AILit Framework - Review Draft (May 2025)

AI Literacy Framework for Primary and Secondary Education

European Commission

OECD
BETTER POLICIES FOR BETTER LIVES

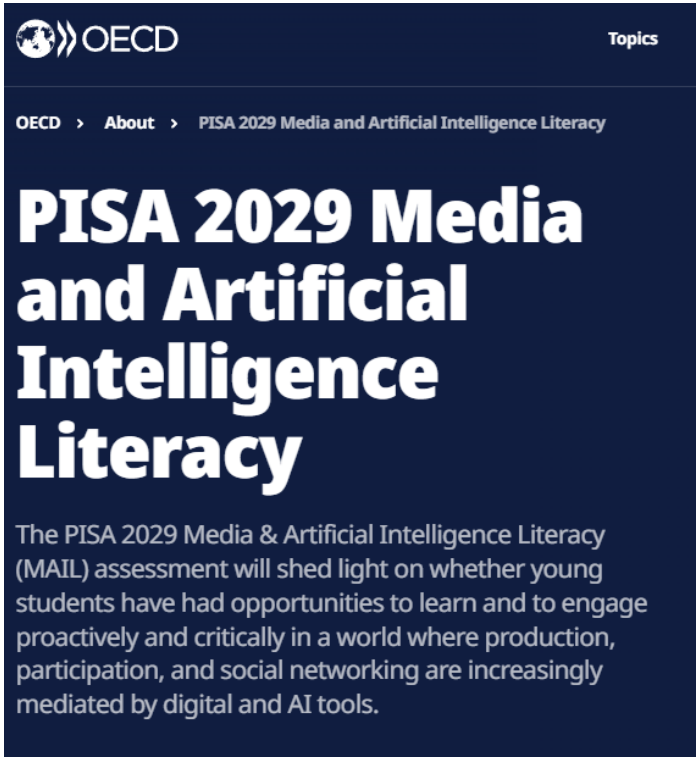
With Support from code.org

PhD Kari Kivinen
17.10.2025

PISA 2029 Media and Artificial Intelligence Literacy MAIL

The new PISA 2029 Innovative Domain on Media & Artificial Intelligence Literacy (MAIL) aims to be an instrument to support the assessment of these evidence-based interventions. It is currently defined as the set of competencies to interact with digital content and platforms effectively, ethically and responsibly.

This assessment will shed light on whether young students have had opportunities to learn to engage proactively and critically in a world where production, participation, and social networking are increasingly mediated by digital and AI tools..



https://www.oecd.org/en/about/projects/pisa-2029-media-and-artificial-intelligence-literacy.html

About this Framework

The AILit Framework is a joint initiative of the European Commission and the Organization for Economic Cooperation and Development (OECD). Its development is supported by Code.org and leading international experts.

The draft framework is being reviewed by international education stakeholders and will be finalized in 2026.

European Commission | OECD BETTER POLICIES FOR BETTER LIVES

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Provide Feedback on this Draft!

The final version of the framework will be released in 2026.

Stakeholders are encouraged to participate in the review process through October 2025.

