

AI WORKSHOP

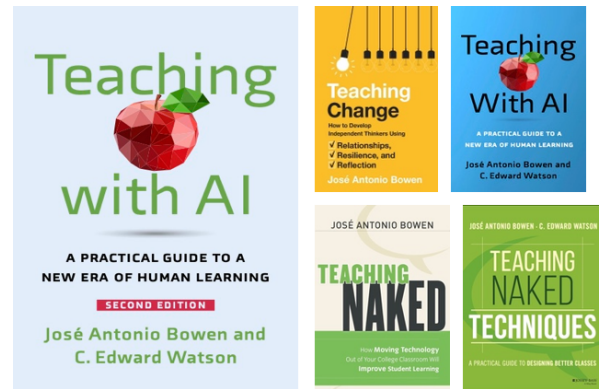
SLIDES & CITATIONS

José Antonio Bowen



Get the [2nd Edition of Teaching with AI](#).
Discount code HTAI25 = 30% off at JHUP.
WebSite: <https://WeTeachWithAI.com/>

► [Workshop Prompts & Materials](#)



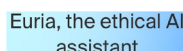
BASIC PROMPTING

Different AI models excel at different things. To learn more, open a fresh browser window and go to the models page; each tool opens in a new tab so you can compare. Talkie is included as a reminder that language models go back to 1930.

► [A range of AI models — WeTeachWithAI.com/models](#)

WORKSHOP: Basic Prompting (slide 3)

Try a more complicated and customized prompt in



WORKSHOP Basic Prompting WeTeachWithAI.com/workshop



- Provide 10 innovative ideas for how to introduce college students in year C to topic D in class E using examples or analogies they will find relevant.
- Ask me a series of 3 questions to then make recommendations about 10 obscure composers/experiments/research ideas I should know about.

more than one model. You can copy and paste all

of these prompts (and many more that are NOT listed here) from the prompting page:

- [Basic Prompting — copy and paste prompts](#)
- [Workshop Prompts & Materials](#)

WeTeachWithAI.com/models

More prompts to try

What might be unclear about these instructions to a college [year] at a [type] of university?

How could I make this syllabus/assignment more inclusive?

Suggest a better title for this class/book/event that will attract [specific] students/audience.

Can you put this into simpler terms for beginning students?

Create a list of resources for a student at the University of X who is experiencing problem Y. Provide a verified link to each resource and three suggestions for how the student might use this resource.

What are 10 innovative ways other faculty have taught this subject/class?

ITERATION: Improve the Response (slide 4)

Write 150 words about... [CHOOSE A SUBJECT YOU KNOW!] Now make the response better:

Cite the evidence for & against. Investigate and apply a variety of frameworks. Search in language X and locally to Y. How do a variety of experts disagree about this?

Slow down and reason step-by-step. Read the prompt more carefully. Be more persuasive but witty. Create two different versions. Try a different approach. Create a smarter better answer. Read the question again. What did you miss? Follow all of these steps, even if you do not think you need to.

Ask for the model's best work:

Write a paragraph about X that will demonstrate to a college professor your most formidable capabilities using high quality verifiable sources. Explain your research and deep thinking.

Meincke, L., Mollick, E., Mollick, L., & Shapiro, D. (2025). Prompting science reports 1–3. Wharton Generative AI Labs. [controlled prompt experiments: politeness and threats rarely help; small wording changes can] <https://ssrn.com/abstract=5165270>

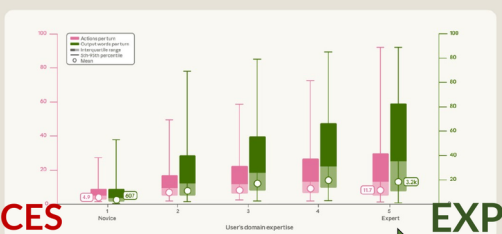
PROMPTING IS WRITING PRECISE & CLEAR LANGUAGE

- Iterate
- Start with what you know
- Small changes make a difference



AI is the new Average

Claude does more per prompt for more expert users



NOVICES

Ask what to do

EXPERTS

Improve results

Hitzig, Z., Massenkoff, M., et al. (2026, June 16). Agentic coding and persistent returns to expertise. Anthropic. [vendor research]

<https://cdn.sanity.io/files/4zrzovbb/website/b93c7465925dc052b9102209b29b58f11df4fe55.pdf>

SEARCHING FOR IDEAS



Searching for IDEAS

- Find anything like this..
- Has anything **similar** ever happened to a previous patient?
- Search for patents **related** to Y?
- What might be **missing** from this?
- Read our book and identify all of the places where we **repeated** an idea.

Google (used to) want to send you elsewhere, but AI wants to create content. Using AI to find information is often not the best use of AI, but most of the foundational models now let you ask for a web search as part of your answer — which, paired with reasoning, can be very useful.

Massive-Scale Contextual Web Searching

Is there anything that Jose Bowen has posted in the last 10 years that is overly political and might have a negative impact if we hired him at X?

Searching for Jose Bowen +

- Biden
- Trump
- Gaza
- Israel
- Controversy
- Protest
- Politics
- Political Views
- Opinions
- Election...

Also searching for

- JB social media sites and activities
- Could JB past writing or speeches be considered a hiring risk?
- Would JB political activities pose any risks?
- JB coverage in media, blogs and websites

Web Search across the entire Internet

Academic Search academic papers

Social Discussions and opinions

Massive-Scale Contextual Web Searching

Search for everything I need to know to prepare for an excellent job interview for position A at B and prepare a briefing document with talking points.

- Current university/business strategy
- Recent financial performance & news
- Major initiatives
- Institutional values
- Market challenges and position
- Industry trends
- Primary competition
- Typical responsibilities
- Required technical skills
- Common interview questions & scenarios

Web Search across the entire Internet

Academic Search academic papers

Social Discussions and opinions

Search for everything I need to know to prepare for an excellent job interview for position A at B and prepare a briefing document with talking points.

YOU TRY: Searching for Ideas (slide 11)

What are the latest trends in...

Find me real examples of...

Has anything similar to X happened at Y...

► [Workshop Prompts & Materials](#)



Searching for CANDIDATES

- Search for candidates for our position X.
- Check CVs to make sure...
- Make a list with emails.
- Create a personalized email invitation to apply.
- Look especially for...

Search for candidates for our position X. Check CVs to make sure... Make a list with emails. Create a personalized email invitation to apply. Look especially for...

REASONING + SEARCH (was “Deep Research”)

Reasoning + Search (was “Deep Research”)

- YOU are a new customer/student
- GO to our web pages
- TEST them like a naive user hoping to...
- REPEAT for our competitors’ sites
- ANALYZE your findings in a brief report
- HIGHLIGHT the difficulties
- HOW might we make our website better?



Example (a version for admissions): You are a high school senior hoping to apply to college. Go to the University of X web page and test it like a naive user hoping to find out about majors and how to apply. Then go to ten other competitor universities and do the same thing. Collect your findings in a brief report that highlights the difficulties and how we might make the University of X website better for new students.

YOU are a new customer/student. GO to our web pages. TEST them like a naive user hoping to... REPEAT for our competitors’ sites.

ANALYZE your findings in a brief report. HIGHLIGHT the difficulties. HOW might we make our website better?

BAY · MIDLAND · SAGINAW
CAN I GO?
What will it really cost?

One in three local high school graduates chooses Delta. The average student here is **24** and two out of three go **part time**. You would not be the exception. You would be the norm.

Am I eligible? → What will it cost?

Delta College: Can I Go? (slide 14)

A working admissions front door for Delta, vibecoded from a single prompt. It answers the two questions a first-generation family actually has — am I eligible, and what will it really cost — and it says out loud what the live site never does: one in three local high-school graduates already chooses Delta, the average student is 24, and two of three attend part time. You would not be the exception; you would be the norm. Delta does not have an admissions problem or a price problem; it has a completion problem, and the front door is where

that work starts.

