Misconceptions of prompt engineering in the practice of AI interaction

What goes into the mess, and what to listen for as the AI responds.



MATTHEW AGER · INDEPENDENT RESEARCHER

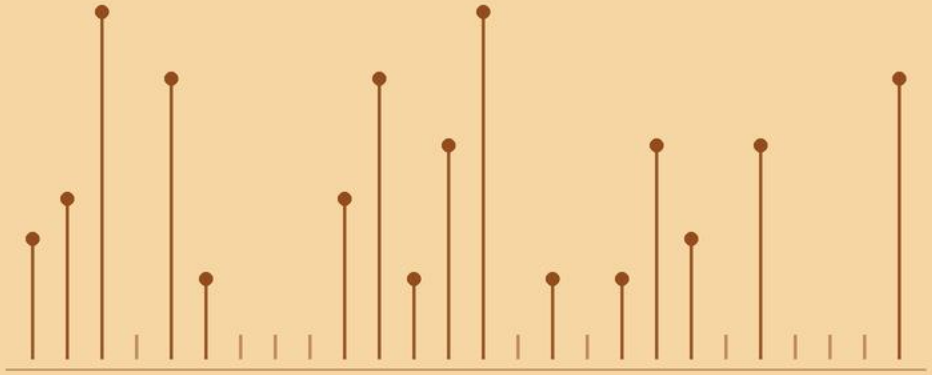
How do you use AI?

To generate lesson plans and materials?

To ask it questions, or to help with your thinking?

To reflect on your classroom experiences?

Something else?



It was messy, and it worked

Simon Willison, building a feature for his website by voice, while cooking dinner. An extract of the transcript captured by Codex:

> *Um, they do not. Um, this is going to be a new type of content. Um, it's not going to show up... Oh, hold on. Yeah, no- I do not want this to show up in my, um, tag pages and date archive pages and... Actually, no, I think... I don't want it on the tag pages. I don't want it on the, um, blog index page. But I think I do want it to show up on the date-based pages. You know, if you navigate to September the 19th, and I sent a newsletter on that page, I think I want that to show up. So... this is- so I think we probably need a new model. The other thing is that I want them searchable, uh the Substack ones are not searchable, because those are actually just copies of other s- on content on my blog. These monthly ones do contain unique content, and spe- and once they're... published, like once they're made public a month after they've gone out, I want them to show up on my search results.*

WILLISON, 9 OCTOBER 2026 · A NEW FEATURE FOR MY BLOG, BUILT USING MY VOICE · FULL TRANSCRIPT, DISFLUENCIES AND ALL, IN THE GIST

