

# The AI Teaching Conundrum: Adapt, Resist, or Redefine?



# Cake-Making Analogy ([Maha Bali, 2024](#))

Cake made from scratch

- No AI assistance

Cake made from a box mix

- Some AI assistance

Cake purchased from a bakery

- Lots of high quality AI assistance

Inexpensive, but lower quality, off-the-shelf cake

- Copy-paste AI output, wholesale



Cake as a metaphor for AI



When would you make it from scratch, from box, bakery or grocery?



# The Meaning Behind the Cake

Cake made from scratch

Cake made from a box mix

Cake purchased from a bakery

Inexpensive, but lower quality, off-the-shelf cake

How will the decisions influence or be affected by?

- Quality
- Time
- Cost
- Personal investment
- Growth and knowledge development



Cake as a metaphor for AI



When would you make it from scratch, from box, bakery or grocery?



# Learning and the Development of Expertise

Most of us are not expert bakers

- If you needed a cake, what approach would you take?

But we have all developed 1 or more domains of expertise

- Nearly all students have less expertise
- What approaches do we want our students to take in developing their expertise? If we were expert bakers, what would we hope to teach them about cake?
  - Let's sit with this idea for 30 seconds...

# What is Expertise?

Expertise is developed through repeated practice, in which students take in feedback from experts and use it to improve their memory/thinking on particular topics, then attach it to related topics

- Deliberate practice (Chew, 2025)
- Retrieval practice/the testing effect (Roediger et al., 2011)
- Elaboration (McDaniel & Donnelly, 1996)
- Operant conditioning (Skinner, 1938)

## What does this look like for our teaching?

- At introductory, intermediate, and advanced levels?
- Across courses—traditionally “lecture based” vs. seminars vs. laboratories, etc.

# Expertise: The Product of Repeated Learning Moments

Try a thing

Take in feedback on that thing

Try that thing again

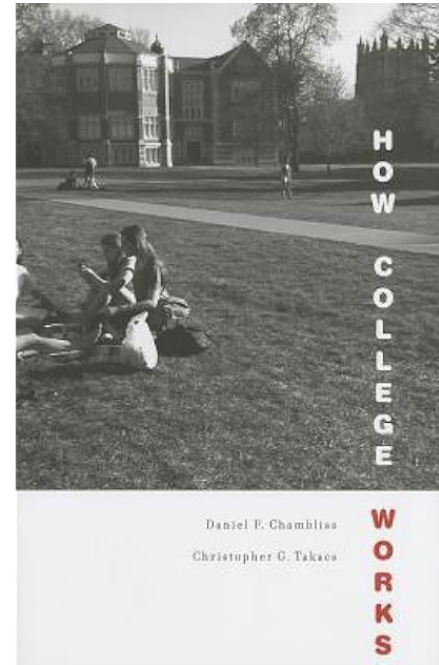
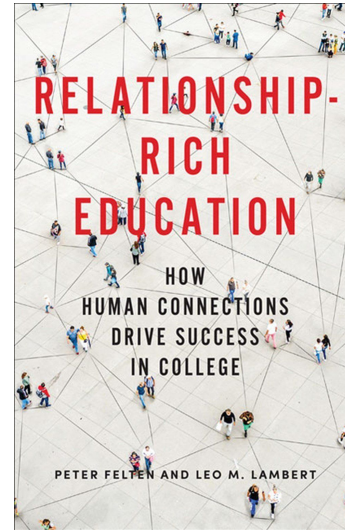
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This is interpersonal, and there is friction here. Heavy use of AI in learning does not produce friction.

Expand to new things through analogy, spreading activation, etc.