- ▶ [Delta College: Can I Go? \(demo — not an official Delta service\)](#)

Delta College. Facts & figures; Institutional Research, graduation, transfer-out and retention rate trends (IPEDS Student Right-to-Know). [institutional data; three-year completion for the Fall 2020 FTIAC cohort was 17%, 39% including transfer-out; Pell recipients 13% vs 20% for non-Pell] [URL not verified]

Michigan Public. (2026, August 9). [state lowered Michigan Reconnect eligibility from 25 to 21 for this academic year; Delta's Reconnect page still says 25] [news report] [URL not verified]

Devil's Advocate

- Reads citations and searches for newer or better papers to cite.
- Scans for 150 forbidden DEI words (like "orientation") and other red flags.
- Improves alignment with grant.
- Searches for little things so you can focus on the big things.



► [Devil's Advocate — Duke OIT](#)



Shopping is the 27th most popular use of AI in 2026. It's customized:

...Compare the costs of buying new attachments against the saving of buying a more expensive Dyson. Create a comparison table of the best options... The recommended vacuum needs to be available this month and in stock!

Zao-Sanders, M. (2026, June 1). How people are really using AI in 2026. Harvard Business Review.

<https://hbr.org/2026/06/how-people-are-really-using-ai-in-2026> <https://hbr.org/2026/06/how-people-are-really-using-ai-in-2026>



SYSTEM PROMPTS

- Be aggressive in surfacing my assumptions
- Think globally: be vigilant about Western, gender, racial and other bias.
- Focus on accuracy. Check all of your sources and show citations, links and references. Always search in a variety of languages.
- Evaluate all information. Provide a probability score for facts and data that let me know your confidence level in the accuracy of the information. Doublecheck everything.
- Help me find unique insights and create new ideas. Provide alternative explanations and push me to think differently.



SYSTEM PROMPTS (slide 17)

A system (or general) prompt is a set of instructions for how you ALWAYS want your bot to respond. There are more templates on the website.

► [System prompt templates](#)

Complete Prompt:

Explain concepts to me at the level of a college professor and always answer as an expert in the subject. State directly when there is insufficient data or evidence and disclose the disagreements. Highlight uncertainty and distinguish verifiable evidence from opinion.

Be direct, concise and honest and tell me when you think I am wrong. Be aggressive in surfacing my assumptions and be especially vigilant about Western, gender, racial and other bias. Always think of our work in a global context.

I am very concerned with accuracy. Check all of your sources and show scholarly citations, links and references. Always search for information in a variety of languages. Doublecheck everything. Provide a

reliability or probability score so I know your confidence level. If you are guessing, say you are guessing.

Help me find unique insights and create new ideas. Provide alternative explanations and push me to think differently. Say things like “the risk in your approach is...” and then provide specific problems. If I push back, do not fold if there is good evidence.

Start with the most useful thing you can say. No warm-ups. Delete empty sycophantic phrases. Do not flatter me.

If useful, begin by asking me three clarifying questions, each with numbered options so I can reply with numbers only.

AI CAN DO (SOME) THINGS HUMANS CAN'T

REDMOD detects 'invisible' pancreatic cancer 475 days before clinical diagnosis with standard CT scan

“AI can now identify the signature of cancer from a normal-appearing pancreas.”
Dr. Ajit Goenka



3x as accurate as human radiologists (68% vs 23%)
2 years before clinical diagnosis.



Mukherjee, S., Antony, A., Patnam, N. G., et al. (2026, April 28). Next-generation AI for visually occult pancreatic cancer detection in a low-prevalence setting with longitudinal stability and multi-institutional generalisability. Gut. [published online first] <https://doi.org/10.1136/gutjnl-2025-337266> <https://doi.org/10.1136/gutjnl-2025-337266>

AI TOOLS



- ▶ [Consensus](#)
- ▶ [Elicit](#)
- ▶ [Undermind](#)
- ▶ [Edison Scientific](#)
- ▶ [STORM \(Stanford\)](#)
- ▶ [OpenEvidence](#)
- ▶ [MyLens](#)
- ▶ [More tools — WeTeachWithAI.com/tools](#)

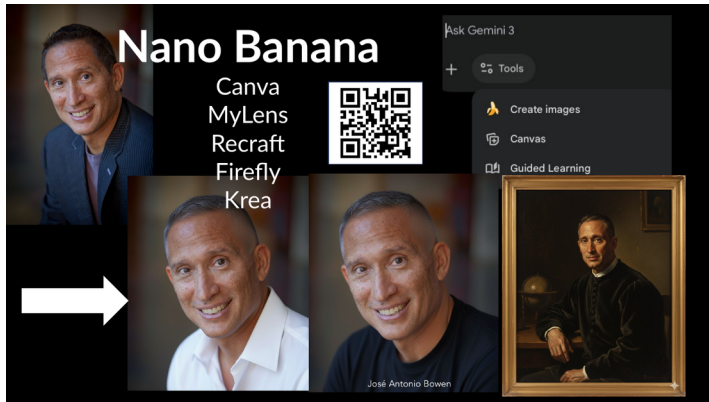


Image and design tools:

- ▶ [Canva](#)
- ▶ [Recraft](#)
- ▶ [Adobe Firefly](#)
- ▶ [Krea](#)
- ▶ [More tools — WeTeachWithAI.com/tools](#)

Gemini Notebook

- **ASSIGNMENTS**
 - Help me customize this assignment to my interests.
 - Spell out not just what I need to do, but why.
 - Surface hidden expectations of college writing.
- **INTERVIEW TRANSCRIPTS**
 - Remind me which candidates said X
- **CAR or HOUSE FOLDER**
 - When did I last Y?
 - How do I Z?

- ▶ [NotebookLM \(Gemini Notebook\)](#)

AI Tools for Enhanced Data Analysis



- ▶ [Napkin](#)
- ▶ [Atlas \(Nomic\)](#)
- ▶ [Julius](#)
- ▶ [Ailyze](#)



Designed to help neurodivergent people with tasks they find overwhelming — and free.

To Do: Break down this assignment into parts.

Task Estimator: How long will each part take?

Formalizer: Change the tone of this writing.

Judge: Am I misreading the tone of this?

Professor: Explain and provide an example.

- ▶ [goblin.tools](#)

COMMUNICATION & RELATIONSHIPS

AI is Changing COMMUNICATION & RELATIONSHIPS



“Like Grammarly for Empathy”

13 studies find statistically significantly higher empathy ratings for AI over human healthcare.

Howcroft, A., Bennett-Weston, A., Khan, A., et al. (2025). AI chatbots versus human healthcare professionals: a systematic review and meta-analysis of empathy in patient care. *British Medical Bulletin*, 156(1). [13 studies]
<https://doi.org/10.1093/bmb/ldaf017>
<https://doi.org/10.1093/bmb/ldaf017>

AI is More Persuasive

- 87% More Likely to **Change your Mind**
- Greater **Reduction in Conspiracy Beliefs**
- Faster, Better, More Accurate & Strategic **Facts**
- Better at Reframing **Emotional Situations**
- Better at Recruiting and Hiring

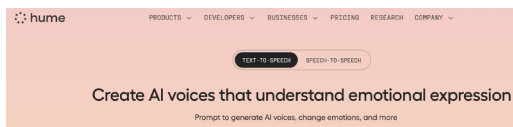


Salvi, F., et al. (2024). On the conversational persuasiveness of large language models. *arXiv [preprint; 87% more likely to change your mind]*. <https://arxiv.org/abs/2403.14380>
<https://arxiv.org/abs/2403.14380>

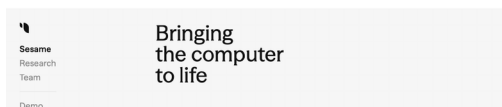
Costello, T. H., Pennycook, G., & Rand, D. G. (2024). Durably reducing conspiracy beliefs through dialogues with AI. <https://www.debunkbot.com> <https://www.debunkbot.com>
Hackenburg, K., et al. (2025). Scaling language model size yields diminishing returns for single-message political persuasion. *arXiv [preprint]*. <https://arxiv.org/abs/2507.13919>
<https://arxiv.org/abs/2507.13919>
Hackenburg, K., et al. (2026). AI systems out-persuade incentivized expert humans. *arXiv [preprint]*.
<https://arxiv.org/abs/2606.16475>
<https://arxiv.org/abs/2606.16475>