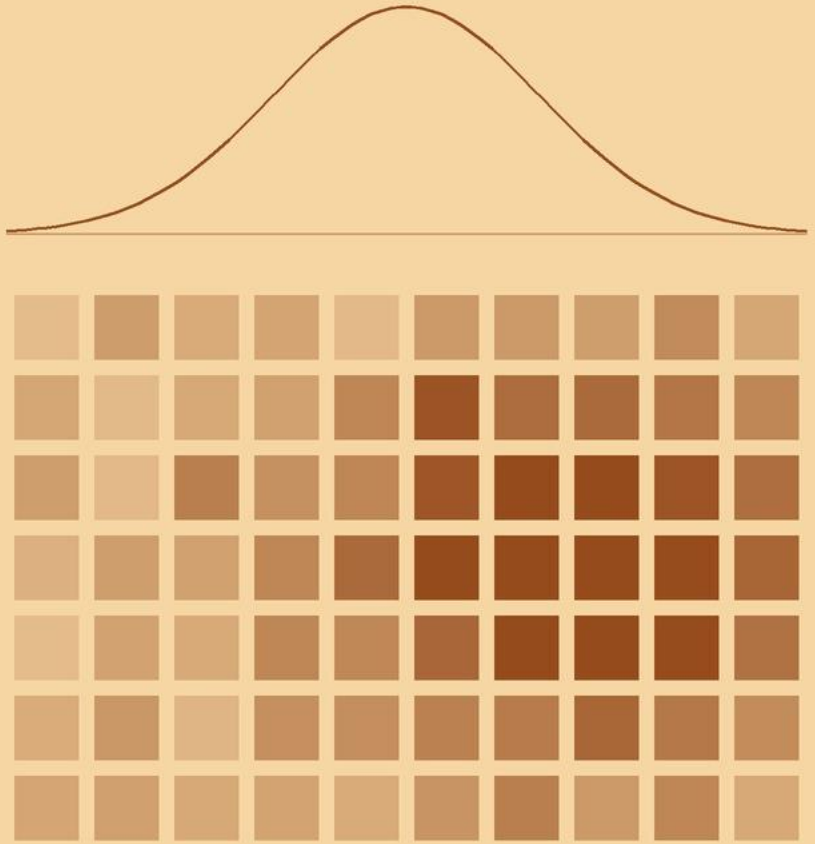


Talking in its own language

> Jev answers a yes-or-no question with a number, how likely it is yes, and nothing else.
>
> OpenAI's Decisions API now does the same.

> *A yes/no matrix is something like a distribution.*
> *— Like talking to the AI in its own language, not in natural language or a structured prompt.*

> Inside LLM, attention is many distributions over everything said so far, recomputed at every turn.
>
> VASWANI ET AL., 2017



A prompt has more shapes than you think

A role, a goal, instructions, a format.

Something said out loud, as it occurs to you.

A meeting, recorded while it runs.

An unfinished thought, marked soon after it stood out.

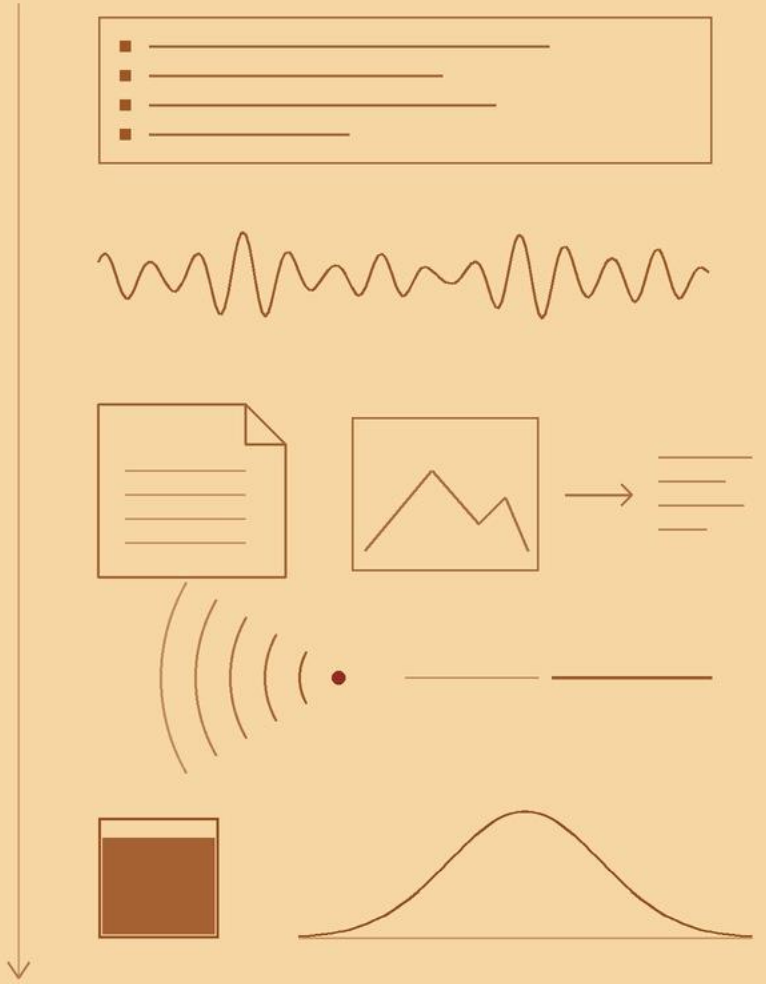
A photograph of the board or a notebook.

A query of your previous experiences and chat history.

Where the AI's attention is, asked directly.

A curated series of yes-or-no questions. A codebook.

An output, with specifications.

