

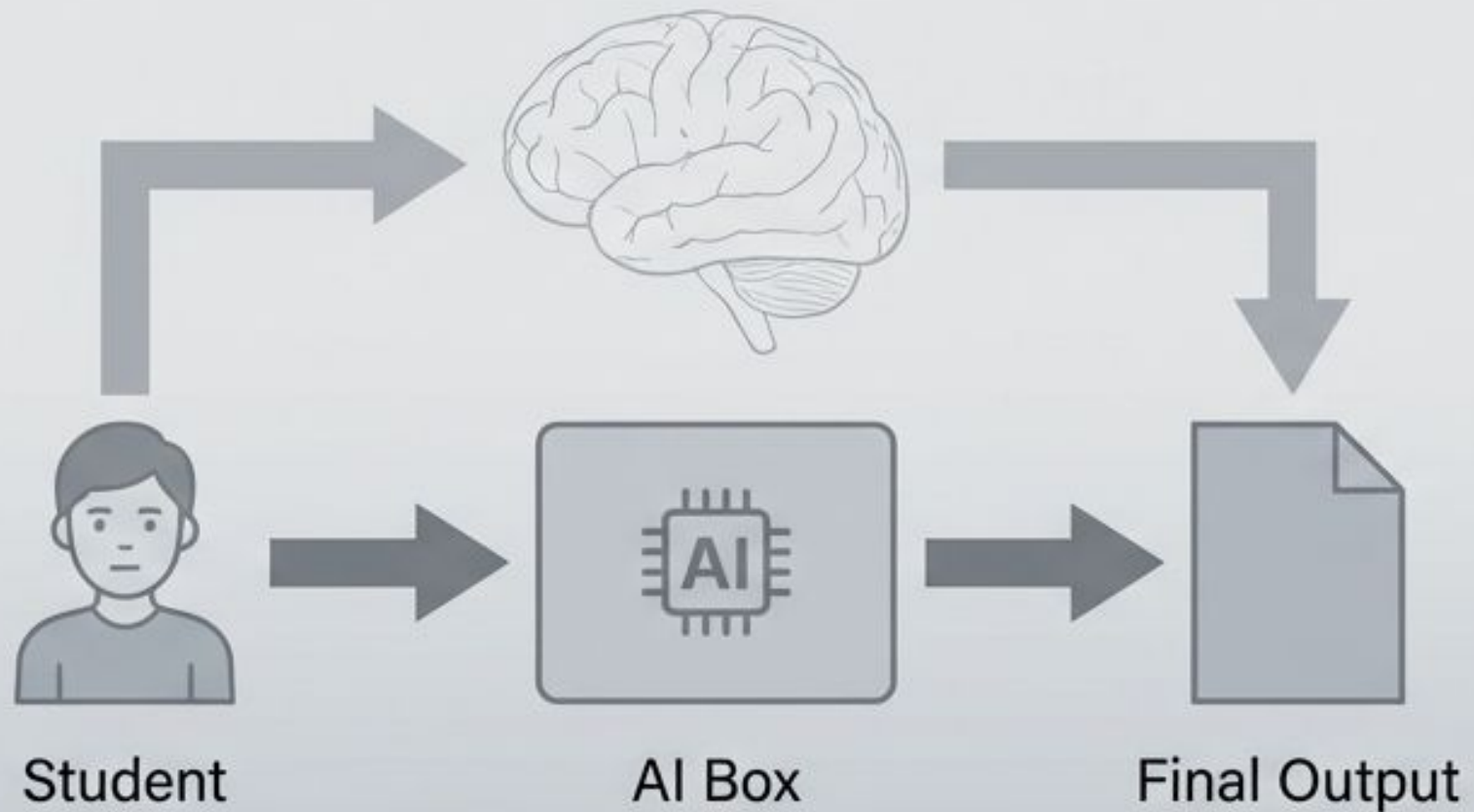
The AI-Enhanced Classroom

Using LLMs as Creative Catalysts in Design Thinking



The Grounded Hybrid Studio: Before-and-After Conceptual Diagram

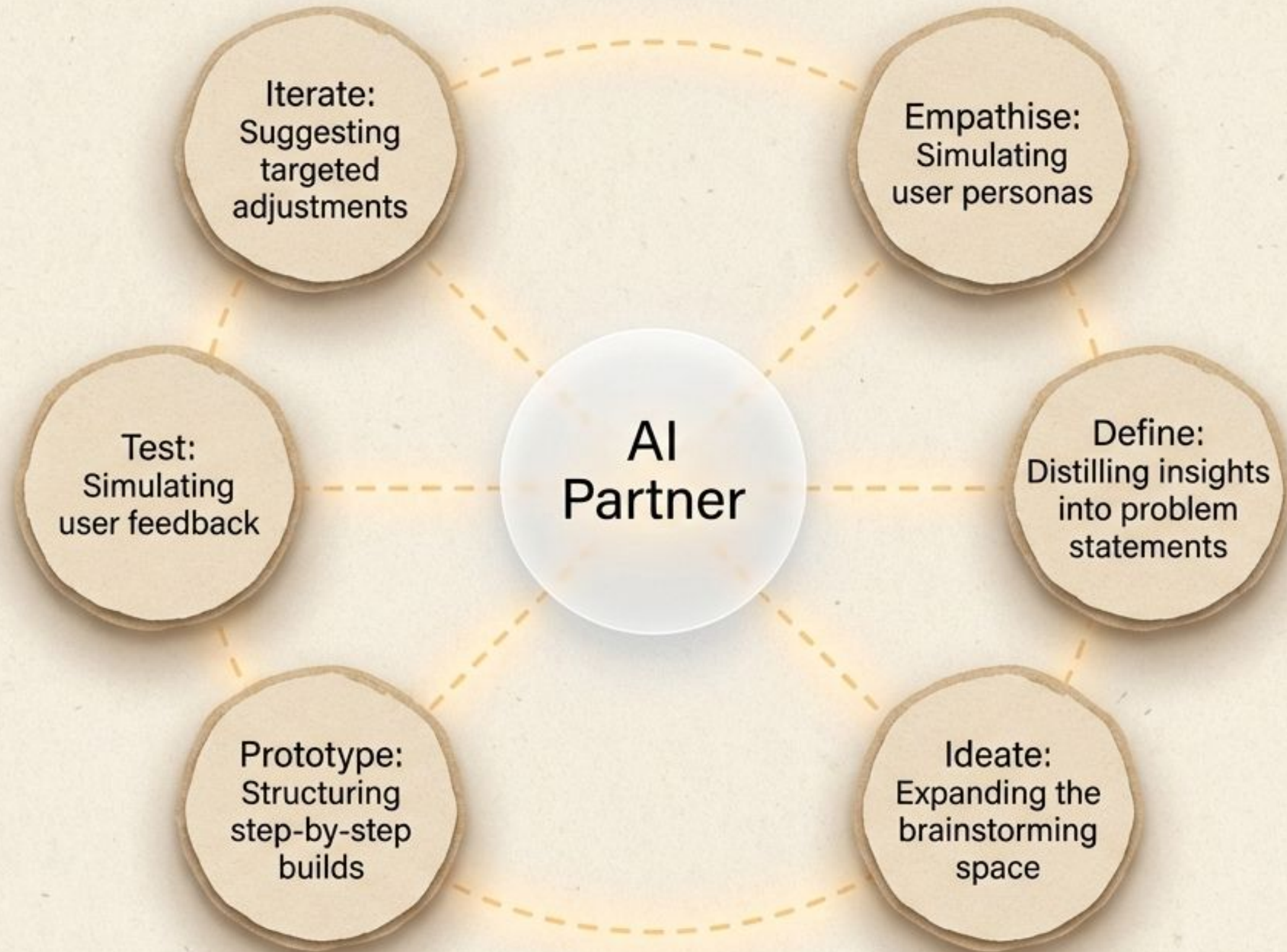
The Fear: ~~Automation~~



The Reality: Collaboration



The Engine of Innovation



WeDesign: Built for the Classroom

A participatory framework stripping away corporate jargon to focus on play and discovery.



Create Alter Egos
(Establishing safe psychological distance)



Explore Needs
(Discovering problems and opportunities)



Produce Ideas
(Collaborative brainstorming)



Sustainability
(Reflecting on environmental impact)



Assessment
(Collective reflection and synthesis)

Tangible Sparks, Digital Scaffolding

Physical cards anchor the classroom. AI supports the game—it doesn't replace it.



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Unbound Student Agency

Preserving Student Agency

Collaborative
Co-Creation

AI Acts as
Oracle
(Does the work)

Student
Operates Solo
(High friction)

AI is a Mediated Partner:

- Contributions are optional, negotiable, and reversible.
- It clarifies and explores; it never validates or decides.
- The facilitator orchestrates the mediation, not the machine.

Three Pillars of AI Support



Reduces Expressive Burden

Helps students rephrase
and articulate complex
ideas without doing the
thinking for them.
Overcomes writing fatigue.



Expands Ideation Space

Injects "How might we?"
prompts and generative
stimuli based directly on
the physical Idea Cards
chosen by the student.