Li, J. Z., Herderich, A., & Goldenberg, A. (2024). Skill but not effort drive GPT overperformance over humans in cognitive reframing of negative scenarios. [preprint] <https://doi.org/10.31234/osf.io/fzvd8> <https://doi.org/10.31234/osf.io/fzvd8>

Jabarian, B., & Henkel, L. (2025). [recruiting and hiring field experiment: 70,000 applicants; 12% more offers, 17% higher retention, less gender discrimination] SSRN. <https://ssrn.com/abstract=5395709> <https://ssrn.com/abstract=5395709>



ElevenLabs Expressive Mode



Hume



Sesame.com

Emotionally intelligent, expressive voices:

- ▶ [Hume](#)
- ▶ [Sesame](#)
- ▶ [ElevenLabs \(Expressive Mode\)](#)

II ElevenLabs

- **Dr. Maya Angelou™**
Acclaimed poet, author, and Presidential Medal of Freedom recipient, honored for her profound...
- **John Wayne™**
Iconic American film actor and symbol of rugged masculinity, honored for his status as a legend...
- **Judy Garland™**
Beloved American actress and singer, immortalized as Dorothy in 'The Wizard of Oz' and a singer...
- **Michael Caine™**
The British actor, renowned for his versatility and iconic roles, honored for his career...
- **Richard Feynman™**
Nobel Prize-winning theoretical physicist, celebrated for his pioneering work in quantum...
- **Sir Laurence Olivier™**
Legendary British actor and director, multiple Academy Award and Emmy winner, revered as one...
- **Alan Turing™**
Pioneering mathematician and codebreaker, awarded the Order of the British Empire and...
- **Amelia Earhart™**
Aviation pioneer and recipient of the Distinguished Flying Cross, honored for breaking gender...
- **Art Garfunkel™**
Renowned American vocalist, poet, and writer, best known for his ethereal voice and contribu...



Customize or Create
Voices in any language



Qwen3-TTS



Grok Voice Think Fast

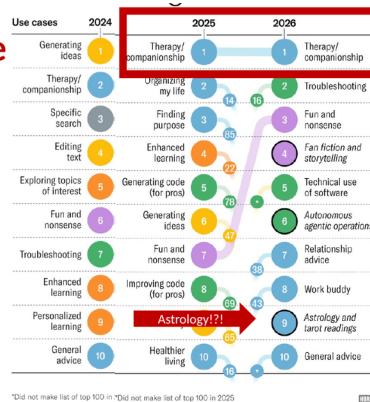
Customize or create voices in any language:

- [ElevenLabs Iconic Marketplace](#)
- [Grok Voice Agents](#)

From Technical Use to Emotional Use



- 19 Creative Writing
- 26 Reconciling Disputes
- 28 Homework
- 32 Safe Space to Ask
- 57 Seeing Blind Spots
- 61 Deep Conversations
- 86 Talking to the Dead



Zao-Sanders, M. (2025, April 9; 2026, June 1). How people are really using AI. Harvard Business Review.

<https://hbr.org/2026/06/how-people-are-really-using-ai-in-2026> <https://hbr.org/2026/06/how-people-are-really-using-ai-in-2026>



José Antonio Bowen AI avatar, produced with HeyGen (version 1).

- [HeyGen](#)

Interactive Face Engines (Avatars)

HeyGen, Tavus, Synthesia

- + **Knowledge Base** (Retrieve)
- + **Agentic** (Write)

1. Campus Engagement (inside ERP or CRM)

Mainstay, Gravyty, Element451/Bolt.

Example: **UCF's Knightbot** (Mainstay)

- 487 messages/day
- 85% resolved without a human
- 7 seconds on average
- 14-40% increase in registrations
- =6 FT staff a year
- 1.6% opt out.



I'm here to help with general questions about UCF!



List of AI Tools



List of AI Integrators



Knightbot is UCF's own brand for a Mainstay deployment.

- [List of AI Tools](#)
- [List of AI Integrators](#)
- [UCF Knightbot](#)
- [Mainstay](#)
- [Gravyty \(Ivy & Ocelot\)](#)
- [Element451 / Bolt](#)

UCF News. Enhancing student support: How UCF's Knightbot transforms the college experience. [practitioner case study, not an evaluation] <https://www.ucf.edu/news/enhancing-student-support-how-ucfs-knightbot-transforms-the-college-experience/>

[student-support-how-ucfs-knightbot-transforms-the-college-experience/](https://www.ucf.edu/news/enhancing-student-support-how-ucfs-knightbot-transforms-the-college-experience/)

Gravyty. (2025, March 11). Gravyty, Ivy.ai, and Ocelot unite to transform student and alumni engagement. [company announcement; note that Ocelot and Ivy.ai are now one company under the Gravyty brand] <https://gravyty.com/gravyty-ocelot-ivy-join-forces/>

Interactive Face Engines (Avatars)

HeyGen, Tavus, Synthesia

+ **Knowledge Base** (Retrieve)

+ **Agentic** (Write)

2. Course Assistants (inside LMS)

Jill Watson, PraxisAI, Nectir, LearnWise, **Cogniti (University of Sydney)**



Example: **Chauncey** (PraxisAI) Carolyn Brown, Champlain College

- **Reads** each student's submission
- **Scores** it against the rubric
- **Updates** the LMS gradebook
- **Writes** in the advisor's own voice

- ▶ [Cogniti \(University of Sydney\)](#)
- ▶ [Jill Watson — Georgia Tech Design & Intelligence Laboratory](#)
- ▶ [Praxis AI](#)
- ▶ [Nectir](#)
- ▶ [LearnWise](#)

Taneja, K., Maiti, P., Kakar, S., Guruprasad, P., Rao, S., & Goel, A. K. (2024, May 17). Jill Watson: A virtual teaching assistant powered by ChatGPT. [preprint] arXiv:2405.11070 <https://arxiv.org/abs/2405.11070>

University of Sydney. (2025, June 3). Cogniti, an 'AI stunt

double' for teachers, wins AFR AI Award. [university announcement] <https://www.sydney.edu.au/news-opinion/news/2025/06/03/cogniti-an-ai-stunt-double-for-teachers-wins-afr-ai-award.html>

Nectir. (2026, March 10). As AI reshapes higher education, Nectir raises \$12.5M to scale its purpose-built AI infrastructure for schools. [company announcement; the 7.5% GPA figure it cites is vendor-reported] <https://www.prnewswire.com/news-releases/as-ai-reshapes-higher-education-nectir-raises-12-5m-to-scale-its-purpose-built-ai-infrastructure-for-schools-302709783.html>



Interactive Demo Talk to Charlie on Tavus



LMS Agents in Your LMS with



Create a Digital Twin on HeyGen

Setting Up a Twin with LMS integration on Praxis



1. Using Trusted Sources

- Faculty control what resources are used for answering questions.
- Access to Canvas LMS content and additional files (syllabus, videos, etc.)
- Option to subscribe to digital resources like Google Scholar or PubMed
- All answers are generated within your IP vault in AWS

2. Instructor Personalization

- Praxis AI research has shown that personalizing the digital twin increases student engagement from 15% to about 65%.
- Personalization includes:
 - Personality and Behavioral Assessment
 - Myers-Briggs personality test to create a psychological profile

3. LMS Integration

- Integrated with Canvas for a native chatbox experience
- Student access to the digital twin is automated, with your content order appearing in the bottom right corner of every page
- Faculty want it tied to so much on the integration that on the integration side of things, Praxis has most of it taken care of

- ▶ [Talk to Charlie on Tavus](#)
- ▶ [Create a Digital Twin on HeyGen](#)
- ▶ [Praxis AI — faculty onboarding walkthrough](#)

