

From AI Concepts to Responsible Co-Creation

Research brief on framework convergence for grade-band AI literacy standards

AAB-RESEARCH-BRIEF-2026-004

Intended audience: Curriculum designers, researchers, standards writers, policy staff, and implementation partners

Foreword

This document has been prepared by the AI Assessment Board (AAB) to support public-interest AI literacy standards, evidence review, and policy formation. AAB's role is to organize evidence, clarify implementation conditions, and support responsible decision-making across education, workforce, and community settings.

The brief translates framework evidence into an AAB grade-band design heuristic for AI literacy standards.

Research Claim

The strongest AI literacy frameworks move from concepts to judgement to creation. AAB should therefore use grade-band progressions and role-specific expectations rather than one generic AI literacy statement for all learners.

Framework Convergence

The live AAB framework registry contains 62 records, including global, K-12, teacher, higher education, workforce, and governance references.

UNESCO organizes student competency across human-centred mindset, ethics, AI techniques and applications, and AI system design, with progression from understand to apply to create.

AI4K12 organizes school AI education around perception, representation and reasoning, learning, natural interaction, and societal impact.

Policy sources increasingly connect AI literacy with safety, human agency, governance, and institutional accountability.

AAB Grade-Band Design Heuristic

Recommendations for Research Translation

Map every AAB outcome to at least one framework source and one implementation or assessment evidence type where available.

Preserve conceptual AI knowledge alongside generative AI tool fluency.

Treat responsible use, human agency, and societal impact as core AI literacy outcomes.

Use grade-band examples to prevent adult compliance language from being copied into elementary learning goals.

AAB Evidence Base

External Source References

Publication Boundary

AAB identifies evidence patterns and policy implications; inclusion of a record does not by itself constitute product endorsement, institutional accreditation, or certification approval.

Where records are marked for review in the AAB registry, they should be read as evidence candidates until the applicable AAB review process confirms publication status and source sufficiency.

Policy and legal references should be rechecked before final adoption because statutory duties, agency guidance, and state implementation requirements continue to evolve.

| Document type | Prepared by | Publication status | Evidence refresh |
|----------------|---------------------------|----------------------------------|------------------|
| Research Brief | AI Assessment Board (AAB) | Public draft for external review | 2026-05-16 |

| Grade band or audience | Primary emphasis | Evidence of learning |
|------------------------|---|---|
| K-2 | Notice AI-like systems and human choices | Sorting, discussion, teacher observation |
| 3-5 | Explain data, patterns, and simple model behavior | Unplugged tasks, reflections, simple artifacts |
| 6-8 | Evaluate outputs, bias, privacy, and appropriate use | Scenario analysis, source critique, design notes |
| 9-12 | Design, test, disclose, and critique AI-supported solutions | Project portfolio, evaluation rubric, responsible-use statement |
| Adult/workforce | Role-based use, risk, documentation, and compliance | Use-case inventory, training record, performance task |

| AAB collection | Current records | Most recent registry update | Publication use | Representative public IDs |
|--------------------|-----------------|-----------------------------|---|---|
| Case Registry | 140 | Sep. 28, 2024 | Implementation and study evidence | AAB-CASE-2025-RV-027, AAB-CASE-2025-RV-040, AAB-CASE-2025-RV-054, AAB-CASE-2025-RV-022 |
| Pilot Registry | 6 | 2026-05-15 | Structured pilot governance and field documentation | AAB-PILOT-2026-AI_Explorer_Program-001, AAB-PILOT-2025-LL-002, AAB-PILOT-2025-LL-003, AAB-PILOT-2025-LL-004 |
| Framework Registry | 62 | 2026-05-12 | Standards, competency, and governance references | AAB-FRAMEWORK-013-AI4K12-FIVE-BIG-IDEAS-IN-AI, AAB-FRAMEWORK-014-AI4K12-GRADE-BAND-PROGRESSION-CHARTS, AAB-FRAMEWORK-055-AWS-AI-ML-SCHOLARS, AAB-FRAMEWORK-054-AWS-AI-READY-AWS-AI-TRAINING |