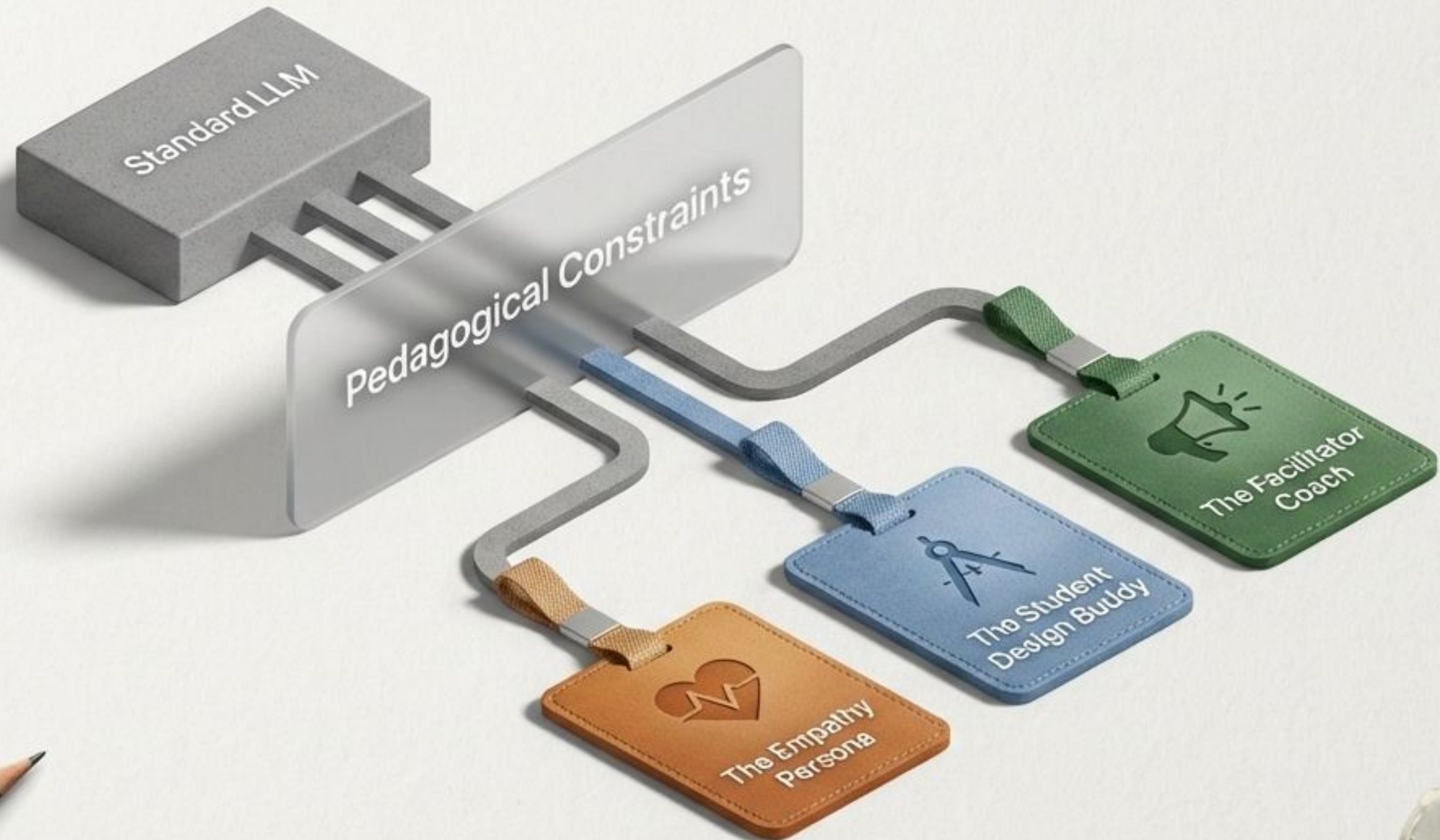


Accelerates Iteration

Enables rapid "what if"
scenario testing and
reflective prototyping
without requiring advanced
technical execution.

Constraining the AI: Role-Based Agents

We do not use open-ended, unpredictable AI in the classroom. Instead, we deploy bounded, role-based Agents that act strictly as guides with highly specific rulesets.



Role 1: The Empathy Persona

Simulating the End-User

Function

Answers questions exclusively from the perspective of a specific user. Allows students to practice interview skills and gain deep empathy safely and instantly.



Student

What is your biggest challenge with fitness?