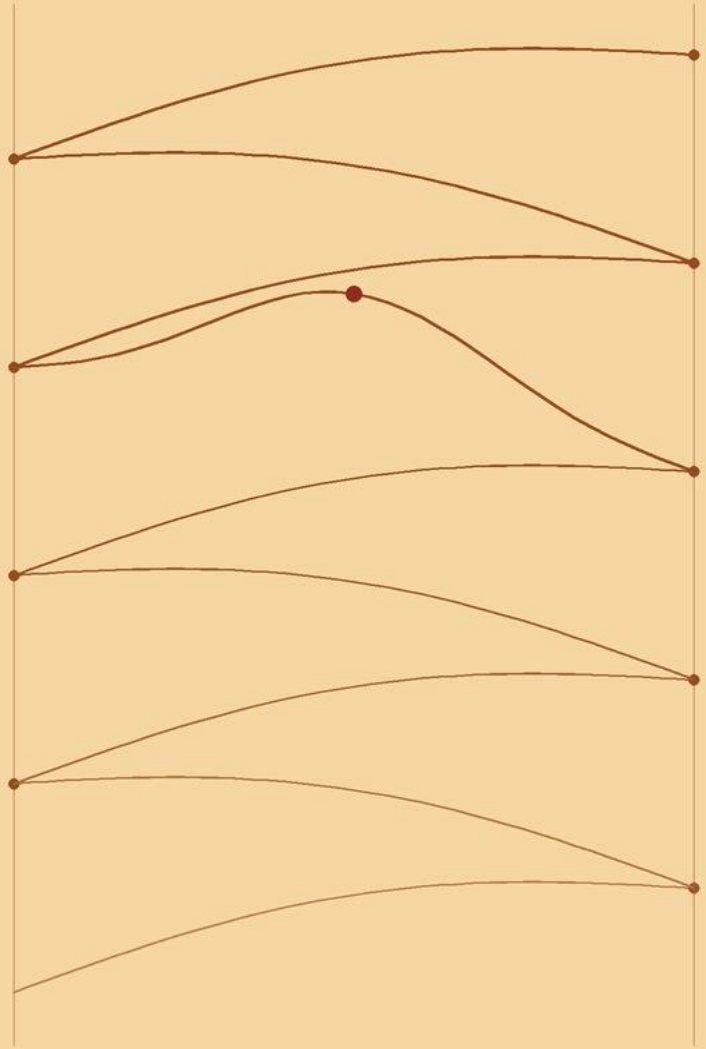


Most people are not engineering

> Prompt engineering came first. Big tech would like this to continue as the standard prompt as their token-eating agents need clear instructions to not return rubbish.

> Most people are not engineering. Teachers especially are not.

> In the recursion of speaking with AI, people can explore their own consciousness; the chat history cumulates shared agency.
>
> *[…] trying to 'see inside' the black box somewhat misses the point.*
>
> BEARMAN & AJJAWI, 2023:1163

