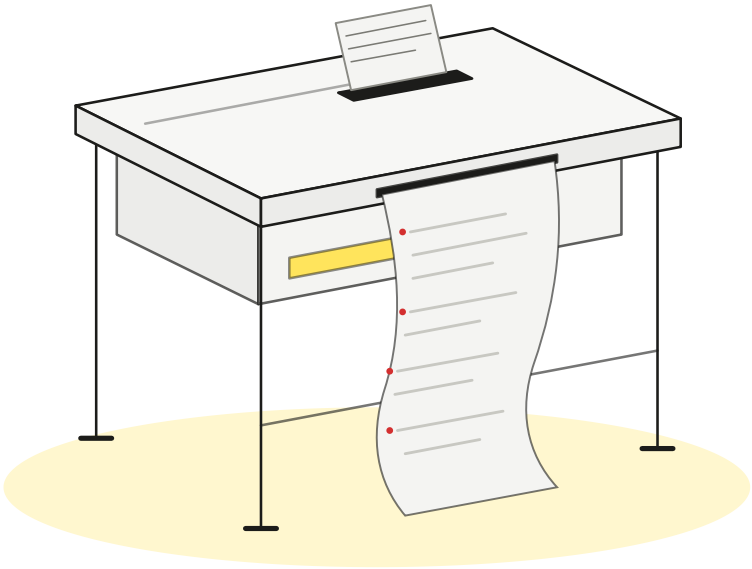
AI IN THE WILD · STANFORD D.SCHOOL

The Asking Desk.

A school desk that gives you questions, not answers.



> **“Instead of putting answers inside the school … put questions inside.”**
>
> Marshall McLuhan, 1974

Final report · October 30, 2026

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AIMES Thought Leadership award · AI & Critical Thinking · Stanford Accelerator for Learning

OVERVIEW

Questions, not answers.

The project set out to explore a hypothesis: what AI does to thinking depends on how AI is deployed, not only on the underlying model.

Its goals, as set out in the AIMES Thought Leadership proposal, were to explore whether an AI experience that is public, embodied, slow and artifact-producing can cultivate the habits of critical thinking that chatbots on personal devices tend to skip; and to open a public conversation about these under-examined deployment choices.

My initial idea for the form of the installation was to create a question vending machine, but I pivoted to a school desk, an object that represents the institution most of us associate with being handed answers. An "asking desk" made a clearer statement about the importance of questions in education, and in particular for critical thinking.

Over the month of October 2026 the desk sat in the d.school lobby, operating unattended, around the clock. When there was an event close by (e.g., a Classes Without Quizzes session during Reunion Homecoming), I hung around to talk to people using the desk. I also invited people who came to meet with me and colleagues to try the desk. In all, 100 people fed the desk a problem they were grappling with, and the desk generated 520 questions.



A visitor at the desk in the d.school lobby. Photo: Patrick Beaudouin

I created a companion site, linked from the slip of questions that people received. The site includes an explanation of how the desk works and the framework I chose for the generated questions, the rationale of the project, relevant research, a photo gallery, and resources to continue reflecting and diving deeper. It also includes related lessons that educators can adapt to their teaching. The site can be accessed at dschool.pub/asking-desk.

This report starts with an inventory of the contents of the site and includes additional elements: details of how the desk was built and activity metrics to date.