# AI@SLAC (*Small Liberal Arts Colleges*)

- Education is a **process**, not a **product**
- Finding answers is easy, building a mental framework is difficult
- At SLACs, education is relationship driven
- Virtually all models of effective teaching assume that both professional and relational capabilities are key
  - Teacher behavior checklist (Buskist et al.)
  - Model teaching criteria (Richmond et al., 2014)
  - Self-determination theory (Guay, 2021)
  - Teaching innovations framework (Palmer & Giering, 2024)

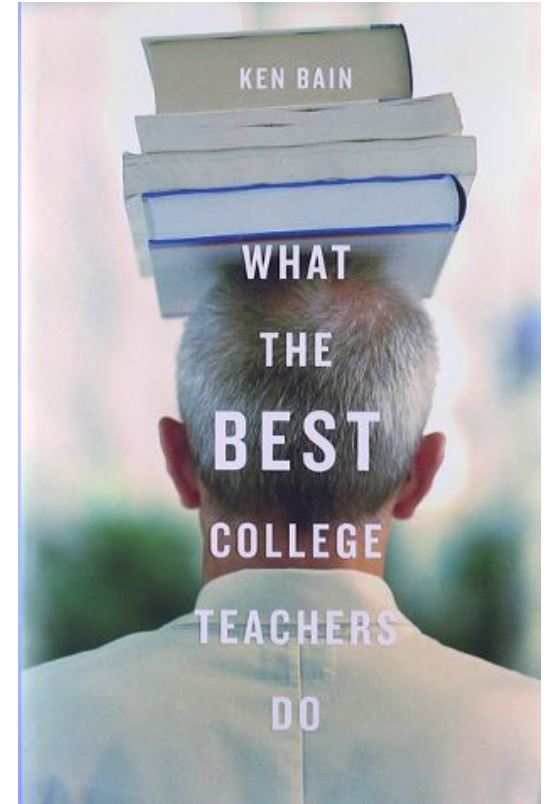


# What now at SLACs?

- In the age of AI, and before that, in the age of Google, what are we shooting for?
- What are we even trying to do here?
- And what tools help or hinder those goals across the many spaces where we teach?

*The best teachers . . . “Achieved remarkable success in helping their students learn in ways that made a sustained, substantial, and positive influence on how those students think, act, and feel.*

(Bain, 2004, p. 5)



Exit out of Google slides here :)

Let's get one thing straight

Let's get one thing straight—you didn't ask for this.

Let's get one thing straight—you didn't ask for this.

You didn't request an unregulated, untested, and rapidly evolving technology to suddenly upend education (and nearly every other sector of society).

Teaching in the era of generative AI feels like assembling a plane in midair



Teaching in the era of generative AI feels like assembling a plane in midair—while you're also the hostage negotiating for the manual.



# AI Hype Cycle



# A moment of grace



# A moment of grace



# A moment of grace for your students



# A moment of grace for your students



● December 09, 2024

## To Use AI or Not to Use AI? A Student's Burden

In shifting much of the responsibility for upholding academic integrity from instructors to students, we leave students with an unfair burden, Daniel Cryer writes.

By [Daniel Cryer](#)