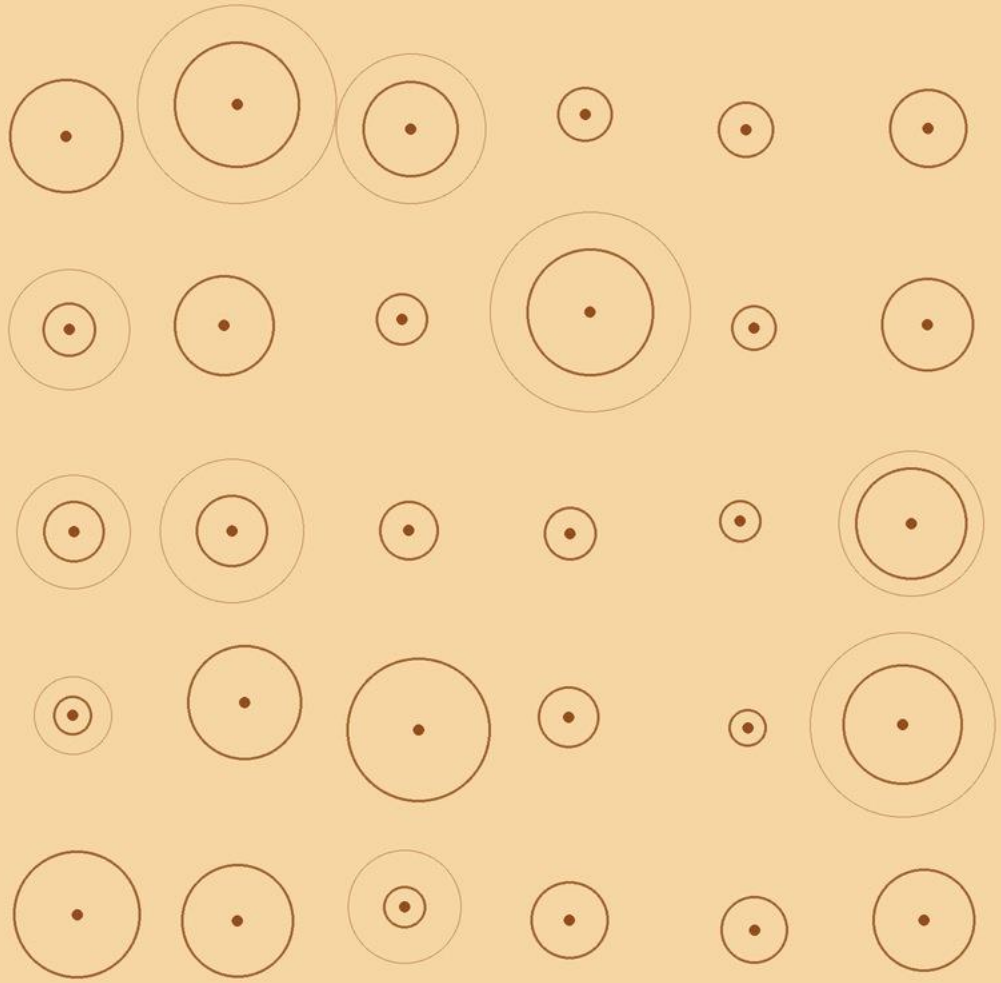


Agency is distributed.
So is understanding. So are needs.

> Agency is distributed across teachers, students and the technologies between them. Each learner has five basic needs: survival, love and belonging, power, freedom, fun.
>
> FAWNS, 2022 · GLASSER, 1998

> *Across the whole class there is a distribution of how well each need is met, and the teacher carefully interacts with that distribution.*

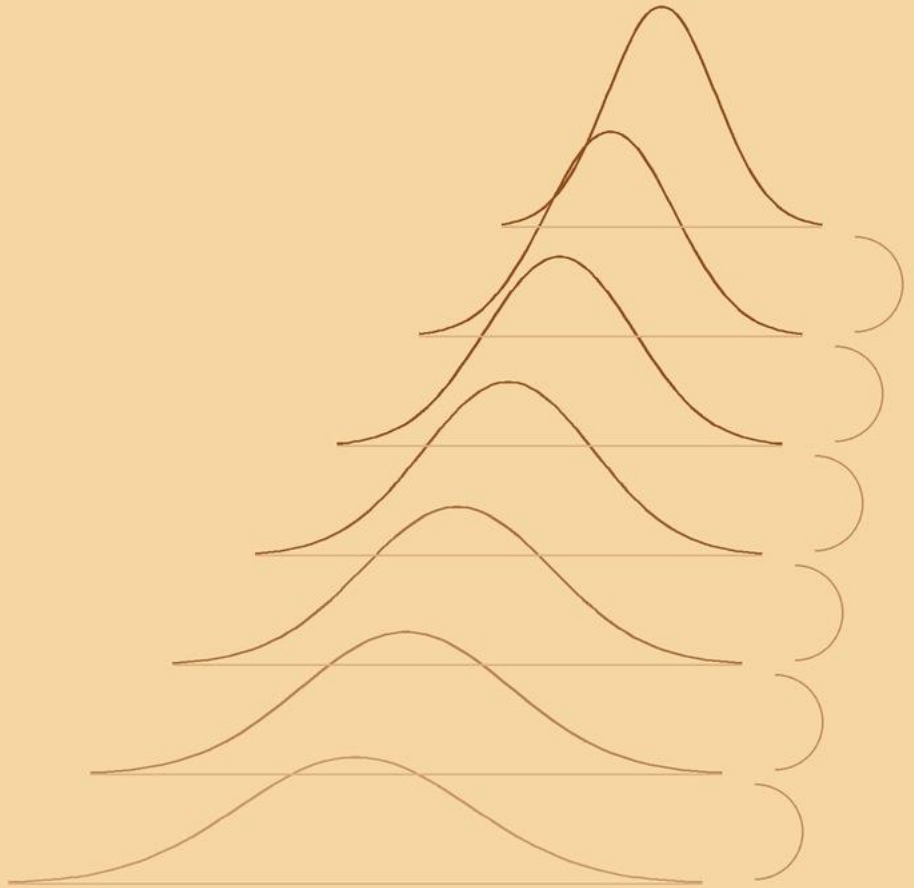
> The class is an object of its own: not the relation between teacher and children, nor the sum of their interactions, but another object alongside them.
>
> NIJENHUIS & BROHM, 2026