Beginner User

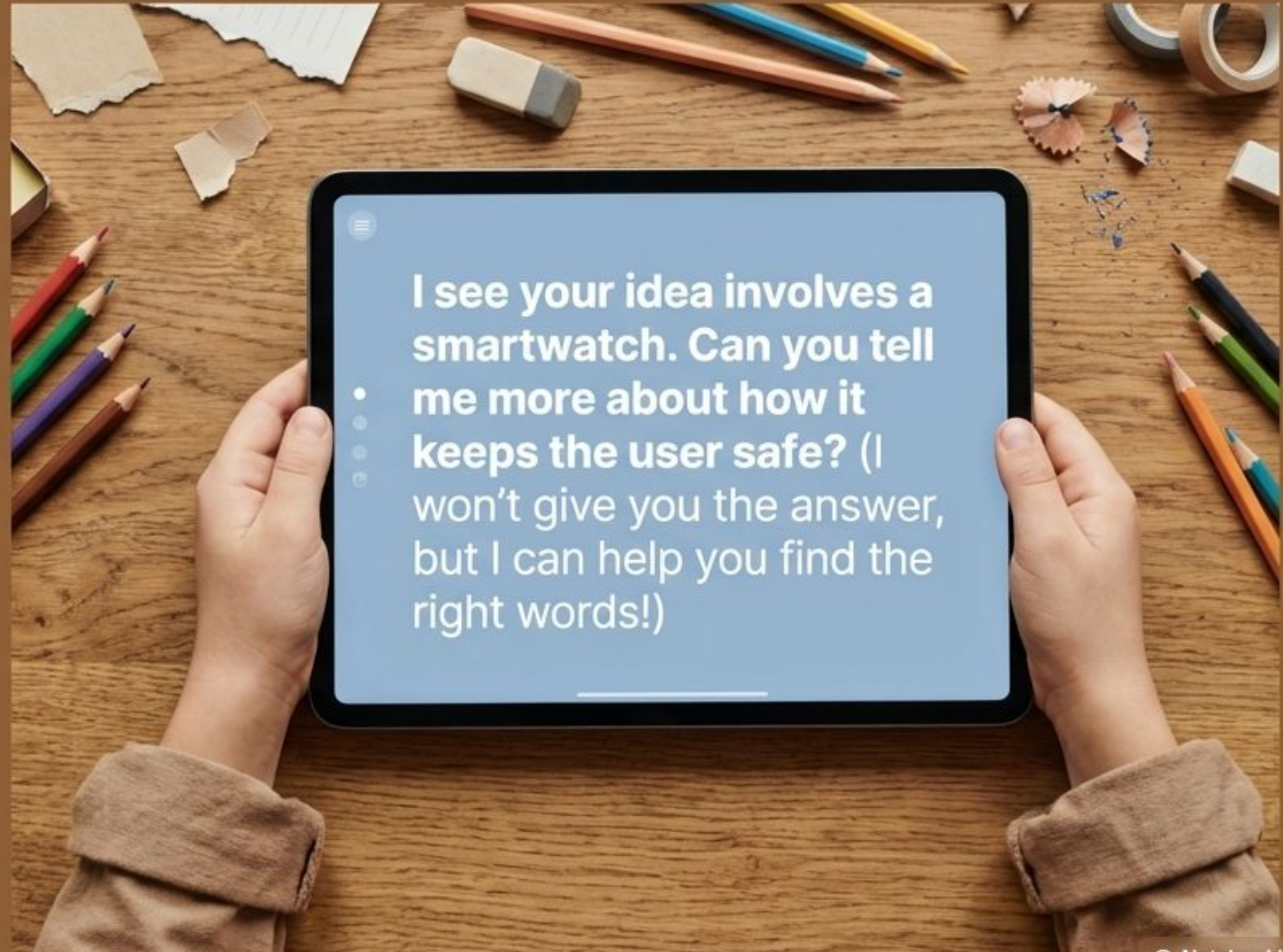
I find it hard to stay motivated alone, and I'm not sure where to start with meal plans.

Role 2: The Student Design Buddy

The Ultimate Scaffold

Function

Asks clarification questions, provides 2-3 phrasing options for the student's own thoughts, and strictly refuses to generate final solutions. Helps externalize ideas.