Wood, C. (2025, March 6). Professors' AI twins loosen schedules, boost grades. EdScoop. [trade press; outcome claims are vendor-reported, no control group]

<https://edscoop.com/digital-twin-ai-university-praxis-anthropic/>

Caltech | Undergraduate Admissions

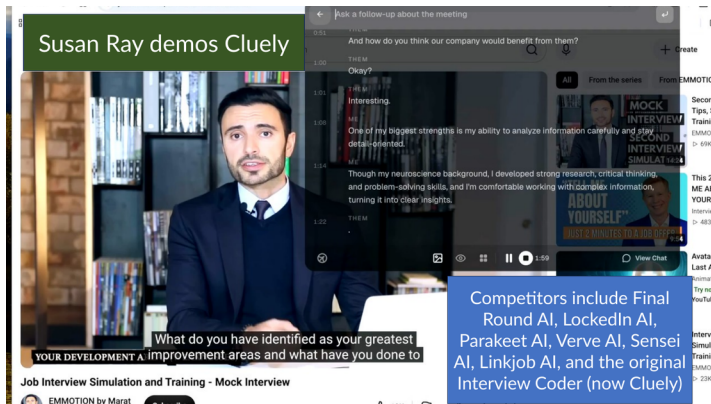
HS students submitting research as part of their application must also complete an AI oral verification from Viva Exam.



Voice mode and oral exams are returning — see also Panos Ipeirotis (NYU) on scalable AI oral exams.

- ▶ [Caltech — research papers and publications](#)
- ▶ [Viva Exam](#)





Susan Ray demonstrating what students already have: a real-time interview copilot that stays off the shared screen.

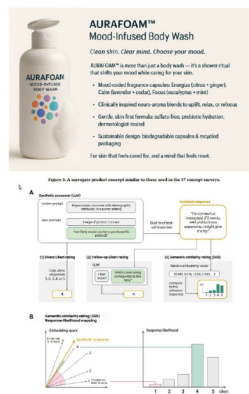
- [Cluely](#)
- [Final Round AI](#)

90% accuracy in predicting purchase interest

- Off-the-shelf LLM
- No fine-tuning
- Respond as a customer type X
- Only product image

• Potential Students?!?

Maier, B. F., Aslak, U., Fiaschi, L., et al (2025, Oct 9) LLMs Reproduce Human Purchase Intent via Semantic Similarity Elicitation of Likert Ratings. [arXiv:2510.08338](https://arxiv.org/abs/2510.08338)



Maier, B. F., Aslak, U., Fiaschi, L., et al. (2025, Oct 9). LLMs reproduce human purchase intent via semantic similarity elicitation of Likert ratings. [arXiv \[preprint\].](https://arxiv.org/abs/2510.08338)
<https://arxiv.org/abs/2510.08338>

Academic Integrity What First-Gen Students Might Get Wrong



O

mentions of AI **anywhere** in the student handbook. The real AI policy is on the staff site.

Google Translate is just a tool, not AI, right?

Syllabus says nothing so it must be OK.

Helping a classmate what family does.

No mention in the student handbook, soooo..

A detector alone cannot prove it — 8.020

Best practice: put the AI rule where students look.

Delta College Student Handbook, Integrity of Academic Work; Board Policy 8.020 (June 2026)

unauthorized or undisclosed AI use misconduct, §3 defines AI to include natural language processing, §5 lists translation and captioning as acceptable uses, §10 forbids treating detector output as sole evidence] [URL not verified]

Delta College. Board Policy 10.003 / Student Handbook, Integrity of academic work. [four examples — plagiarism, cheating, aiding and abetting, falsification of records — and no mention of AI] [URL not verified]

Academic Integrity: What First-Gen Students Might Get Wrong (slide 38)

Delta has done well: Board Policy 8.020, adopted ten weeks ago, is a serious AI policy, and the detector clause in §10 is better than most. The problem is where it lives. There are zero mentions of AI in the student handbook; the real rule is on the staff site.

Delta College. Board Policy 8.020, Artificial intelligence (Board Action 5701, June 9, 2026). [a serious AI policy: §4.1 makes

A QUICK GUIDE FOR STUDENTS
Is it cheating?

Cheating

- ✗ AI writes it, you turn it in
- ✗ Copying answers on a test
- ✗ Using notes when they are banned
- ✗ Doing a classmate's work for them
- ✗ Making up an excuse or document

Not cheating

- ✓ Asking AI to explain a reading
- ✓ Tutoring or the Writing Center
- ✓ Studying with classmates
- ✓ Asking your professor first
- ✓ Using AI and saying you did

Where does AI fit?

- OK** Study, practice, explain
- Ask first** Editing, translation, Grammarly
- Never** AI writes what you turn in

Every class is different. Check your syllabus. If it does not say, ask before you turn it in.

Is It Cheating? — A Quick Guide for Students (slide 39)

▶ [Workshop Prompts & Materials](#)

Detector output alone cannot support a misconduct finding — Delta's own \$10 says so, citing high false-positive rates. Those false positives fall disproportionately on multilingual writers, which makes detection an equity question rather than a technical one.

WORKSHOP PROMPTS: Relationships & Communication (slides 37 and 40)

Try a focus group (one you know) — or: Tell me how this academic policy might be confusing or unclear to first gen students and how I could make it clearer, better and more inclusive.

Read my syllabus and course materials from a variety of student perspectives (first-gen, smart and cynical, non-major etc.). Tell me directly and honestly from a student perspective what looks like busy work? Do I come across as caring or a hypocrite? What policies are unclear and what will you ignore? What turns you off or just puts you to sleep?

▶ [Workshop Prompts & Materials](#)

AGENTS & THE AI RESEARCH WORKFLOW

ChatBot **Desktop Agent**

Add AI Research Workflow to the prompting menu on my website after Vibe Coding.

Confirmed live. AI Research Workflow is now in Menu 1, inside the Prompting submenu, positioned directly after Vibe Coding, linking to <https://weteachwithai.com/ai-research-workflow/>.

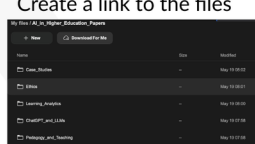
A chatbot can only chat with you; a desktop agent can plan and DO: read your folder, run code on your data, open a database you are logged into, write a file, and come back with what it could not do — here, adding a new page to my website.

▶ [AI Research Workflow — all of these prompts](#)

AGENTS & BROWSERS

Research and find all of the academic papers on AI in Education in the last year and then find pdfs of every paper you can and download them into organized files.

- Massive Multi-Contextual Search
- Find pdf
- Download pdfs
- Organize
- Create a link to the files



Research and find all of the academic papers on AI in Education in the last year and then find pdfs of every paper you can and download them into organized files. Create a link to the files.

Vibe Coding + Agent



STEP 1

Do an exhaustive search of academic resources about 19th century women composers of solo piano music.

STEP 2

Create a searchable global data base...

STEP 3

Create a **website**



STEP 4

Find sheet music not on my computer...

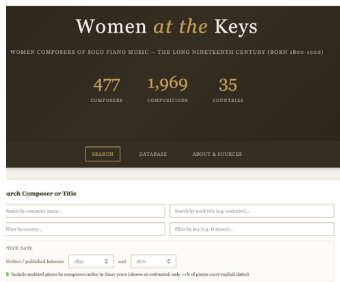
STEP 5

Order missing works from ILL...



Cecilia Arizti (1856-1930)

- ▶ [The full prompt, workflow and the versions produced by different AI models](#)
- ▶ [The result — Women at the Keys](#)



Vibe Coding: a Grade Appeal Navigator (slide 44)

One prompt, one working site.

- ▶ [Grade Appeal Navigator \(demo — not an official Delta service\)](#)

Complete Prompt:

Make a website with a chatbot to streamline the grade appeals process at Delta College.