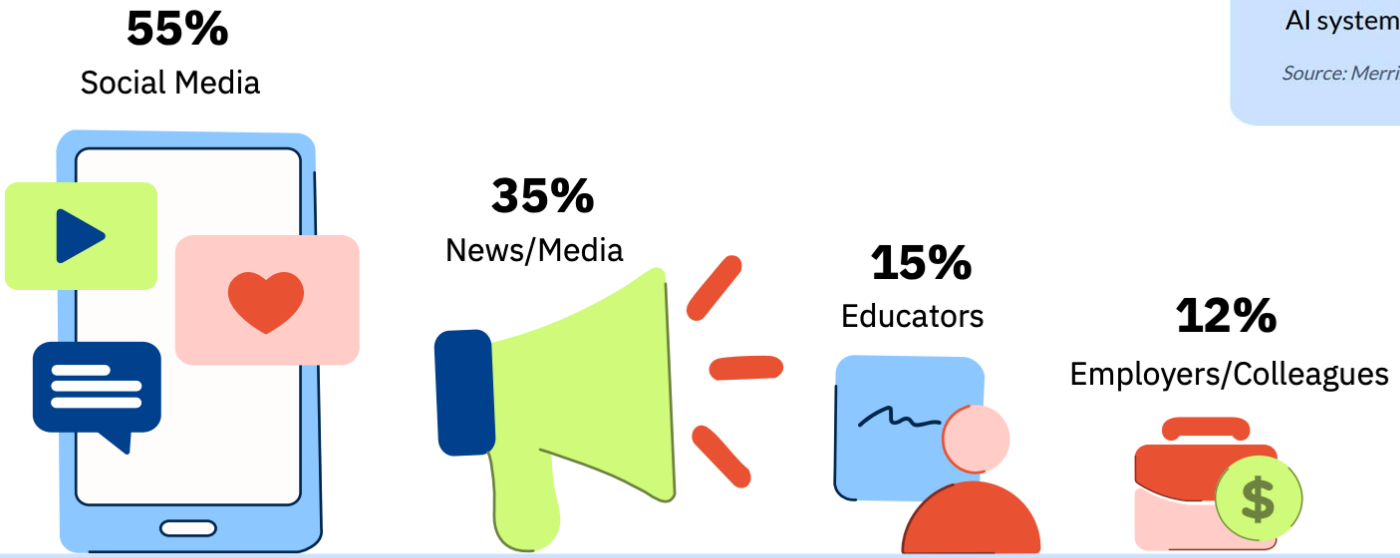
ailiteracyframework.org

Young People are Experimenting with AI and Need Guidance

49% of 17- to 27-year-olds struggle with critically evaluating and identifying AI's shortfalls, such as whether AI systems can invent facts.

Source: Merriman & Sanz Sáiz, 2024

How Does Gen Z Learn About AI?



Source: How can we upskill Gen Z as fast as we train AI? (Merriman & Sanz Sáiz, 2024)
(5,218 respondents distributed globally)

The AI Skills Gap

A 2024 study of 12- to 17-year-olds across Europe reported that:

74%

Believe that AI will play a significant role in their professional lives.

46%

Think their schools adequately prepare them for AI.

44%

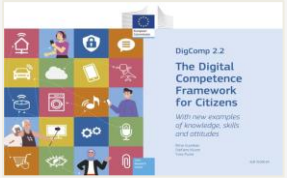
Perceive their teachers as well prepared to work with AI applications.

49%

Worry that AI could widen gaps in academic success among peers.

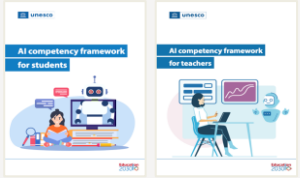
Source: AI in European Schools: A European report comparing seven countries (Vodafone Foundation, 2024)
(7,000 students across Germany, Greece, Portugal, Romania, Spain, Türkiye, and the UK)

Building on Existing Initiatives



European Commission Digital Competence Framework for Citizens

Competence categorization, use cases, and emphasis on student agency in knowledge, skills, and attitudes.

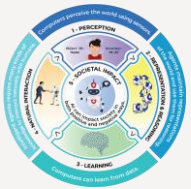


UNESCO AI Competencies for Students and AI Competencies for Teachers

Focus on global relevance and implementation. Distinctions between learner-specific AI literacy outcomes and role of educators.

Digital Promise AI Literacy Framework

Interconnected Modes of Engagement, with cross-cutting AI Literacy Practices and enumerated Types of Use.

