Elevating Education to Excellence for Impact

The Learning Compass - Vol 1 - Issue 9

Let's Explore This Together

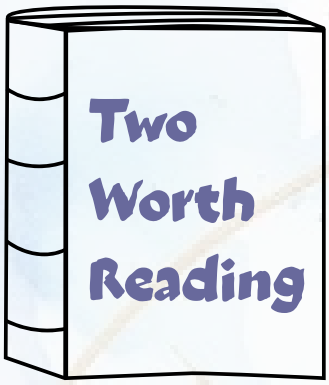
We're teaching in classrooms dominated by visual stimuli with textbooks, diagrams, slides, charts, videos, yet we barely acknowledge visual processing as a distinct learning modality worthy of explicit instruction.

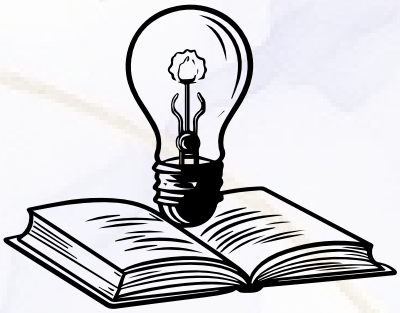
Think about this: students spend hours staring at diagrams in science textbooks, but how many have been taught how to read a diagram strategically? They encounter flowcharts, timelines, infographics, and concept maps across subjects, yet we assume visual literacy develops naturally, without guidance. Meanwhile, research reveals a stark reality: high-performing learners demonstrate selective attention, strategic integration of text and images, and metacognitive control over their visual processing. However, lower-performing learners show localised, unfocused fixations and insufficient self-regulation as they literally don't know where or how to look.

The visual modality offers untapped potential that extends far beyond mindmaps (which themselves remain underutilised). Sketchnoting, combining visual elements with text to capture ideas, engages spatial memory and creative thinking simultaneously. Visual cues for revision transform abstract concepts into memorable spatial relationships. Diagrammatic exploration helps students see patterns, hierarchies, and connections that prose descriptions struggle to convey.

Here's what makes this particularly revelatory and hence, urgent: I once conducted a workshop to analyse NEP 2020 and NCF 2022 using only the images, diagrams, and visual elements in those policy documents. Why? Because educators weren't reading the text. The visual pathway revealed insights that thousands of words had failed to communicate. If visual processing can unlock understanding of complex policy frameworks, imagine what it could do for science concepts, historical relationships, mathematical patterns, or literary analysis.

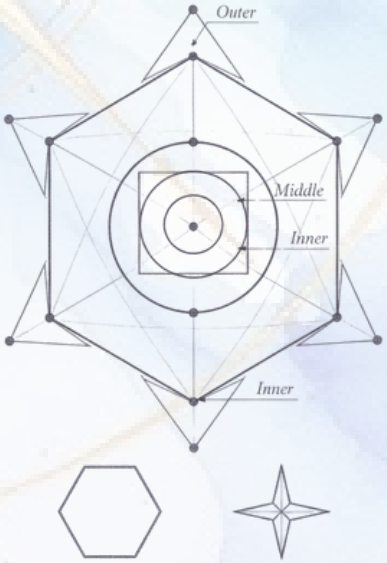
We don't need expensive technology or radical curriculum overhaul. We need to stop treating visual elements as mere decoration and start teaching students to engage with them strategically, to create them purposefully, and to use visual processing as a legitimate pathway to deep learning.





1. **How and Why to Introduce Visual Note-Taking to Your Students:** Visual methods like sketchnoting prompt students to identify connections actively. Start with simple scribbling exercises, develop a co-created visual vocabulary with students, and emphasise low-fidelity drawings over artistic perfection. Visual note-taking isn't meant to demonstrate mastery—it's a vehicle for processing and organising thinking.

2. **Proofs Without Words: Exercise in Visual Thinking by Roger Nelsen:** Mathematical illustrations that demonstrate theorems through visual logic rather than formal deductions. These diagrams function as pedagogical tools to help students think visually about complex quantitative relationships across geometry, algebra, and calculus.



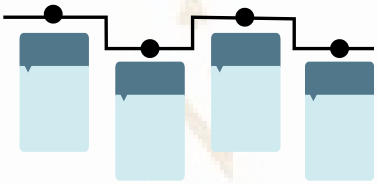
Three to Try

Visual Retrieval Practice:

Spaced Visual Revision:

Try This Tomorrow: The "Sketch Before Speaking" Protocol

After learning new material, students close their books and draw everything they remember—diagrams showing how concepts connect, sketches of processes, and visual maps of relationships (5 minutes). Then compare drawings to notes and identify gaps.



Encourage a simple spaced cycle (1, 3, 7, 14, 30 days) where each review requires recreating diagrams, concept maps, or visual explanations from memory.

Before class discussion on any concept, give students 2 minutes to create a quick visual representation—diagram, flowchart, sketch, or labeled drawing. No artistic skill required; functionality over beauty. Then have students explain their visuals to partners. This forces processing through the visual modality before verbal articulation, often revealing misconceptions that text alone wouldn't surface.

On My Radar

1. Emerging research suggests AI writing assistants may be reducing students' ability to sustain complex, multi-step reasoning—today's convenience could become tomorrow's cognitive dependency

2. Reading comprehension scores continue falling even as decoding skills improve—students can read the words but can't extract meaning, suggesting fundamental gaps in how we teach engagement with text.

3. Digital microcredentials are proliferating in higher education and workforce training, but K-12 systems remain anchored to letter grades—are we preparing students for a credentials landscape that will look nothing like traditional report cards?

4. The gap between how students consume information outside school (visually, spatially, multimedia) and how we require them to study in school (linearly, verbally, and with text-heavy materials) might explain engagement struggles.

What's one visual tool or technique you wish you'd learned earlier in your teaching career? Hit reply and share—let's build a community resource of visual learning strategies that actually work.

Elevating Education to Excellence for Impact,

K. Anand

Chief Education Officer

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