

Beyond the Right Answer

A model for integrating **AI** and **cognitive bias** into problem-based learning

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▲ Why this matters, in four numbers

95%

of students use AI in their studies; 94% on assessed work

HEPI / Kortext 2026

~half

of student AI conversations seek the finished answer, not the thinking

Anthropic Education Report

83%

of ChatGPT users couldn't accurately quote the essay they had just written

MIT Media Lab

60%

of tax firms use AI research weekly, up from 33% a year earlier

Blue J & CPA.com 2026

Students are offloading exactly the thinking their profession is about to pay a premium for. AI absorbs the routine work; what remains is interpretation, judgment, and advice. **The core idea: reframe accounting as a judgment profession, and teach it that way.**

▲ What we teach shapes what AI gives back · Anthropic, ~400K real AI work sessions

IF WE ONLY TEACH THE AI TOOL

AI does the work for them



Domain knowledge never develops



No way to judge or fix the output



AI slop

15% verified success · give up ~4× as often

IF WE TEACH CRITICAL THINKING + DOMAIN KNOWLEDGE

Students understand the problem first (PBL)



Judgment and domain knowledge grow



They direct and evaluate the AI



Great work

~2× the success rate · 12-action AI chains vs 5

▲ The class session · ungraded, in-class; any solution is a good solution for learning

1 · Open with the PBL case

A student-life problem, no jargon. Rent vs. buy, a side hustle, a car loan. Groups propose solutions cold.

2 · Add the language

Introduce accounting terminology and the business version of the same problem.

3 · Work problems

In-class accounting problems, now anchored to a problem students understand.

▲ Field notes: making PBL land

- 1 Choose student problems over business problems.** A problem they own beats a problem they're assigned.
- 2 Get a student to explain the topic.** The moment a peer explains it, the room leans in.
- 3 Let students identify the problem themselves.** Naming it correctly is already a big achievement.
- 4 Let them be wrong, loudly.** Mistakes are the raw material.
- 5 Show how bias shaped their answers.** The reveal is the lesson.

Across 25 studies, the average PBL student out-scores ~86% of traditionally-taught peers on critical thinking

▲ Cognitive bias quick reference

📍 **Anchoring** · the first number spoken owns the room: budgets, estimates, valuations

🔍 **Confirmation bias** · we hunt for evidence our first answer was right

📈 **Overconfidence** · forecasts and self-graded quizzes both run hot

💰 **Sunk cost** · "we've already spent so much," the fallacy accounting exists to kill

🧠 **Availability** · vivid recent examples outweigh base rates

🤖 **Automation bias** · trusting the AI's answer *because* it's the AI's answer

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Li, Mustakim & Muhamad (2025). A Meta-analysis of the Effectiveness of Problem-based Learning on Critical Thinking. Eur. J. Educational Research. eujer.com · **Abbas et al. (2025); Wang et al. (2025).** AI and the transformation of accounting.