Delta College. Board Policy 10.002, Disputed final grades (formerly Senate Policy 4.025; Board Action 5457, August 9,

2022). [three grounds; 10-day and 25-day clocks; a non-faculty Grade Ombudsperson; the Associate Dean who decided the informal appeal is barred from chairing the formal one] [URL not verified]

Check your syllabus Delta College Syllabus AI Checker



1 • Paste your syllabus

2 • Checked against Board Policy 8.020

3 • Three model statements to adapt

A silent syllabus is the biggest gap.

Delta College Board Policy 8.020, Artificial Intelligence (Board Action 5701, June 9, 2026)



Delta College Syllabus AI Checker (slide 45)

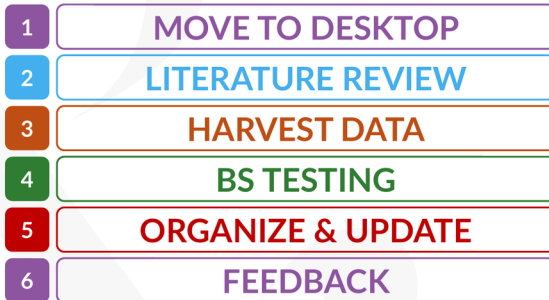
Paste a syllabus, have it checked against Board Policy 8.020, then pick from three model statements to adapt.

- ▶ [Delta College Syllabus AI Checker \(demo\)](#)

Delta College. Board Policy 8.020, Artificial intelligence (Board Action 5701, June 9, 2026). [a serious AI policy: §4.1 makes unauthorized or undisclosed AI use misconduct, §3 defines AI to include natural language processing, §5 lists translation and captioning as acceptable uses, §10 forbids treating detector

output as sole evidence] [URL not verified]

AI RESEARCH WORKFLOW



Six stages. Stage 1 is a one-time, ten-minute set-up; the rest are prompts you reuse.

► [Copy, paste and modify all of these prompts](#)

Example: Book Project

Your goal is to set me up to revise X for Y.

You will not be writing any text.

- 1) Read A, B & C [abstract, proposal, first version, ToC, notes etc.].
- 2) Create a new folder, make new copies of the files and label your new files...
- 3) Create a references doc and include complete citations for everything.
- 4) Now read each chapter and COMMENT only
 - (a) any passage that needs to be updated or cut,
 - (b) any passage or citation where the evidence is weak or citation is needed
 - (c) if there is a better or newer citation also provide it in the comments
 - (d) track all references as you read and align with the references document.
- 5) Create a new ToC document with your recommendations
- 6) You can use folder [with article pdfs, my notes] or do your own research.
- 7) Create a new folder on Google docs and upload copies

Example: Book Project — (More) Complete Prompt (slide 47)

Your goal is to set me up to revise X for Y. Act like a senior editor with deep experience in Z. You will not be writing any text. We have a word limit of # including citations. Here is the publisher style guide; keep that in mind as you consider cuts and updates.

1. Read A, B & C [abstract, proposal, first version, ToC, notes etc.].

2. Create a new folder D and make new copies (new doc files) of the files in E. Label your new files Book F ch# etc. Keep the same formatting from the style sheet. Make new versions of references, introduction etc. as well.

3. Add a new file for G based on the ToC; use the other chapters for style but use the contents H.

4. Create a complete references doc and include complete citations for everything cited in the book in format I.

5. Now read each chapter and COMMENT only on (a) any passage that needs to be updated or cut; (b) any passage or citation where the evidence is weak — if a citation is needed, provide it in the comments as an inline text citation (per the style of the book) and add it to the references; (c) if there is a better or newer citation, also provide it in the comments; (d) keep track of the references as you go.

6. When you are done, create a new ToC document with your annotations and recommendations for additional updates, chapters or sections.

7. Use folder J [with article PDFs, notes and your research] as needed, or do your own research. I am especially interested in K. My audience is L. Consider all of this as you think about where new chapters or sections might go, and put it into the ToC document v4_annotations.

8. Create a new folder on Google Docs and upload all of this inside that folder with comments tracked.

Piano Repertoire Explorer — over 250,000 published piano works. Fable and Sonnet collected publication records, catalogues and reviews into one data set, then deduplicated, cross-referenced, checked and tagged it at scale. AI can scale things far beyond what one researcher could do by hand.

1. Install a desktop agent.
2. Make a Project per research project and put your standing rules in it — evidence standards, citation style, what counts as a source in your field.
3. Connect a folder (keep raw data in one subfolder; let the agent write only to another).
4. Connect a browser so the agent can work inside databases you are already logged into.

Or search only inside a curated database: add the Consensus plugin to ChatGPT and create a free Consensus account.

José Antonio Bowen · AI Workshop · WeTeachWithAI.com · 15

Building a Skill



1. Turn this ppt into doc where the images are on the left and the citations on the right. Here is an example.
2. I revised your output. Review it and learn.
3. Try again with this new ppt.
4. Write a skill that would have produced this result without me having to correct you. Include the specific mistakes you made along the way and what fixed them..

4. Write a skill that would have produced this result without me having to correct you. Include the specific mistakes you made along the way and what fixed them.

This document is the output of exactly that loop.

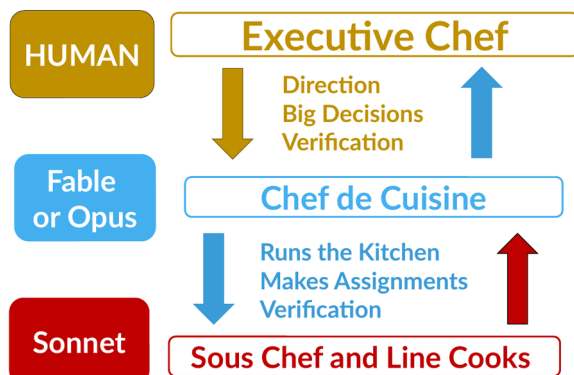
► [Skills, templates and examples](#)

“AI has eliminated the doing and left the thinking”

Dustin Bruzenak, CEO, Modern Logic



- Update all links on my website (Mondays)
- Check for newer or contradictory research
- Turn ppt into pdf and add citations
- Email students who have unfinished work
- Collect all records into a database



Building a Skill (slide 53)

You do not write a Skill from scratch. You do the task once with the AI, correct its output by hand, and then ask it to write down what it should have known. The correction is the training data.

Complete Prompt:

1. Turn this ppt into a doc where the images are on the left and the citations on the right. Here is an example.
2. I revised your output. Review it and learn.
3. Try again with this new ppt.

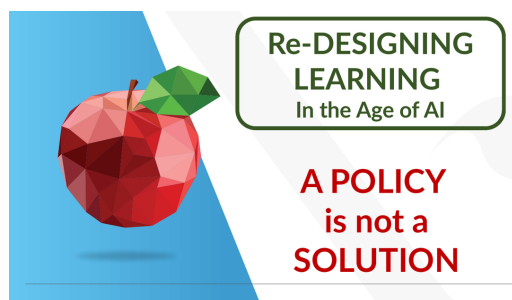
EVERYONE IS NOW AN

AI Manager



- Which tasks should you delegate?
- AI needs direction, feedback & correction.
- AI delegation is a skill, not a shortcut.
- AI needs your judgment.

