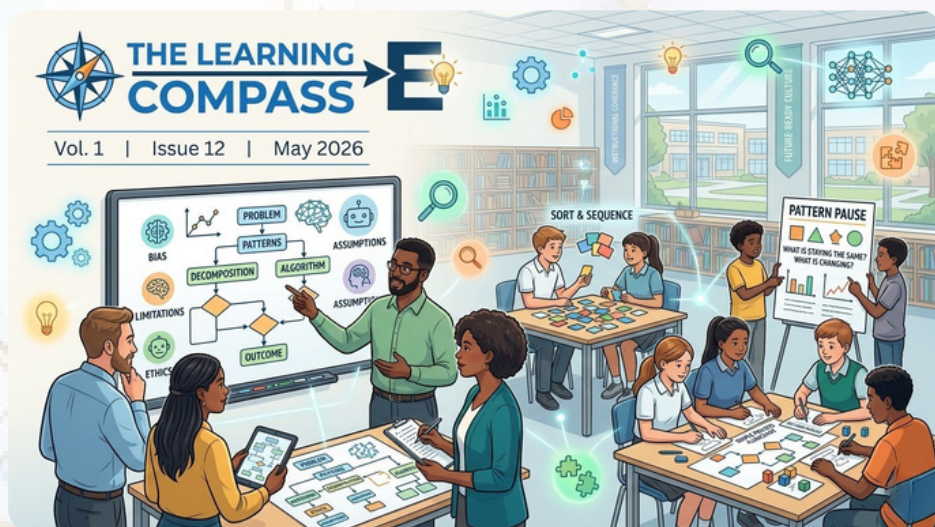


The Learning Compass - Vol 1 - Issue 12

**Let's
Explore
This
Together**

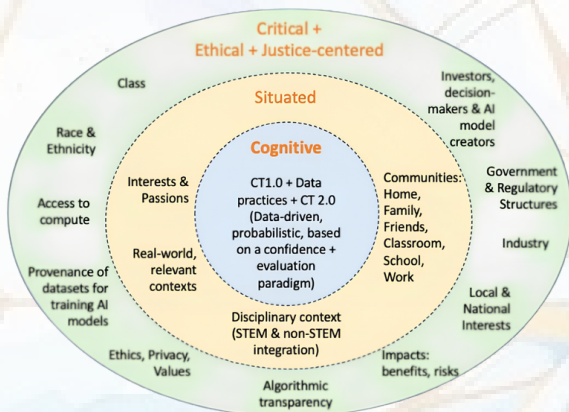
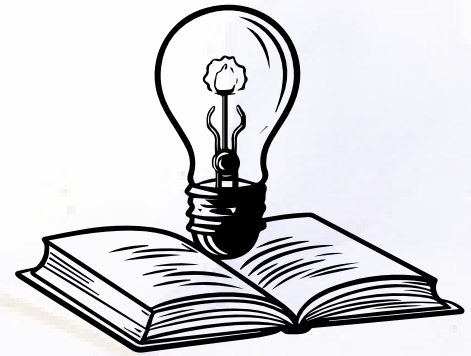


The effectiveness of any curricular shift is determined by the depth of teacher understanding that underpins it. Computational Thinking (CT) and Artificial Intelligence (AI) are increasingly integral to teaching and learning; however, their impact depends on the clarity, confidence, and pedagogical fluency with which teachers engage with these ideas.

When teachers understand CT as a cross-disciplinary cognitive process – decomposing problems, recognising patterns, and structuring solutions – classrooms shift from content delivery to purposeful inquiry. These practices are not new; they are embedded within strong teaching across subjects and require deliberate articulation and deepening. AI literacy further extends this shift, enabling students not merely to use tools but also to observe patterns of human intelligence that can be programmed and to question their assumptions, limitations, and implications. AI requires metacognitive skill development more than tool exposure and prompting.

In such environments, students develop into independent problem-solvers and critical thinkers capable of navigating a world shaped by automated systems. For schools, this translates into stronger instructional coherence, meaningful interdisciplinary connections, and a more future-ready learning culture.

The priority for school leaders, therefore, is not the introduction of CT and AI but ensuring that teachers internalise and enact these concepts with depth and precision.



1. Research Spotlight: **Expanding the Scope of Computational Thinking in Artificial Intelligence for K-12 Education Kafai & Grover (2026).**

This research advocates moving beyond a narrow, programming-focused view of computational thinking ("CT 1.0") toward a broader framework that includes cognitive, social, and ethical dimensions relevant to AI contexts. It emphasises that effective integration depends on building teachers' pedagogical confidence, connecting CT to existing subject practices, and fostering collaborative professional communities. Thus, it is clear that CT and AI integration requires sustained, structured professional development rather than one-off training, ensuring depth over compliance.

2. Perspective to Consider: **How to Teach Computational Thinking (Stephen Wolfram, 2016)**

Wolfram positions Computational Thinking as a foundational cognitive competency, arguing that it should be cultivated across subjects through active problem formulation rather than isolated instruction. The piece reframes CT not as a standalone component but as a way of thinking that shapes how teaching and learning are approached across the school.

Zoology Literature Political Science Earth Science Science
Finance Government Engineering Drama History
Health Mathematics Psychology Language Arts Statistics
Chemistry Art Sports Science Law Library Science
Biology **Computational** Management
Architecture Social Science Geography Anthropology Physics
Medicine Economics Linguistics Humanities Business
Archaeology Agriculture Astronomy Journalism Philosophy

Three to Try

Try This Tomorrow: The Sort-and- Sequence Challenge:



Provide students with 8–10 jumbled steps from a recently studied process. Ask them to sequence the steps correctly and justify their reasoning to a partner.

Question to Ask:



The Pattern Pause:
Pause during a lesson and ask, "What is staying the same? What is changing?" Give students a minute to think, identify the pattern and note responses before discussion.

Flowchart Fun:



Ask students to select a simple process, e.g., deciding what to eat or planning a weekend, and represent it as a flowchart showing decision-making, logical reasoning and possible outcomes.

On My Radar



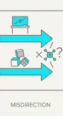
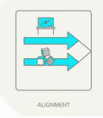
1. Are we creating systems that sustain good teaching, or relying on individual teacher effort to carry the load?



2. Are we balancing academic rigour with student well-being, or are both being compromised in pursuit of outcomes?



3. Is assessment evolving to capture thinking, not just task completion?



4. Is professional development aligned with actual classroom needs or driven by external trends and compliance?

What is one CT or AI concept you wish your teachers had already deeply understood? Hit reply and share — let's build an honest picture of where our schools actually stand. Share your reflections to build a more grounded understanding of current school realities.

Elevating Education to Excellence for Impact,

K. Anand

Chief Education Officer



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Excellence for Impact