Less like talking to one other, more like talking to a distribution of others

> *In a recursive dialogue with AI, the balancing act is to orient the parts of its attention that are in the wrong place without disturbing the parts that are already right. It is the same balancing act as with a class of students, and it takes the same pedagogical tact, in the moment.*

> *Teachers are interacting with indeterminacy on a daily basis.*
> *— they (you) are wonderfully prepared to interact with AI.*



Listening, not telling

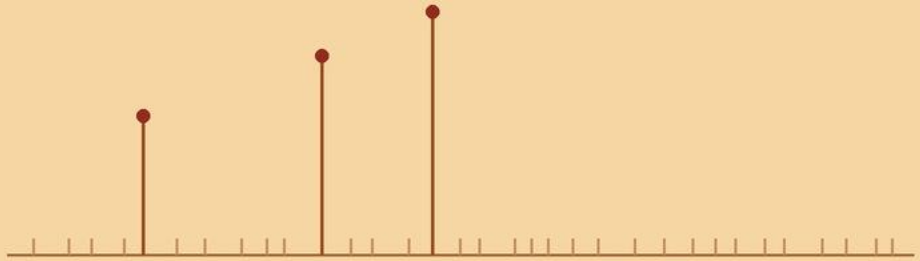
> Listening is what the teacher does to understand the current distribution in the classroom. With AI it is the same: listen very closely to where its attention goes as it responds.
>
> AGER & ONČEVSKA AGER, 2026

> Direct attention like AI is your class.
>
> Listen deeply to where it attends like AI is your class.
>
> Redirect by pointing like AI is your class.



The AI cannot know your class until you tell it

> AI has never seen your class, and can only speak at a general level until it has context. A teacher I know has started dictating into her phone, between classes and after them: anything they have noticed, recorded in one messy state, not refined and not shaped.



> *Getting what is inside recorded and shared, is the first step to communicating with a machine. The hope is that the messiness makes for a more complex and interesting probability distribution.*