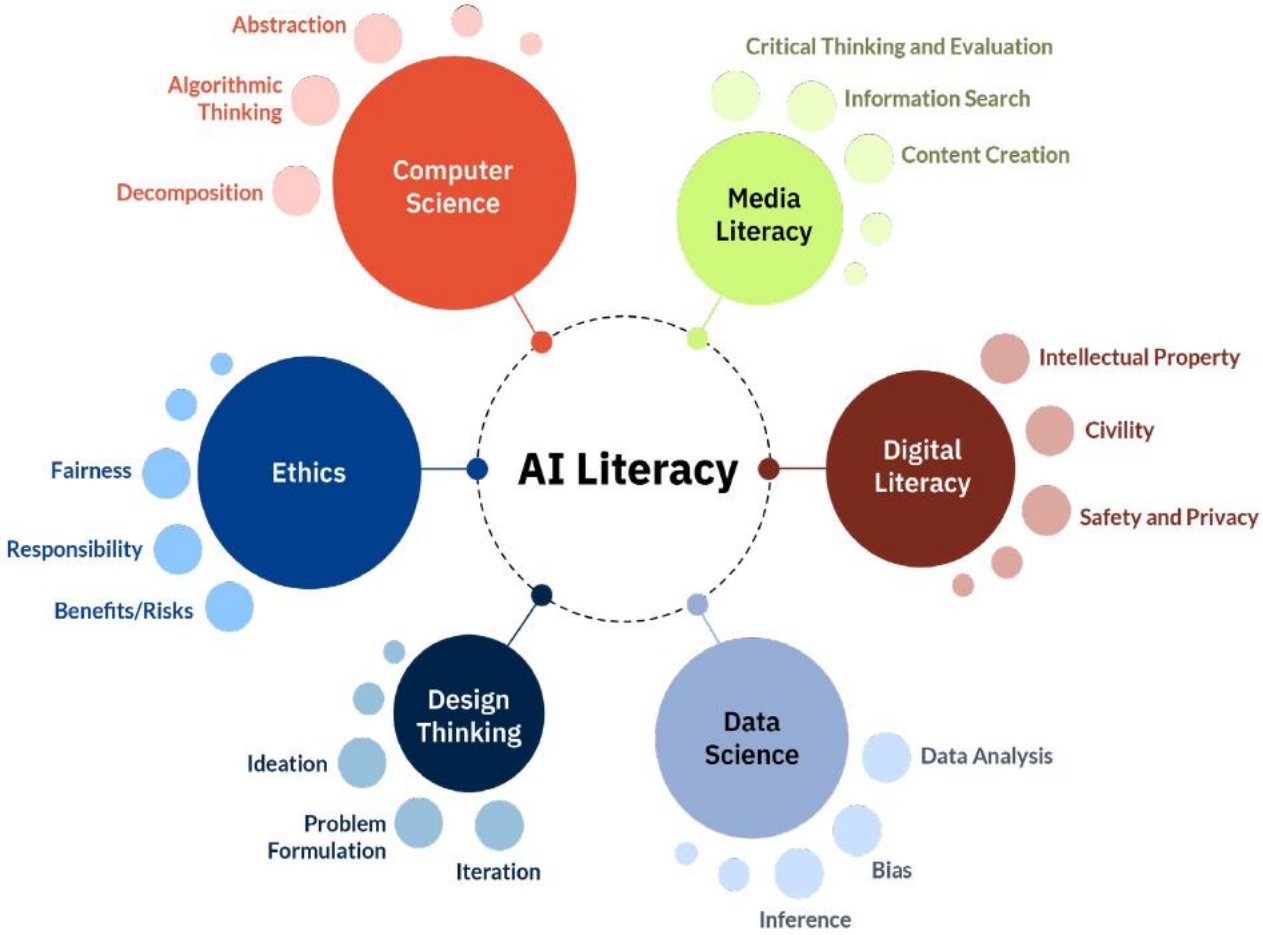


AI4K12 5 Big Ideas in AI

Technical aspects of AI, including the nature of AI and role of data in the AI training process.

PISA 2029 Media and AI Literacy Assessment

Supports the innovative domain of the PISA 2029 Media and AI Literacy Assessment.


AI Literacy
Computer Science
Abstraction
Algorithmic Thinking
Decomposition
Media Literacy
Critical Thinking and Evaluation
Information Search
Content Creation
Ethics
Fairness
Responsibility
Benefits/Risks
Digital Literacy
Intellectual Property
Civility
Safety and Privacy
Design Thinking
Ideation
Problem Formulation
Iteration
Data Science
Data Analysis
Bias
Inference

Ethics in the Framework

Ethical principles appear throughout the framework's knowledge, skills, and attitudes, and are reflected in multiple competences.