100
VISITOR CARDS

520
QUESTIONS PRINTED

16/20
DAYS WITH VISITORS

10s
MEDIAN, CARD TO SLIP

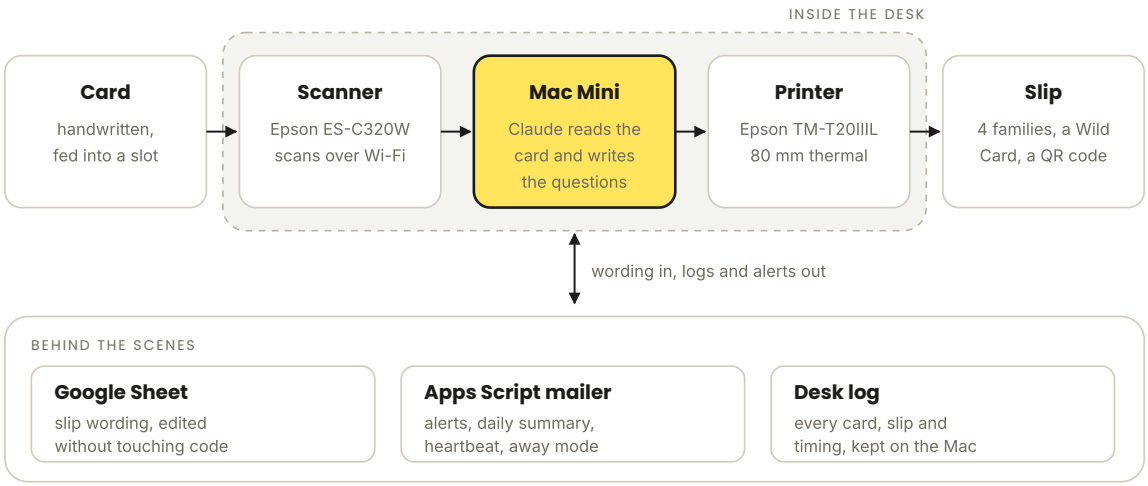
Where the work continues.

dschool.pub/asking-desk: each section of the site, what's there, and what visitors can do.

SECTION	WHAT'S THERE	VISITORS CAN
The desk	The desk under a spotlight, with the four question families around it and the McLuhan quote	Click a family to jump to it
How it works	Write, feed, wait, receive; a 48-second video of one visit; how the desk uses AI	Watch the video; book a chat with Leticia
Try it	Sample problem cards and the slips they produce	Feed a sample card and watch a slip print
Out in the open	About 30 photos of the desk in the lobby by Patrick Beaudouin and Leticia Britos Cavagnaro	Open the full gallery
Four families of questions	Sharpen, Widen, Deepen, Imagine: the question types and their research roots	Read the typology
Why questions	The case for questions now that answers are cheap; six research findings with sources	Read and follow the sources
For educators	Six classroom activities, kept in a folder of notebook pages	Pull activities out one at a time or all at once; download them all as a PDF (CC BY-NC-SA 4.0)
What's worth knowing now?	Postman and Weingartner's question-based curriculum (1969), revisited for AI	Submit an urgent question about learning in times of AI; read approved questions from others
Find Questions to Your Answers	Chapter 6 from *Experiments in Reflection*	Flip through the pages
Reflect with Riff	An AI reflection partner that asks questions back	Reflect on how it felt to get questions back
Connect with Leticia	An invitation to talk about the desk and the value of questions	Book a time

Problems in, questions out.

A repurposed school desk with the whole system hidden under its tabletop. Inside, a handwritten card becomes a printed slip in about 10 seconds.



PART	WHAT IT IS	NOTES
Desk	A real school desk, 24 × 18 in tabletop, with the scanner, printer, computer and router underneath	The furniture most people associate with being given answers
Card	A 5 × 4.8 in card: “I'm trying to ___, but ___.”	Written by hand, then fed into the slot on the desktop
Scanner	Epson ES-C320W, driven directly over its network scanning interface (eSCL)	The choice of scanner was critical for the functioning of the desk
Computer	Mac Mini running the desk's Python software as a background service that restarts itself	Calls Anthropic's Claude to read the card and write the questions
What the AI does	Reads the handwriting, sorts the card (a problem, a test, unreadable, offensive, or a sign someone may need care), then writes one question per family plus a Wild Card	If necessary, care cards print support lines (988, Stanford CAPS) and alert Leticia
Printer	Epson TM-T20IIIL 80 mm thermal printer, mounted upside down	The slip ends with a QR code to the website
Network	A mobile router inside the desk box, shared by the scanner and the Mac Mini	Campus Wi-Fi blocked the scanner; dropouts were the main source of downtime
Keeping it running	A Google Sheet for slip wording, an Apps Script mailer for alerts and a daily summary, a 10-minute heartbeat, Wi-Fi self-reset, and an away mode run from a phone	Most problems could be checked and fixed remotely

ACTIVITY AT A GLANCE

Twenty days in the lobby.