# A moment of grace for your colleagues



# A moment of grace for your colleagues



## Showing Up for the Future: Why Educators Can't Sit Out the AI Conversation

Guest post from Lew Ludwig

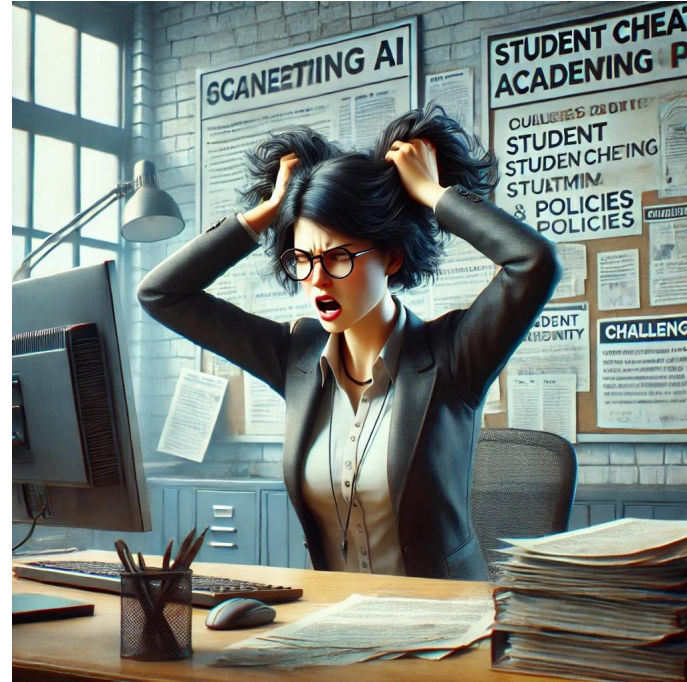


MARC WATKINS

APR 04, 2025



# A moment of grace for your administrators



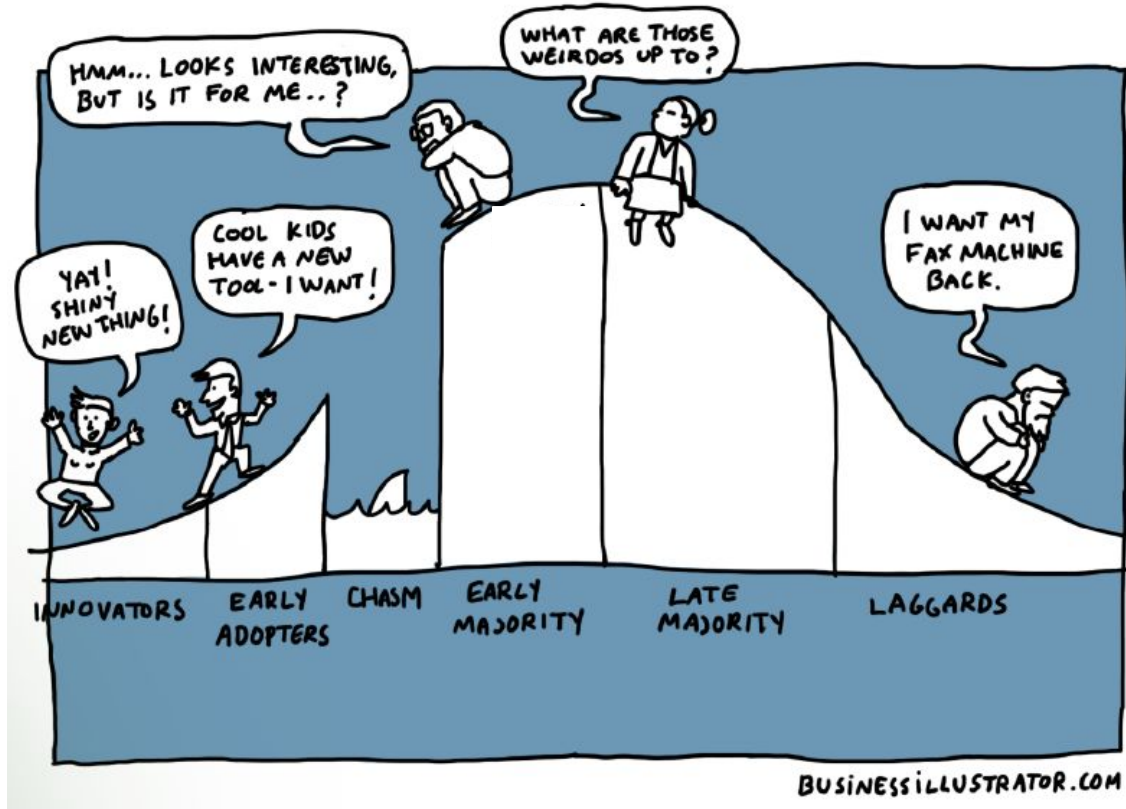
# A moment of grace for yourselves



**A deep, cleansing  
breath!**