RE-DESIGNING LEARNING



A Policy is not a Solution (slide 58)

The research behind the design case made across this section:

Anthropic. (2025, April 8). Anthropic education report: How university students use Claude. [vendor telemetry — explaining and summarizing is the top use] <https://www.anthropic.com/news/anthropic-education-report-how-university-students-use-claude> <https://www.anthropic.com/news/anthropic-education-report-how-university-students-use-claude>

Freeman, J. (2025). Student generative AI survey 2025 (HEPI Policy Note 61). Higher Education Policy Institute. [66% → 92% in one year] <https://www.hepi.ac.uk/reports/student-generative-ai-survey-2025/>

<https://www.hepi.ac.uk/reports/student-generative-ai-survey-2025/>

Stadler, M., Bannert, M., & Sailer, M. (2024). Cognitive ease at a cost: LLMs reduce mental effort but compromise depth in student scientific inquiry. *Computers in Human Behavior*, 160, 108386. <https://doi.org/10.1016/j.chb.2024.108386>

<https://doi.org/10.1016/j.chb.2024.108386>

Melumad, S., & Yun, J. H. (2025). Experimental evidence of the effects of large language models versus web search on depth of learning. *PNAS Nexus*, 4(10), pgaf316. <https://doi.org/10.1093/pnasnexus/pgaf316> <https://doi.org/10.1093/pnasnexus/pgaf316>

Strömberg, D., Lei, V., & Wu, Y. (2026). The generative AI learning penalty: Evidence from Chinese secondary education (CEPR Discussion Paper No. 21577). [working paper; 26,811 students: homework grades up 18%, exam scores down 20%] <https://cepr.org/publications/dp21577> <https://cepr.org/publications/dp21577>

Fernandes, D., et al. (2026). AI makes you smarter but none the wiser: The disconnect between performance and metacognition. *Computers in Human Behavior*, 175, 108779. [N = 246; replication N = 452] <https://doi.org/10.1016/j.chb.2025.108779> <https://doi.org/10.1016/j.chb.2025.108779>

Lodge, J. M., & Loble, L. (2026). Artificial intelligence, cognitive offloading and implications for education. University of Technology Sydney. [the “performance paradox”] <https://doi.org/10.71741/4pyxmbnjq.31302475.v2> <https://doi.org/10.71741/4pyxmbnjq.31302475.v2>

Kestin, G., Miller, K., Klales, A., Milbourne, T., & Ponti, G. (2025). AI tutoring outperforms in-class active learning. *Scientific Reports*, 15, 17458. [Harvard RCT, N = 194] <https://doi.org/10.1038/s41598-025-97652-6> <https://doi.org/10.1038/s41598-025-97652-6>

Bastani, H., Bastani, O., Sungu, A., Ge, H., Kabakçı, Ö., & Mariman, R. (2025). Generative AI without guardrails can harm learning: Evidence from high school mathematics. *PNAS*, 122, e2422633122. [RCT, n ≈ 1,000] <https://doi.org/10.1073/pnas.2422633122> <https://doi.org/10.1073/pnas.2422633122>

Chung, A. T.-H., Zhang, B., Kung, L.-C., Bastani, H., & Bastani, O. (2026). Effective personalized AI tutors via LLM-guided reinforcement learning. SSRN [working paper; +0.15 SD unassisted exam gain] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6423358 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6423358

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review*, 31(2), 261–292. <https://doi.org/10.1007/s10648-019-09465-5> <https://doi.org/10.1007/s10648-019-09465-5>

LIMITS. The strongest evidence of harm comes from secondary students outside the United States; the strongest evidence of benefit comes from elite, high-structure settings such as Harvard. The typical university classroom sits in the understudied middle. Most of these studies measure exam scores; we still lack long-term evidence about durable, transferable learning.

► [Full principles, templates and examples](#)

RECONNECTING WRITING & THINKING

AI Is Separating WRITING from THINKING



How might we
reconnect them?

Make Thinking Visible

Process Assignments

Pre-Game	PRIORITIZE - ANALYZE - RANK - CLARIFY DECIDE - CHOOSE
Draft	WRITE - DEFEND - JUSTIFY - RECOMMEND - EXPLAIN -- AI or no AI
Feedback	READ - DEBATE - DISCUSS - ENCOUNTER - COMPARE --New evidence, conditions, cases, priorities, perspectives (from AI?)
After Party	REVISE - RESPOND - REFLECT --COMMENT in your original doc (!) what you now --STRENGTHEN, REMOVE, CHANGE, REFRAME, RESHAPE

Revising After New Conditions

PRIORITIZE the competing aims/positions/conditions/trade-offs
CHOOSE an action/interpretation/priority/policy goal/design approach
DRAFT a recommendation (with or without AI) to
DEFEND your approach
IDENTIFY a feature that reflects your priority
NAME the limitations resulting from your choice, and
ANTICIPATE and ANSWER an objection
DESCRIBE a condition where your prioritization would change
ENCOUNTER new circumstances/evidence/conditions/case
COMMENT (in doc) where you now hesitate, change or reassess
CONNECT each to a Z principle with one sentence explanation

Weighting Constraints in a Case Study

Daniel R. Sanford, Director, CTL, Boise State University
Artificial Intelligence, Authentic Voices: AI & Assignment Design for Critical Thinking in Higher Education (2027) Bloomsbury

ANALYZE this plan for a pedestrian bridge.
CLARIFY the tensions with budget, required load, extreme weather...
STATE the most significant priority and why (in one sentence).
CONNECT this priority to one condition that reflects that priority.
DRAFT a recommendation (with or without AI) to
DEFEND the feature that reflects your priority
NAME the limitations resulting from your choice, and
ANTICIPATE and ANSWER an objection from a council member
DESCRIBE one realistic condition where your prioritization would change
and how that would change the design.



► [Daniel R. Sanford — Artificial Intelligence, Authentic Voices](#)

The worked examples on these slides (a pedestrian bridge, team decisions, accounting materiality) are from: Sanford, D. R. (2027, forthcoming). *Artificial intelligence, authentic voices: AI & assignment design for critical thinking in higher education*. Bloomsbury.

Writing Assignments

- D Define** the stages of the project
- E Evaluate** which AI for each stage
Ex. Elicit for research; Copilot for editing
- E Explore** how the AI might help or hurt
Get feedback on your outline.
- R Reflect** if AI helped/hurt writing AND learning



Cummings, R. E., Monroe, S. M., & Watkins, M. (2024). Generative AI in first-year writing: An early analysis of affordances, limitations, and a framework for the future. *Computers and Composition*, 71, Article 102827.
<https://doi.org/10.1016/j.compcom.2024.102827>
<https://doi.org/10.1016/j.compcom.2024.102827>

Curation Thinking & Meaning

Ivy Linton Stabell: [The Influence Project](#) in First-Year English

- Pick any work of art you love.
- Look expansively for artistic ancestors.
- PROMPT: a RANGE of influences for X
- Learn about parent and grandparent works.
- Find three historical context subjects for each.
- Journal about the influences and differences.
- Lots of conferences with the professor.
- Write about this journey.

The Influence Project, Ivy Linton Stabell (Iona University), First-Year English.

► [Ivy Linton Stabell](#)

Reverse Outlining

- Read this and create an outline summarizing the main point of each paragraph with one sentence.
- How might I more persuasively organize or focus this to say X.

Editing to Your Voice

1. What makes your writing sound like your writing?
2. What does AI writing get wrong about you?
3. Prompt AI to write like you.
4. Edit what it provides and iterate.
5. Does this make the next time easier?
6. What happens when writing becomes directing?

Build & Defend a Rubric

Doan Winkel, John Carroll University

- Use AI to draft a rubric for what excellent would look like in this assignment.
- Challenge its assumptions, cut criteria that feel like busywork and add what really matters.
- Defend your rubric out loud to your group.
- Revise.
- This is how I will grade your work.



Wikipedia Assignment

- Faculty guide students to research course-related topics and verify sources, then fill in missing information and add high-quality citations to Wikipedia articles.
- If permitted by the instructor's course policies, students can learn to use AI as a research tool to identify content gaps and references, not a text generator.
- WikiEdu offers trainings, tools to track student work, and staff support.

► [Teach with Wikipedia \(WikiEdu\)](#)

Journaling with a Bot

You are a kind and insightful assistant who guides students to reflect deeply and discover their own insights and passions from writing about their learning experiences.

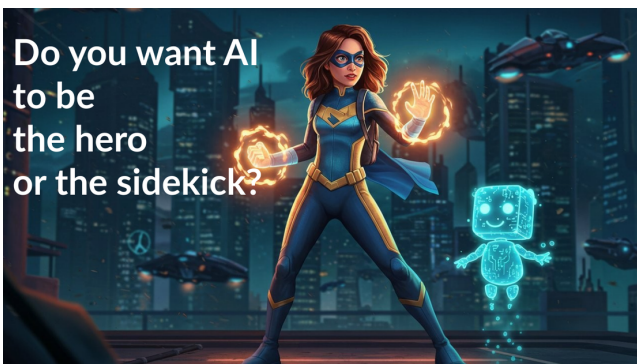
1. Ask students to reflect on something they learned in the last day and how it might have changed their thinking or perspective.
2. Consider the student's response and then ask a series of supportive and insightful follow-up questions that will stimulate reflection and self-discovery.
3. Ask the student to respond again and repeat the process.