The desk answered 100 cards with 520 questions and had visitors on 16 of its 20 days open.

MEASURE	VALUE
Build and testing	Sep 22 – Oct 8, 2026
Open to visitors (logged)	Oct 9 – 28, 2026
Days with at least one visitor card	16 of 20
Visitor cards answered	100
Questions printed	520 (one per family plus a Wild Card on every slip)
Cards the desk couldn't read	5, one of them written in Korean
Busiest days	Oct 16 (23 cards) and Oct 28 (19)
Time from card to slip	10 s median; 9 in 10 within 21 s
Languages	English, plus one card in Spanish
Longest outage	Oct 16 evening to Oct 19 morning, when the Mac Mini lost its connection

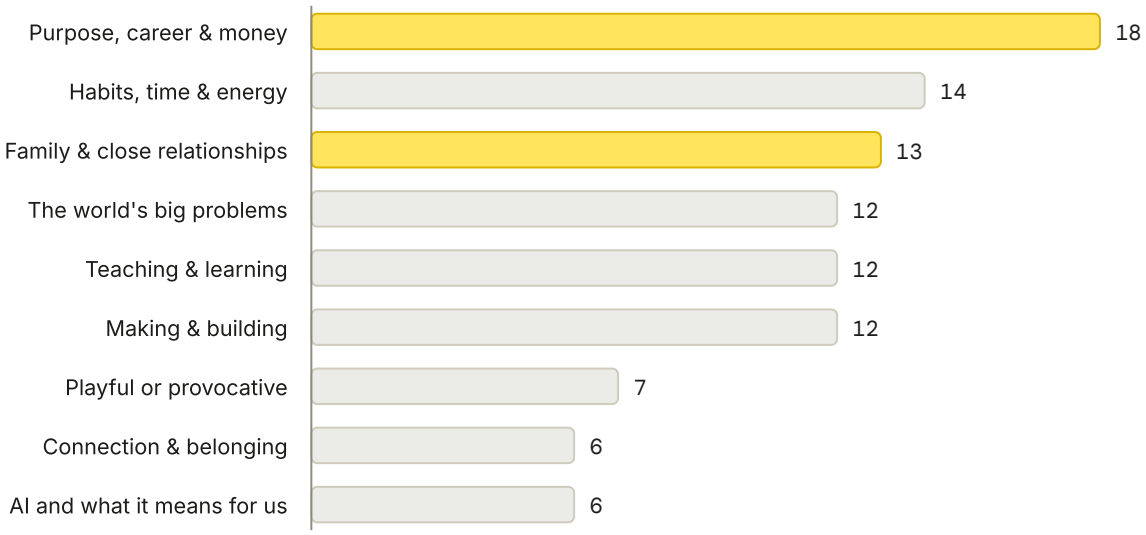


Visitors with their slips beside the desk. Photo: Leticia Britos Cavagnaro

WHAT PEOPLE BROUGHT

The problems.

31 of 100 cards were about purpose, career or family (in yellow); 12 were about teaching or learning.



THEME	WHAT PEOPLE WERE WRESTLING WITH
Purpose, career & money	Empty nests, retirement, a career that feels “beneath” expectations, which major or city next, financial freedom
Habits, time & energy	The gym, piano practice, two jobs and three classes, perfectionism, studying while run down
Family & close relationships	Parents and teens or adult kids, an ex at a reunion, whether a partner is the right fit
The world's big problems	Coral in the 22nd century, poultry disease, wetlands, portal hypertension, kids' access to play
Teaching & learning	Students who want answers, math for creative people, critical thinking without screens, design thinking for scientists
Making & building	A soft octopus robot, song lyrics, a rocket with no budget, a sit-stand desk people will use
Playful or provocative	A cantaloupe with tied hands, Stanford's favorite cheese, a missing joke
Connection & belonging	Moving beyond small talk, working from home, finding a way into real projects
AI and what it means for us	“I want to stop AI,” AI as a competitor, vanishing entry-level jobs, the future of design, what makes us human

From left field.