For example, the competence "Evaluate whether AI outputs should be accepted, revised, or rejected." requires learners to recognize that AI's ability to generate humanlike content introduces risks, such as misinformation, disinformation, or manipulation.

Learners must apply critical thinking to detect misleading outputs and adopt a responsible attitude to ensure AI is used ethically.

The AILit Framework

Knowledge + Skills + Attitudes = Competences Organized into Four Domains

Knowledge, Skills, and Attitudes

Knowledge

The Nature of AI
AI Reflects Human Choices and Perspectives
AI Reshapes Work and Human Roles
AI's Capabilities and Limitations
AI's Role in Society

Attitudes

Responsible
Curious
Innovative
Adaptable
Empathetic

Skills

Critical Thinking: Evaluate AI-generated content.
Creativity: Collaborate with AI to create and refine ideas.
Computational Thinking: Decompose problems and provide instructions.
Self and Social Awareness: Recognize AI's influence.
Collaboration: Work effectively with AI and humans.
Communication: Explain how AI is used.
Problem Solving: Determine when and how to use AI.

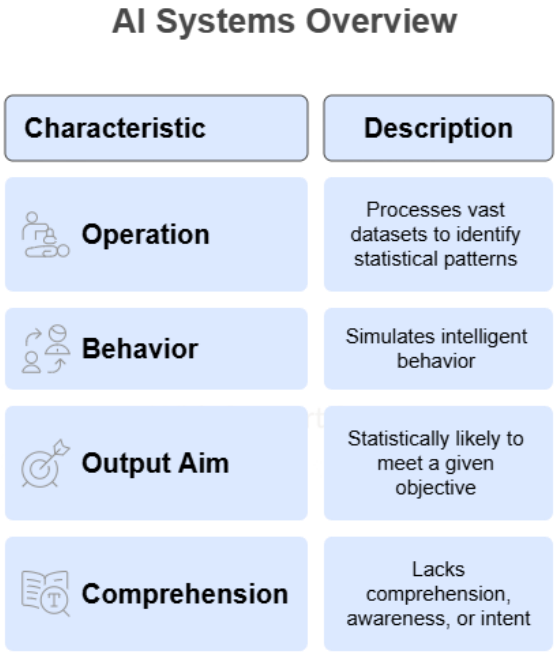
Knowledge

The knowledge statements in the framework focus on conceptual knowledge, outlining the technical and societal understandings that learners need to apply and engage with AI systems.

These concepts include how AI processes data, how AI differs from human thinking, and how bias can emerge in AI systems.

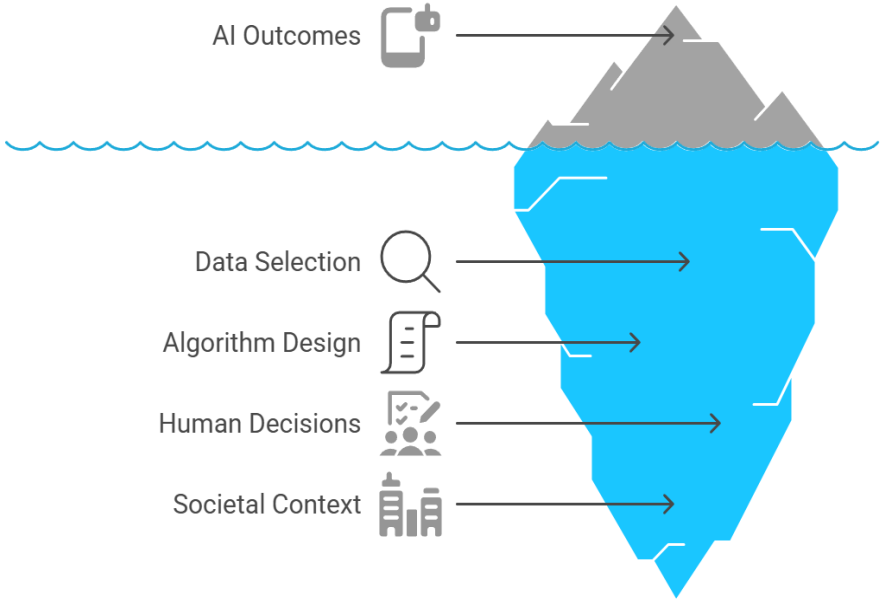
1. AI Processes information, but it lacks human understanding