| AAB collection | Current records | Most recent registry update | Publication use | Representative public IDs |
|------------------------------|-----------------|-----------------------------|---|--|
| Resource Catalog | 90 | 2026-05-12 | Instructional and professional learning supply | AAB-RESOURCE-029-AI-PEDAGOGY-PROJECT, AAB-RESOURCE-080-AI-SINGAPORE-AI-FOR-EVERYONE, AAB-RESOURCE-025-AI-FOR-EDUCATION-FREE-RESOURCES, AAB-RESOURCE-007-AI4K12-RESOURCE-DIRECTORY |
| Initiative Directory | 94 | 2026-05-12 | System and sector activity signals | AAB-INITIATIVE-045-AI-SINGAPORE-AI-FOR-EVERYONE, AAB-INITIATIVE-034-AI-FOR-EDUCATION, AAB-INITIATIVE-014-AI4K12-INITIATIVE, AAB-INITIATIVE-012-AI4T-ARTIFICIAL-INTELLIGENCE-FOR-AND-BY-TEACHERS |
| Assessment and Credentialing | 74 | 2026-05-12 | Assessment, credential, and recognition models | AAB-ASSESSMENT-072-AAB-REVIEW-RECOGNITION-SYSTEM-INTERNAL-REFERENCE, AAB-ASSESSMENT-064-ABAIM-CERTIFICATION-IN-ARTIFICIAL-INTELLIGENCE-IN-MEDICINE, AAB-ASSESSMENT-062-ARTIBA-ARTIFICIAL-INTELLIGENCE-BOARD-OF-AMERICA-AI-CERTIFICATIONS, AAB-ASSESSMENT-043-AWS-CERTIFIED-AI-PRACTITIONER |
| Policy Monitor | 195 | 2026-05-14 | Country and regional policy signals | AAB-POLICY-ALGERIA, AAB-POLICY-AUSTRALIA, AAB-POLICY-CANADA, AAB-POLICY-FINLAND |
| U.S. State Policy Monitor | 50 | 2026-05-14 | State-level policy signals | AAB-USPOL-AL, AAB-USPOL-AK, AAB-USPOL-AZ, AAB-USPOL-AR |
| Community Signals | 260 | 2026-05-15 | Teacher, public, institutional, and state signals | AAB-COMMUNITY-SIGNAL-001-ACADEMIC-INTEGRITY-AND-CHEATING, AAB-COMMUNITY-SIGNAL-AFGHANISTAN, AAB-COMMUNITY-SIGNAL-004-AGE-APPROPRIATENESS, AAB-COMMUNITY-SIGNAL-ALBANIA |

| Reference | Use in this document | URL |
|---|--|---|
| UNESCO AI Competency Framework for Students | Student AI literacy progression across human-centered mindset, ethics, AI techniques and applications, and AI system design. | https://www.unesco.org/en/articles/ai-competency-framework-students |

| Reference | Use in this document | URL |
|---|---|---|
| UNESCO AI Competency Framework for Teachers | Teacher capacity reference for responsible classroom integration and professional learning design. | https://www.unesco.org/en/articles/ai-competency-framework-teachers |
| EU AI Act, Article 4 | Institutional AI literacy obligation for providers and deployers of AI systems. | https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng |
| White House Executive Order 14277 | U.S. federal policy signal on AI literacy, educator training, K-12 resources, and youth AI pathways. | https://www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth/ |
| U.S. Department of Education AI guidance | Federal education guidance on allowable uses for AI literacy, educator professional development, and AI-supported learning. | https://www.ed.gov/about/news/press-release/us-department-of-education-issues-guidance-artificial-intelligence-use-schools-proposes-additional-supplemental-priority |

| Reference | Use in this document | URL |
|-------------------------|---|---|
| AI4K12 Guidelines | K-12 conceptual reference organized around five big ideas and grade-band progression. | https://ai4k12.org/ |
| OECD TALIS 2024 Results | Teacher AI use and professional learning signal across participating education systems. | https://www.oecd.org/en/publications/results-from-talis-2024_90df6235-en.html |