The Wild Cards were among the questions people commented on most when Leticia talked with them after they used the desk. Each slip ends with one: a surprising, playful question that comes at the problem sideways.

THEME	WILD CARD	THE PROBLEM IT ANSWERED
Purpose, career & money	If your ten remaining years were a book, what would the chapter titles be?	At 58, whether to quit for more pro-social work
	If your career were a trail rather than a ladder, what would 'behind' even mean?	Feeling lost and behind, with AI changing careers
Habits, time & energy	If your excuses formed a band and played a gig, what would they be called?	Building a daily piano practice
	If your laziness were a coworker, what would it be trying to protect you from?	Going to the gym while seeing yourself as lazy
Family & close relationships	If your son wrote a field guide to you, what would the first page say?	A 62-year-old parent wanting to know a 20-year-old son
	If your worry could sit in the passenger seat instead of driving, where would it point?	Giving a college-aged son space
The world's big problems	If a reef could send you a one-line text message today, what would it say?	Making sure coral exists in the 22nd century
	If a tree could vote on where to be planted, what would it campaign for?	Where to plant trees in a neighborhood
Teaching & learning	If questions were a snack, what would make your students crave them?	Students who want answers instead of questions
	If your school were a garden instead of a factory, what would you plant first?	Building community in schools
Making & building	If your stick figures had a fan club, what would they love about them?	Drawings that look like stick figures
	If your idea wore noise-cancelling headphones, whose voice would it let through?	Prototyping while overwhelmed by everyone's input
Playful or provocative	If the cheese were running for student body president, what would its slogan be?	Finding Stanford's favorite cheese
	If the cantaloupe had to come to you, what would it have to do?	Eating a cantaloupe with hands tied
Connection & belonging	If your small talk were a door, what would be knocking from the other side?	Real connection at a reunion
	If your living room were a café with a door that never closes, who would walk in?	More social contact while working from home
AI and what it means for us	If AI were a river, would you build a dam, a mill, or a boat?	"I want to stop AI, but..." left unfinished
	If a bot envied one thing about you, what would it want to borrow?	What makes us human once AI can do everything

Four complete slips.

Below are four real examples: the problem a visitor brought, as the desk read it, and the complete slip of questions the desk generated in response. Each slip fans one problem out in five directions: pin it down, look around, go under it, open it up, and come at it sideways. Visitors started by writing their problem on this card.

The Asking Desk.

Bring a problem or a challenge you're currently wrestling with.

Works best: one real, specific problem, in your own words. No names.
Good to know: the desk's AI-powered brain reads what you write so it can respond.

I'm trying to _____

_____

_____

_____

but _____

_____

Drop this card on the left side slit (gently) and wait ~5 secs for the desk to take it in.



A slip in hand. Photo: Patrick Beaudouin

A TEACHER'S PROBLEM · OCT 16

THE ASKING DESK

questions, not answers

Fri Oct 16 · 11:21 AM

YOU BROUGHT

You're trying to help your students appreciate the value of questions, but they keep wanting the answers instead.

SHARPEN — pin it down

When did a student last choose a question over an answer? What was different?

WIDEN — look around

What might wanting answers be protecting for your students: grades, safety, time?

DEEPEN — go under it

What have your students learned about what being smart looks like?

IMAGINE — open it up

What if the class were graded on the questions they asked, not the answers?

WILD CARD — from left field

If questions were a snack, what would make your students crave them?

The Desk gave you questions to push your thinking.

What if you kept asking your own?

Take these with you.
dschool.pub/asking-desk

A DESIGN PROBLEM · OCT 16

THE ASKING DESK

questions, not answers

Fri Oct 16 · 4:17 PM

YOU BROUGHT

The writer wants to find a novel way to help people with disabilities (specifically those unable to walk), and isn't sure whether a more capable wheelchair is the right solution.

SHARPEN — pin it down

What can't current wheelchairs do that matters most to the people who use them?

WIDEN — look around

What would someone who uses a wheelchair every day say you're missing?

DEEPEN — go under it

Is the real goal walking, or going where life takes someone, and is that the same?

IMAGINE — open it up

What if the world changed around the person instead of the device changing for them?

WILD CARD — from left field

If the wheelchair had never been invented, what would you be building today?