- AI systems, including generative models, can process vast datasets and recognise statistical correlations quicker and better than humans.
- AI is a powerful tool, but it does not "know" or "understand" things the way humans do.
- **Understanding this distinction helps us interpret AI-generated content critically and evaluate its reliability.**



2. AI systems reflect the choices and context of humans

- AI is not neutral; it is shaped by the decisions of those who build it and who are using it.
- From the selection of training data and its sources to how that data is processed, human decisions and societal biases influence AI's outcomes.
- This means that understanding ethics, fairness, empathy, clear explanations, and responsibility is very important when learning about AI.



3. AI is reshaping work and human roles

- AI is not just replacing jobs—it is redefining them.
- Knowing when and how to work with AI, selecting the right tools for different tasks and understanding the evolving landscape of data-driven careers are all important.

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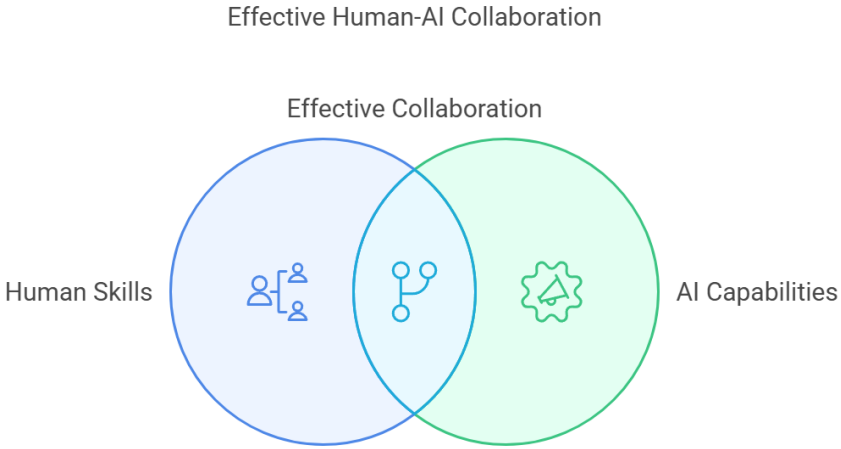
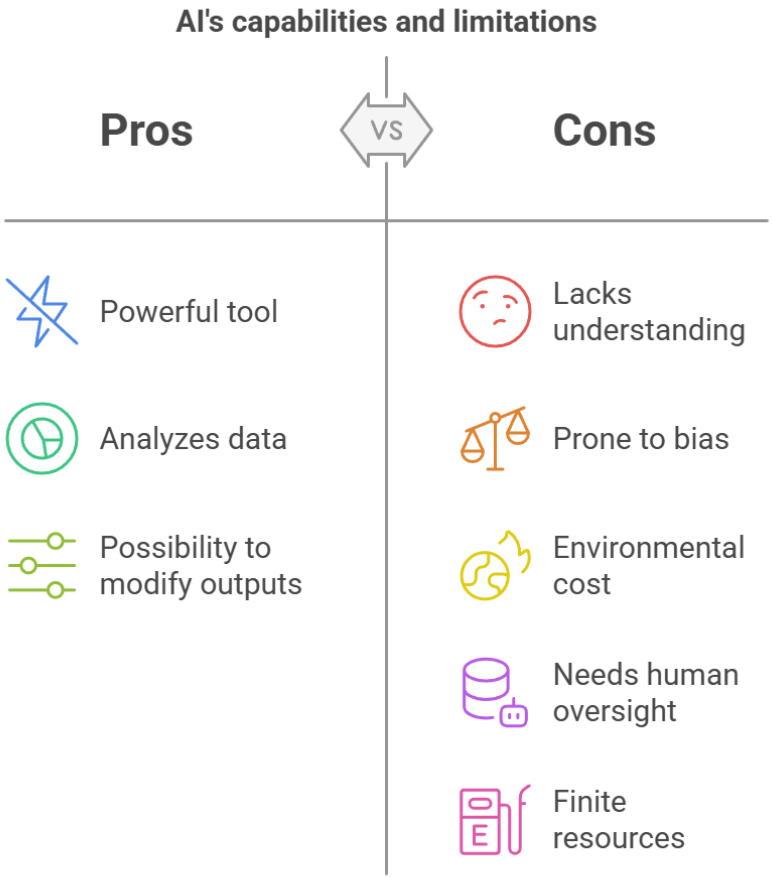