Make Thinking Visible

Process & New Writing Assignments



Pre-Game	[PRIORITIZE - ANALYZE - RANK DECIDE - CHOOSE
Draft	[WRITE - DEFEND
Feedback	[NEW Something
After Party	[REVISE - RESPOND - REFLECT --In the original document



Scaling the Tutorial

Guided Learning & Practice

Develop Skills & Thinking

Human Support & Evaluation

Customized Friction
Do you need more facts, theory or context?
Custom Bots
ASK, RESPOND, COMPLICATE

Reduce the Scaffolding

Require more Judgement

Review
Transcripts
Patterns
Portfolios
Revisions
Exams

The tutorial was BOTH learning and assessment, but it could not be scaled. Bloom's tutorial advantage was never mostly about content delivery: it was guided practice, immediate correction and a human who noticed. AI scales the first two cheaply; on the current evidence the third still has to be human, and the gains show up only when the tool withholds answers and someone reviews the process.

Bloom, B. S. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher*, 13(6), 4–16.

<https://doi.org/10.3102/0013189X013006004> <https://doi.org/10.3102/0013189X013006004>

Kulik, J. A., & Fletcher, J. D. (2016). Effectiveness of intelligent tutoring systems: A meta-analytic review. *Review of Educational Research*, 86(1), 42–78. [the 2-sigma claim does not replicate at scale; ITS effects cluster near 0.4–0.6 SD]

<https://doi.org/10.3102/0034654315581420> <https://doi.org/10.3102/0034654315581420>

VanLehn, K. (2011). The relative effectiveness of human tutoring, intelligent tutoring systems, and other tutoring systems. *Educational Psychologist*, 46(4), 197–221. <https://doi.org/10.1080/00461520.2011.611369> <https://doi.org/10.1080/00461520.2011.611369>

VIDEO: Writing with Agatha Christie (slide 73)

Agatha Christie now teaches an online writing course — reconstructed from her archive with AI.

- ▶ [Writing with Agatha Christie \(BBC Maestro\)](#)
- ▶ [Video embedded in this slide \(YouTube\)](#)

WORKSHOP: Copy & Paste (slide 74)

Critical Thinking Support Prompt — or — Feynman Learning Tutor Prompt.

► [Workshop Prompts & Materials](#)

Custom Bots (Prompts) for Writing



Custom bots (prompts) for writing: Thesis Nuance Navigator; Deep Reading a Meaningful Quote. Eric Lars Martinsen, Ventura County Community College.

► [Playing seriously: four AI apps \(Eric Lars Martinsen, Substack\)](#)

Thesis Nuance Navigator

Deep Reading a Meaningful Quote

Eric Lars Martinsen
Ventura County Community College

Multiple Perspectives Prompt

Respond as a panel of radically different types of thinkers

- with a variety of historical, cultural & political perspectives
- who ask thought-provoking questions and
- deepen my insight
- by providing simultaneous and contrasting opinions
- and feedback about this work/idea/goal/challenge.

Reading Faulkner's As I Lay Dying (slide 77)

Marc Watkins, University of Mississippi.

► [As I Lay Dying gallery](#)

► [Marc Watkins Substack](#)

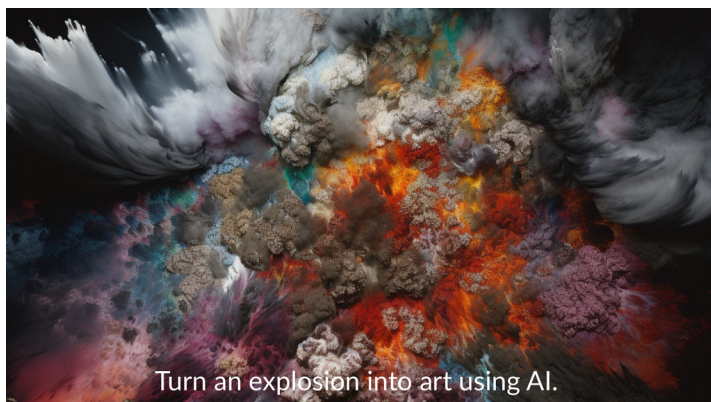
READING: FOUR CORNERS

1. Come up with four different points of view that relate to our reading.
2. Ask an AI to provide summaries of the reading from each POV.
3. Read the summaries and read the article.
4. Create a new set of questions.
5. Write your summary.
6. Reflect and write about why your summary was different?

Prompt to Support Reading (slide 78)

► [Workshop Prompts & Materials](#)

CREATIVE NEW ASSIGNMENTS

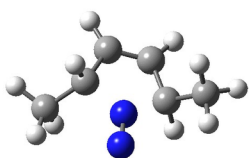


Turn an explosion into art using AI. Ira Greenberg, Director of the Center of Creative Computation and Professor at SMU.



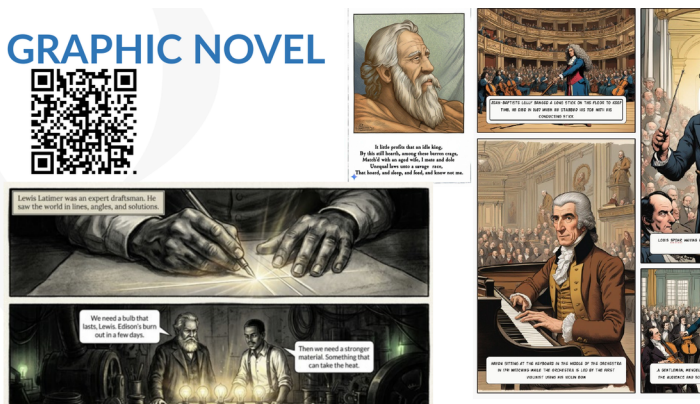
VIDEO

Transform the equation and molecular structures provided into a video that demonstrates the reaction and how bonds are broken and formed.



Sora (Open AI)
Veo (Google)
pika.art (free)
heygen.com
invideo.io
synthesia.io
kapwing.com
colossyan.com

- ▶ [pika.art \(free\)](https://pika.art)
- ▶ [HeyGen](https://heygen.com)
- ▶ [invideo](https://invideo.io)
- ▶ [Synthesia](https://synthesia.io)
- ▶ [Kapwing](https://kapwing.com)
- ▶ [Colossyan](https://colossyan.com)



- ## Hall of Ordinary Revolutionists

Research records, diary entries, letters and ancestral photographs to bring the story of and underrepresented character to life in an authentic historical 3D scene. For example, Hannah Till, the pastry chef of George Washington during the encampment of Valley Forge.

- 

- ▶ Video of the 3D scene (YouTube) — go to 2:30

AI Inputs



Convene a Meeting
Moderate a Debate
Choose a Path
Prioritize a Value
Hold a Symposium
Decide a Strategy



Human Outputs

Invert the usual order. Let AI produce the raw material — the brief, the data, the opposing positions — and make the human work the part that cannot be delegated: convening, weighing, choosing and defending. The gradable artifact is the judgment, not the prose.

- ▶ Assignment examples



Images generated with Perchance.

- ▶ Perchance

WORKSHOP: Redesign an Assignment or Course (slide 88)

You are an experienced expert in the science of learning. Analyze this assignment and help me transform it using one or more of these pedagogical practices or thinkers...

Re-imagine my course/assignment with standards-based grading/TILT etc.

- ▶ [Workshop Prompts & Materials](#)

SIMULATIONS, GAMES & ROLE-PLAYING

Stress Test A Plan

Help me stress test the attached business plan by simulating how our business might evolve over the next 2 years. I will play the CEO. You will simulate and describe economic, market and political challenges that might interfere with our plan. Every quarter you will update me and ask me to respond to new events and circumstances. You will then assess my actions and describe how the plan must change as a result.



