-style template.	AAB Standards Council