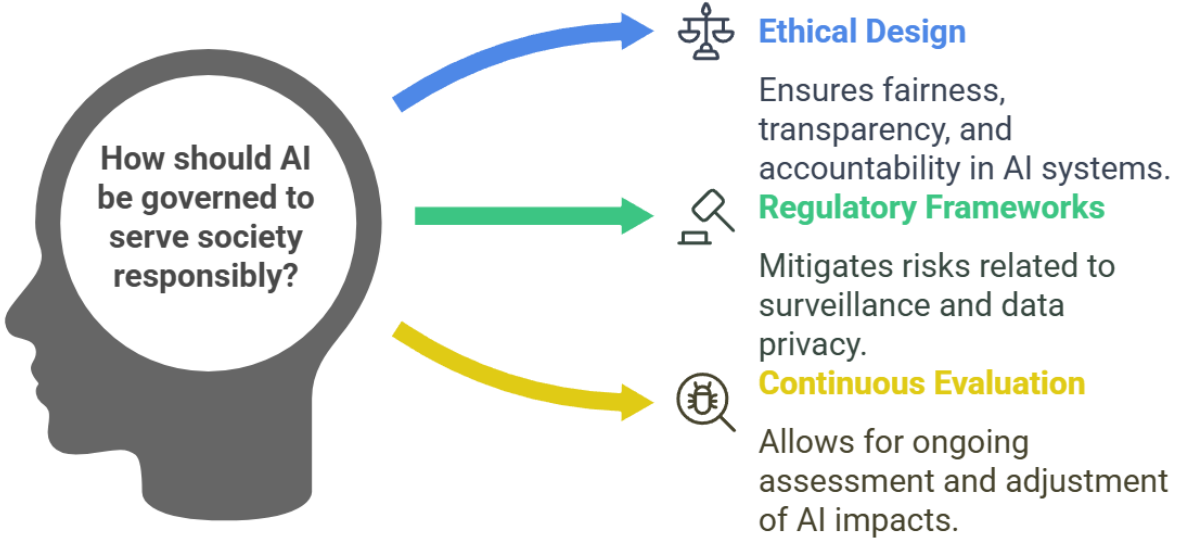
4. It’s useful to be aware of AI’s capabilities and limitations

- AI doesn’t really understand the real world, people’s values, or subtle details, even though it can change its answers based on how someone feels.
- It can study huge amounts of data, but it can be biased, used in the wrong way, and needs a lot of natural resources to work.
- **AI literacy requires critical thinking about when, where, and how AI should be applied to ensure it serves human needs equitably.**



5. AI's Role in Society Depends on How We Govern It

- AI doesn't operate in a vacuum—its use reflects societal choices.
- **To ensure AI serves society responsibly, we must continuously evaluate its effects and establish clear accountability structures.**



Skills

The skills demonstrate how fundamental abilities, such as critical thinking, creativity, and computational thinking, apply in an AI context.

They guide learners in using AI effectively and ethically, ensuring that learners actively shape how AI fits into their lives.

Key AI skills

- **Recognise AI's influence.** How does AI affect me and other people?
- **Assess AI's use:** How can I tell if using AI is worthwhile?
- **Direct AI's actions:** How can I frame a problem so that AI can help to solve it?
- **Create with AI:** How can I collaborate with AI in a transparent and ethical way?
- **Evaluate AI outputs:** How can I be sure that AI-generated outputs are fair and accurate?
- **Explain AI:** How can I clearly communicate how AI is being used?