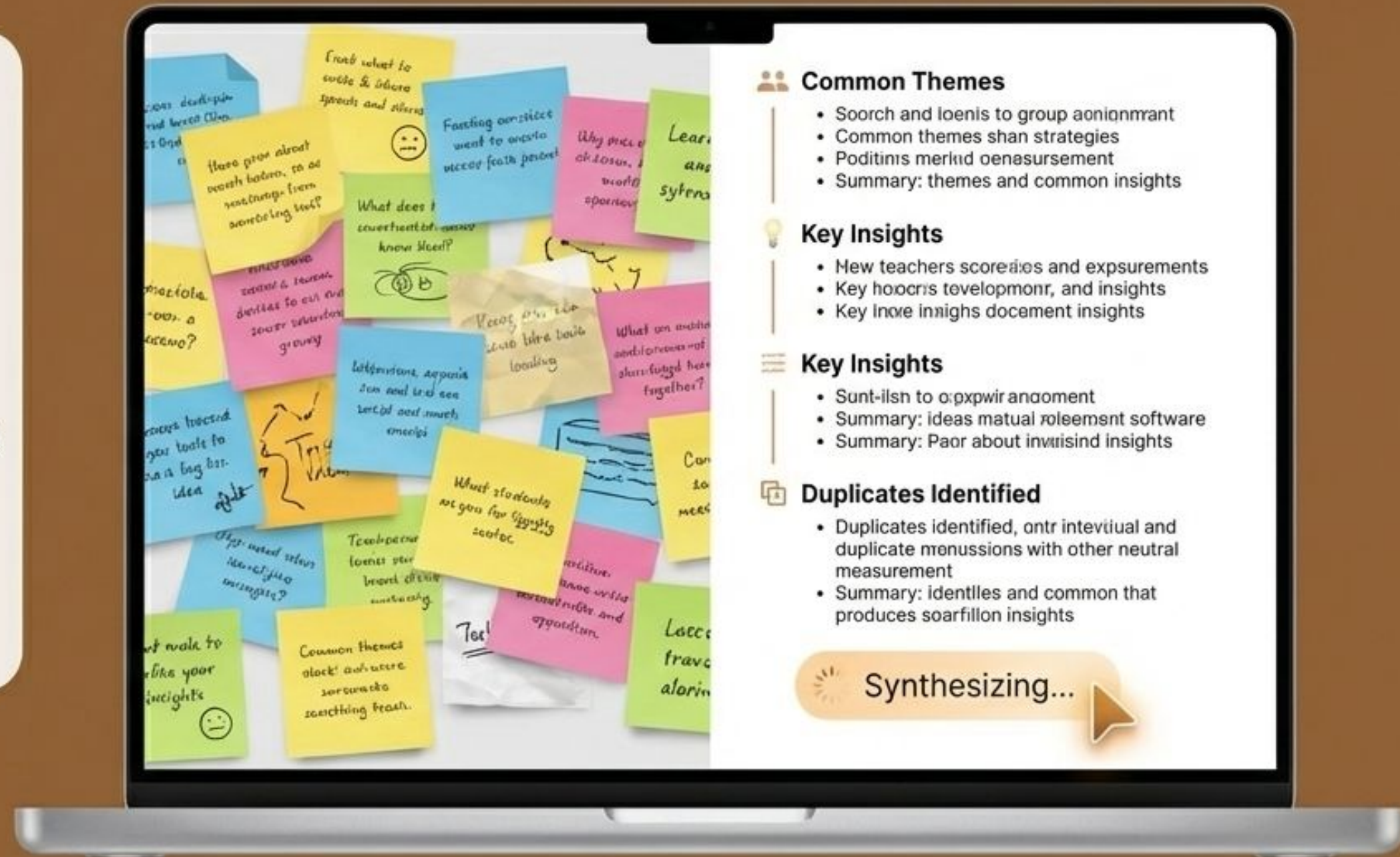


Role 3: The Facilitator Coach

The Teacher's Co-Pilot

Function

Operates on the teacher's device. Helps quickly cluster ideas, identify duplicates, and generate neutral summaries for group discussion. Frees the educator to focus on human connection rather than frantic whiteboard management.



Building Your Agents: Prompt Engineering

A simple formula for teachers to set up stage-sensitive scaffolding.

[ROLE]: "Act as a Student Design Buddy."

[TASK]: "Help the student clarify their idea based on the 'Superhero' Idea Card."

[CONSTRAINT]: "Ask exactly ONE question. Do NOT propose solutions. Output max 2 sentences."

Constraints make the AI safe, predictable, and pedagogically sound for the classroom.

The Classroom Blueprint

<u>WeDesign Phase</u>	<u>AI Role</u>	<u>Student Action</u>
Alter Egos & Needs	Empathy Persona	Interviewing & Empathizing
Produce Ideas (Cards)	Student Design Buddy	Brainstorming & Articulating
Assessment & Sustainability	Facilitator Coach	Synthesizing & Reflecting



AI is a collaborative partner, not an instructional authority.

By embracing hybrid interactions and role-based agents, we preserve the messy, tangible joy of design thinking—and use AI to illuminate the path forward.

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