# Rogers (1962), Moore (1991)

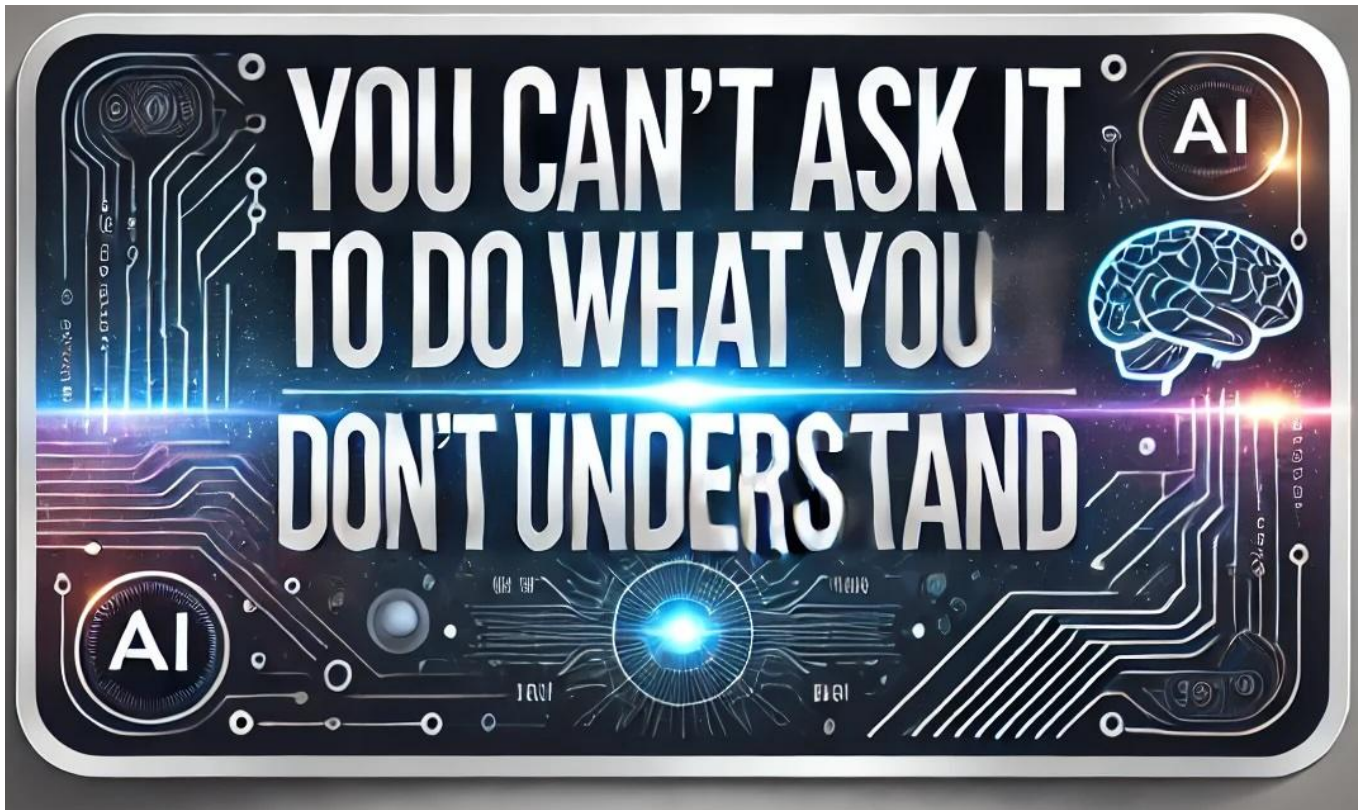


**YOU CAN'T ASK IT  
TO DO WHAT YOU  
DON'T UNDERSTAND**

**AI**



**AI**



A graphic featuring the text "AI > ME?" in a bold, white, sans-serif font. The text is set against a dark background with a glowing blue circuit board pattern. The circuitry consists of various lines, dots, and circular nodes, all illuminated with a bright blue light. The overall aesthetic is futuristic and technological.

**AI > ME?**