Attitudes

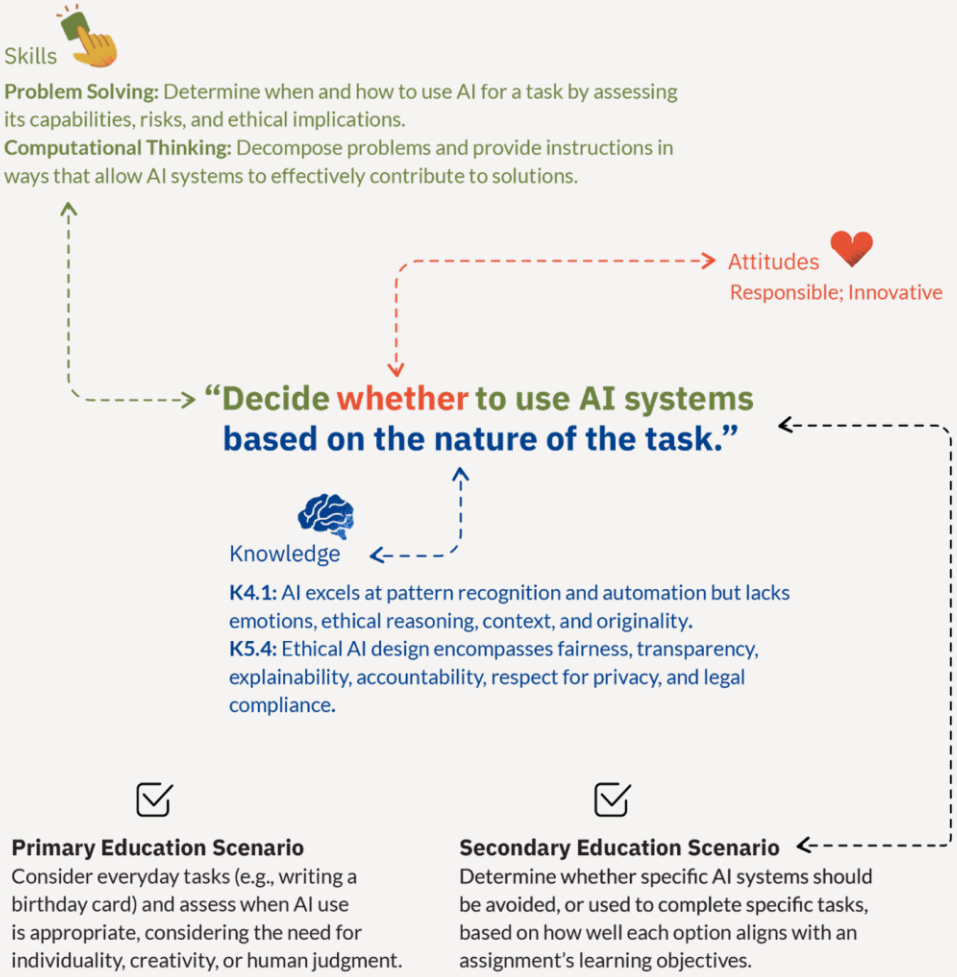
The attitudes reflect mindsets and dispositions that prepare learners to engage with AI, not only with technical skills, but also with an awareness of AI's impact on themselves and others.

These include a sense of curiosity and adaptability in using AI systems, as well as a readiness to question outputs and a commitment to using AI responsibly.

Key attitudes

- **Responsible:** Learners think carefully about how they use AI and are accountable of their choices. They consider both the intended and the potential unintended effects of their actions, and are committed to preventing harm to others.
- **Curious:** Learners are eager to explore what AI can do today and how it might evolve in the future. They want to understand how AI affects their personal lives and future careers.
- **Innovative:** Learners seek to use AI to address real-world challenges and embrace new opportunities. They experiment, try different approaches, and think creatively to solve a problem.
- **Adaptable:** Learners show perseverance and flexibility when working with AI. They understand that collaborating with AI is an iterative process shaped by feedback and revision.
- **Empathetic** Learners thoughtfully examine how AI impacts individuals, communities, and the environment. They weigh both the benefits and potential risks of using AI, understanding that its impact can vary for different groups of people.