The Desk gave you questions to push your thinking.

What if you kept asking your own?

Take these with you.
dschool.pub/asking-desk

A FAMILY PROBLEM · OCT 23

THE ASKING DESK

questions, not answers

Fri Oct 23 · 1:07 PM

YOU BROUGHT

You're trying to get along better with your twenty-year-old son: you're 62, you don't relate to his generation, but you really love him and want to know him better.

SHARPEN — pin it down

When did you last feel really close to him, and what were you two doing?

WIDEN — look around

How might he describe the distance between you, and what might he want from you?

DEEPEN — go under it

What does knowing him better mean to you, and what are you afraid of missing?

IMAGINE — open it up

What if you stopped trying to relate and simply got curious about his world?

WILD CARD — from left field

If your son wrote a field guide to you, what would the first page say?

The Desk gave you questions to push your thinking.

What if you kept asking your own?

Take these with you.
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A PROBLEM ABOUT AI ITSELF · OCT 14

THE ASKING DESK

questions, not answers

Wed Oct 14 · 7:23 AM

YOU BROUGHT

You want to stop AI, but you left the 'but' unfinished, so what stands in your way is still unsaid.

SHARPEN — pin it down

Which AI, doing what exactly, are you trying to stop?

WIDEN — look around

Who would be relieved if AI stopped, and who would lose something?

DEEPEN — go under it

What are you most afraid of losing if AI keeps going?

IMAGINE — open it up

What if the goal were shaping AI, not stopping it? What changes?

WILD CARD — from left field

If AI were a river, would you build a dam, a mill, or a boat?

The Desk gave you questions to push your thinking.

What if you kept asking your own?

Take these with you.
dschool.pub/asking-desk

“You brought” is the desk's reading of the card, printed at the top of every slip.

The slip started conversations.

The desk's biggest effect happened after the slip printed: people were delighted by the physical interaction with the desk, and the printed slip they received often became a reason to talk about learning and what role AI should play in it.

People loved the physicality. Writing by hand, feeding a slot, waiting and taking away a paper slip delighted visitors. The ritual also seemed to give strangers in a lobby permission to bring real stakes: careers, breakups, empty nests, estranged kids.

The slip started conversations. After reading their questions, many visitors stayed to talk about learning, about questions versus answers, and about how AI should and shouldn't figure in education. Those conversations were among the most fruitful parts of the project.

A hypothesis to test: AI can support learning without a personal device. The desk put AI in shared space, in an object, at a slower pace, and made it a starting point for thinking more deeply about something on people's minds, and it often created the opportunity to discuss with other people. Whether this kind of encounter supports learning, and how, is the question worth testing next.



Talking through the questions on a slip. Photo: Patrick Beaudouin

A PROMISING AREA FOR RESEARCH

Beyond the personal screen.

Two research traditions describe learning and computing beyond the individual screen, but neither has yet had much to say about generative AI.

Distributed cognition

Treats thinking as spread across people, tools and settings rather than sealed inside one head (Hutchins, 1995). Salomon (1993) and Pea (1993) brought this view into education, arguing that schools should help learners design and use the systems of people and tools they think with. The series name *AI in the Wild* echoes Hutchins' *Cognition in the Wild*.

Ubiquitous computing

Imagined computers woven into everyday places until they recede into the background (Weiser, 1991). Rogers (2006) argued that the field should aim instead for experiences that engage people. Studies of public displays found that watching others interact draws newcomers in, the "honeypot effect" (Brignull & Rogers, 2003), which matches what happened around the desk.

In my reading, most current research on generative AI in education studies one learner with one chatbot on a screen. Questions the desk opens up:

1 **What does an AI encounter in shared space do to the conversations around it?**

2 **How do physical rituals (writing, waiting, a paper artifact) change how people take up what the AI gives them?**

3 **Can AI be designed as one part of a distributed system of people, places and objects, rather than as a personal assistant?**

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PEOPLE WHO CONTRIBUTED

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Support: AIMES Thought Leadership award, AI & Critical Thinking track, Stanford Accelerator for Learning

Companion website: dschool.pub/asking-desk