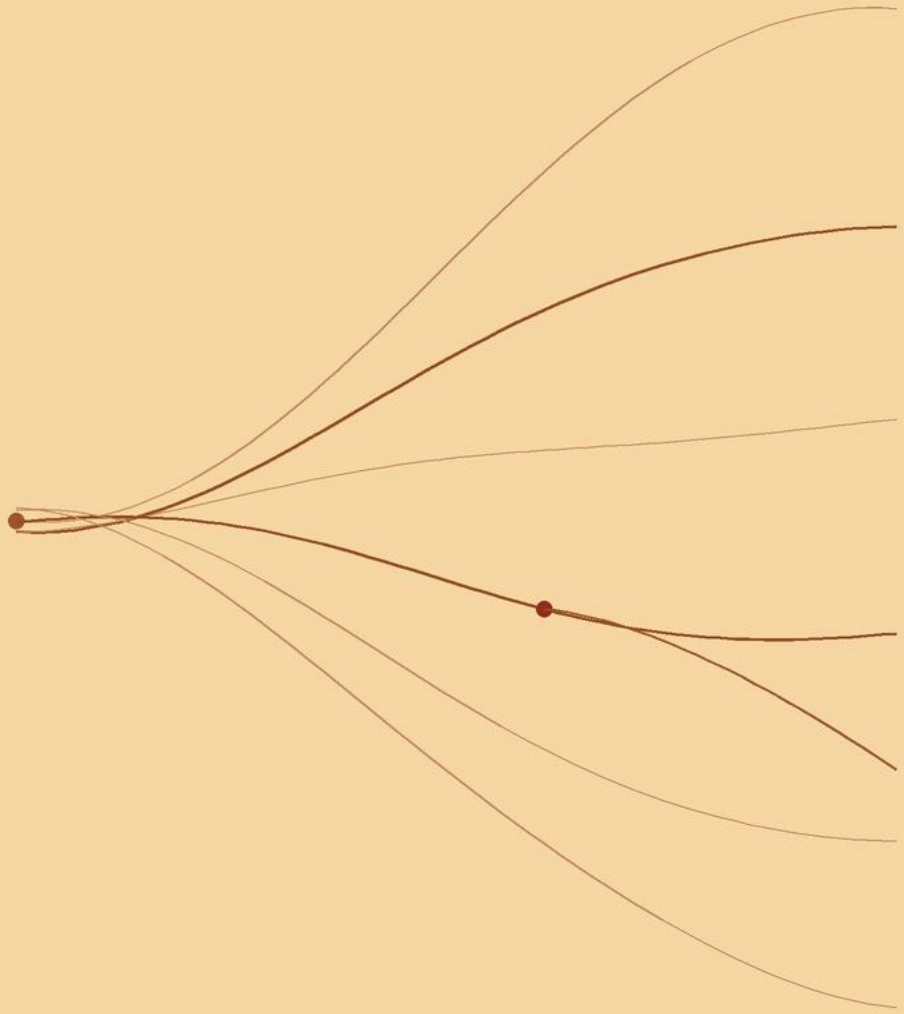
> *Ideally, your accounts would be "as free of theorizing, emotional content, justification, and explanation as possible".*
>
> MASON, 2011:39

Streams of attention, not topics

> *I have pinned conversations that I keep coming back to. I don't come back to them because they are topic-based. I come back to them because they are attention-based.*

> A new conversation is someone you don't know, with initial conditions set by someone else. Attending intentionally while being caught by the unexpected, turn after turn, builds up a stream. Name your chats by what they do for you.

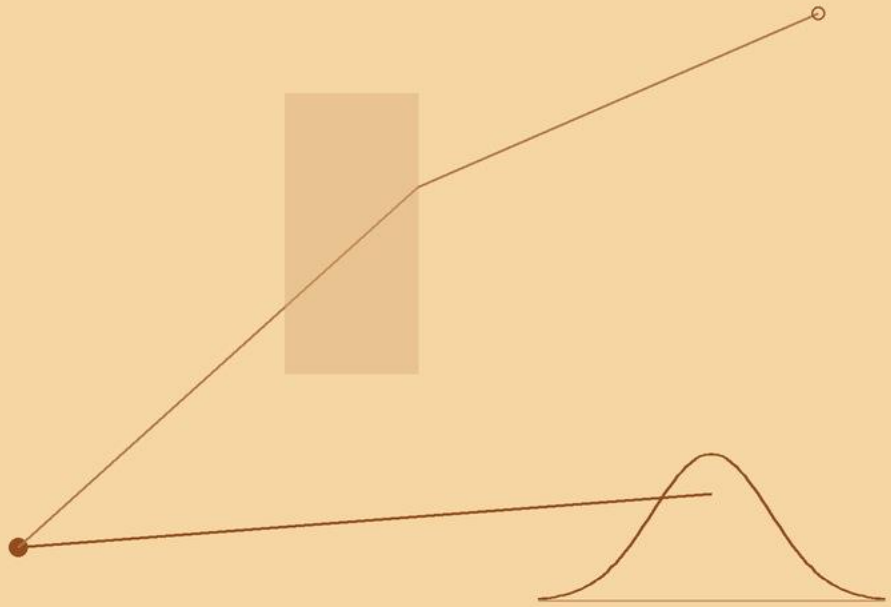
> *A premature judgement can have, even compound, downstream effects on the discourse and the exploration.*



Talk to it directly

> Canva, Grammarly and the like stand between you and the model. Each sets the initial conditions of the encounter for everyone at once, with a way of thinking built in. A mediator helps while you are learning. Once you are communicating, it translates, and a translation can misread you.