Anatomy of a Competence



Engaging with AI

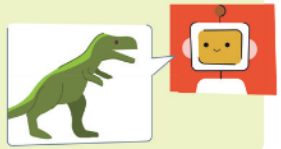
Engaging with AI in daily life involves using AI as a tool to access new content, information, or recommendations.

- **Recognize** AI's role and influence in different contexts.
- **Evaluate** whether AI outputs should be accepted, revised, or rejected.
- **Examine** how predictive AI systems provide recommendations that can inform and limit perspectives.
- **Explain** how AI could be used to amplify societal biases.
- **Describe** how AI systems consume energy and natural resources.
- **Analyze** how well the use of an AI system aligns with ethical principles and human values.
- **Connect** AI's social and ethical impacts to its technical capabilities and limitations.

Creating with AI

Creating with AI consists of collaborating with AI in a creative or problem-solving process.

- **Use** AI systems to explore new perspectives and approaches that build upon original ideas.
- **Visualize, prototype, and combine** ideas using different types of AI systems.
- **Collaborate** with generative AI systems to elicit feedback, refine results, and reflect on thought processes.
- **Analyze** how AI can safeguard or violate content authenticity and intellectual property.
- **Explain** how AI systems perform tasks using precise language that avoids anthropomorphism.



Designing AI

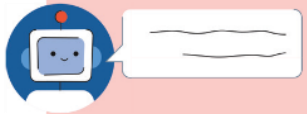
Designing AI empowers learners to shape AI through hands-on exploration of the data used by AI models and engagement with AI design decisions.

- **Describe** how AI systems can be designed to support a solution to a community problem.
- **Compare** the capabilities and limitations of AI systems that follow algorithms created by humans with those that make predictions based on data.
- **Collect and curate** data that could be used to train an AI model by considering relevance, representation, and potential impact.
- **Evaluate** AI systems using defined criteria, expected outcomes, and user feedback.
- **Describe** an AI model's purpose, intended users, and its limitations.

Managing AI

Managing AI requires intentionally choosing how AI can support and enhance human work.

- **Decide** whether to use AI systems based on the nature of the task.
- **Decompose** a problem based on the capabilities and limitations of both AI systems and humans.
- **Direct** generative AI systems by providing specific instructions, appropriate context, and evaluation criteria.
- **Delegate** tasks to AI systems to appropriately automate or augment human workflows.
- **Develop and communicate** guidelines for using AI systems that align with human values, promote fairness, and prioritize transparency.



Deeper Dive: Learning Scenarios

Managing AI

5 Develop and communicate guidelines for using AI systems that align with human values, promote fairness, and prioritize transparency.

Knowledge: K5.4 **Skills:** Communication, Critical Thinking, Self and Social Awareness **Attitudes:** Responsible, Empathetic

Learners create or reinforce responsible guidelines for AI use in academic contexts. They consider existing guidelines from local, national, or international organizations, such as the European Commission or the OECD.

Primary Education Scenario

Create a classroom poster outlining fair ways to use an AI tool, such as crediting sources and seeking a teacher's approval before using it for assignments.

Secondary Education Scenario

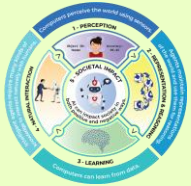
Lead a workshop for peers on common AI tools, sharing guidelines for AI use that promote honesty, respect for intellectual property, and critical thinking.

What is AI Literacy?

Definition of AI Literacy

AI literacy represents the technical knowledge, durable skills, and future-ready attitudes required to thrive in a world influenced by AI. It enables learners to engage, create with, manage, and design AI, while critically evaluating its benefits, risks, and ethical implications.

This draft definition builds on existing definitions from the EU AI Act, OECD, UNESCO, and other organizations.



Provide Feedback on this Draft!

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Thank you for participating in the stakeholder review process!