The CAPABILITY Framework™ (Rabi, 2026)

The effective use of AI must align with established models of cognitive complexity. AI should be used to push learners upward, not keep them at foundational levels. Although the integration of educational technology and AI has expanded significantly across learning environments, this growth has not been matched by equivalent gains in learner capability, with studies highlighting persistent gaps in the development of higher-order cognitive and applied skills (OECD, 2021; Holmes et al., 2019).

DOK (Webb, 1997) vs The CAPABILITY Framework™ (Rabi, 2026)	
Lower Levels (Limited Impact)	**Higher Levels (High Impact)**
• DOK 1 = Recall (What do you know?) • DOK 2 = Basic Application (How do you use it?)	• DOK 3 = Strategic Thinking (Why does it work? Defend your thinking.) • DOK 4 = Extended Thinking (Can you apply, create, and transfer this in real-world contexts?)
These levels: • Emphasize knowledge and comprehension • Do not require strategic thinking or extended reasoning • Levels most easily automated by AI	Within DOK Levels 3 and 4 true capability is developed: • learners move beyond knowing and into thinking, applying, and creating, • the very competencies required in AI-enabled and rapidly evolving environments.

Cognitive Rigor as the Core of Intelligent Learning System Design			
The CAPABILITY Framework™ (Rabi, 2026)	**DOK 3 (Strategic Thinking)**	**DOK 4 (Extended Thinking)**	**Implication for AI-Enabled Systems**
C: Competency-Based Design	Define skills requiring reasoning and justification	Define outcomes requiring transfer and creation	Design for performance, not content coverage
A: AI as an Enabler	AI supports analysis and decision-making prompts	AI supports simulation, modeling, and iteration	AI must extend thinking, not automate answers
P: Performance-Centered Learning	Scenario-based problem solving	Real-world application and projects	Learning shifts from tasks to applied performance
A: Active Cognitive Engagement	Learners explain, justify, and defend thinking	Learners synthesize and generate new ideas	AI prompts must require reasoning, not recall
B: Behavioral Outcomes	Demonstrated reasoning and decision-making	Demonstrated innovation and transfer	Measure what learners can do, not what they know
I: Integrated Systems	Align tasks to strategic thinking expectations	Align systems to long-term, complex outcomes	Systems must sustain depth, not delivery
L: Learning Science Foundation	Supports metacognition and feedback loops	Supports transfer and schema development	Aligns with cognitive load and deep learning theory
I: Instructor as Facilitator	Guides reasoning and questioning	Coaches application and innovation	Human role becomes critical at higher DOK levels
T: Technology with Intent	Select tools that prompt analysis	Select tools that enable creation and synthesis	Avoid tools that reduce thinking effort
Y: Yield (Return on Learning)	Evidence of reasoning and judgment	Evidence of real-world capability and impact	ROI measured through performance and outcomes