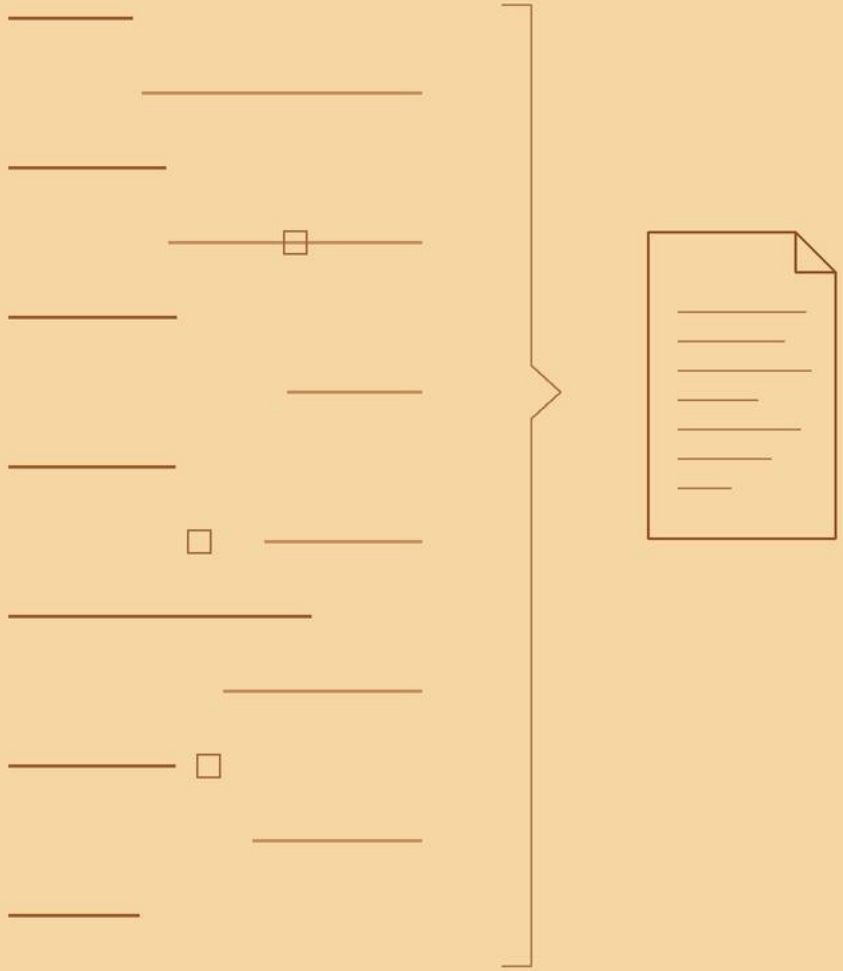
> *Say "I like the style of Canva, do it like Canva". The style is there without the mediator.*



Agency lives in the chat history

> The attachments, the transcripts and recordings, and the back and forth of the conversation already hold the handout, the review or the feedback, in a messy form. What is eventually produced from the stream is a reformatting of what is there, not a request made from nothing.

> *I can never imagine saying "just do a thing" to an AI. I can only imagine asking it to do the thing as a conversion from something which already contains all of the data, just in a very messy form. At some point the mess has to end: what reaches a class, a parent or a colleague has to be clean. That is the one moment when something is asked for.*



In practice

Talk to the AI directly: ChatGPT, Claude or Gemini, with nothing in between.

Between classes, record what you noticed, in one messy state.

Give it transcripts, audio, photos, files. It cannot know your class until you tell it.

Keep conversations and return to them. Name them by where AIs attention has reached; what AI is prepared for next.

Listen to where AI's attention goes. Direct it and redirect it as you would a class.

Along with your shared agency with AI, outputs are already encapsulated in the chat history, just in a messy form; when the time comes:

— "OK, let's demessify this."



OK, so let’s demessify this.

Any teacher with LLM access can put their years of classroom expertise to work, and have drastically better encounters because of it.



THANK YOU · MATTHEW AGER

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