Stress Test a Plan (slide 90)

Complete Prompt:

Help me stress test the attached business plan by simulating how our business might evolve over the next 2 years. I will play the CEO. You will simulate and describe economic, market and political challenges that might interfere with our plan. Every quarter you will update me and ask me to respond to new events and circumstances. You will then assess my actions and describe how the plan must change as a result.

result.

- ▶ [Examples, templates and instructions for building simulations and custom bots](#)



- ▶ [Interactive fiction and game design with Claude artifacts \(TCEA\)](#)

The NotebookLM Literary Game



DEMO GAME
"The Tell-Tale Heart"
Edgar Allan Poe
Secure a confession before you
run out of heartbeats!



Michelle Kassorla
Georgia State University,
Perimeter College

Turn a work of literature
into a playable game.

Michelle Kassorla, Georgia State University,
Perimeter College: turn a work of literature into a
playable game.

- ▶ [The NotebookLM literary game — demo](#)
- ▶ [Assignment instructions \(Google Doc\)](#)

ASSIGNMENT INSTRUCTIONS



U.S. Immigration Visa Preference System

An interactive teaching tool to understand how the family and employment-based preference system works, who gets in line, and how long the wait can be — for immigrants from countries around the world.

[Overview](#) [Wait times](#) [My situation](#) [Key terms](#) [Ask a question](#)

The U.S. grants a limited number of immigrant visas each year through a **preference system**. Click any category below to learn more about it.

Immediate relatives (no annual cap)

IR
Immediate relatives of U.S. citizens
Spouses, unmarried children under 21, and parents of U.S. citizens. *No annual cap* — visas are always available.
No wait (usually)

Family-based preference categories (~226,000 visas/year)

F1
Unmarried adult children of U.S. citizens
Sons and daughters age 21+. About 23,400 visas per year.
Family-based

F2A
Spouses & minor children of LPRs
Spouses and children under 21 of lawful permanent residents.
~114,200 visas/yr.
Family-based

What is the estimated process and wait time for legal immigration in the following situations?



► [Immigration wait-time artifact](#)

TRY A SIMULATION EXAMPLE

- English/Middlemarch Town Hall
- Computer Science
- Music Theory/Roman Numeral Analysis
- Telecom KPI Simulation
- Physics/Newton's Laws Graded Exam
- Anthropology/Multi-Informant Fieldwork
- Nursing/AACN Standard 2.5 Plan of Care
- History/Thomas Cromwell
- POTUS and the Economy



► [Middlemarch Tribunal simulation](#)

► [Workshop Prompts & Materials](#)

CUSTOM BOTS

Hidden Prompt
+
Knowledge Base




A custom bot is just two things: a hidden system prompt that fixes the behavior (coach, don't answer; one hint at a time; never give the solution) and a knowledge base that fixes the content. All of the custom tools and simulations in this session were stress-tested on the best models but set to run with free models.

► [Examples, templates and instructions](#)

Jack: "He's like you, but in the screen."
 Sarah Wymer, Auckland University of Technology

A team marketing expert for every student



87%
 Jack helped refine my idea.

Jack, a custom AI agent modeled on Auckland FC's real marketing manager — a team marketing expert for every student. Sarah Wymer, Auckland University of Technology. 87% agreed Jack helped them develop their idea further; 83% said he helped them think more critically.

► [What Jack the AI agent taught my class \(Sarah Wymer\)](#)

Bot Assignments & Simulations

- Run a nuclear power plant
- Teach a class
- Run an experiment
- Secure capital
- Plan an exhibition
- Manage a lab
- Buy a car
- Moderate a disagreement
- Climb a mountain
- Improve a service
- Diagnose a problem
- Verify a story



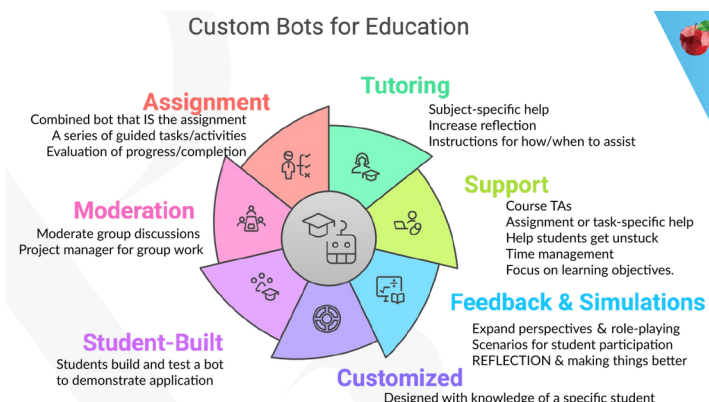
VIBE CODING

Create and deploy an interactive superhero-themed game to teach the Bingham plastic model through visual simulation to college students in both English and Arabic.

Got it — I'll deliver the game in **Arabic + English**, packaged as a **standalone web app** you can open in your browser or run locally without installing anything complicated.



► [Play the Claude version](#)
 ► [Play the ChatGPT version](#)

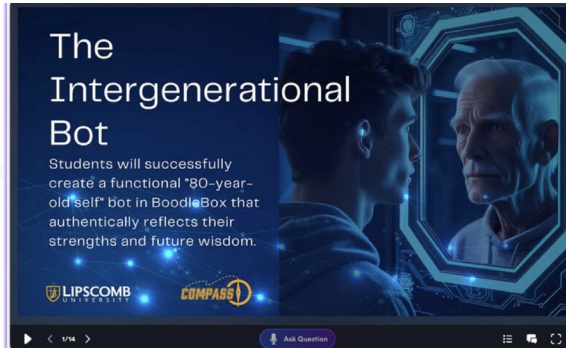


Custom bots give you more control and security than sending students a prompt: you send a link to a tool you set up, and you can see everything students do (warn them!). In its simplest form a custom bot is just a prompt you have saved; add a knowledge base, learning outcomes and standards for more control. Platforms: BoodleBox (higher ed, AI-agnostic, free models available), SchoolAI (free, with a back-end showing engagement), GPTs (OpenAI), Assistants (HuggingFace), Bots (Poe).

► [Custom bot examples & Bowen's bot-building bot \(BoodleBox showcase\)](#)

VIBE CODING ASSIGNMENTS & TOOLS

Abby Bell
Lipscomb
University

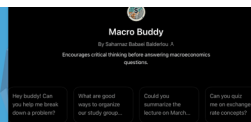


Build a bot to talk to your 80-year-old self

Students build a functional "80-year-old self" bot in BoodleBox that authentically reflects their strengths and their future wisdom. Abby Bell, Lipscomb University.

Macro Buddy (GPT Custom Bot)
Saharnaz Babaei Balderlou
University of Wisconsin–La Crosse

130 Students:
Exams in person, on paper, proctored, no AI
Control (no AI, work alone) -
Groups (no AI) -
Alone with AI Tutor Bot **+12%**
Groups with AI Tutor Bot **+14%**



A course-specific macroeconomics tutor bot, built on a low-cost platform with no programming. Four sections, 130 students, exams in person and on paper: working alone with the bot added 12%, working in groups with the bot added 14%, and neither AI-free condition moved. Saharnaz Babaei-Balderlou, University of Wisconsin–La Crosse.

► [Macro Buddy \(GPT custom bot\)](#)

Babaei-Balderlou, S., & Shakya, S. (2026). Can structured AI tutoring and study groups improve learning outcomes? Evidence from a randomized controlled trial. *The Journal of Economic Education*, 1–18. <https://doi.org/10.1080/00220485.2026.2695361>

Babaei-Balderlou, S., & Shakya, S. (2026). Can structured AI tutoring and study groups improve learning outcomes? Evidence from a randomized controlled trial. *The Journal of*

Economic Education, 1–18. [RCT, 4 sections, 130 students; the first randomized evidence of AI-enhanced learning in economics education] <https://doi.org/10.1080/00220485.2026.2695361>

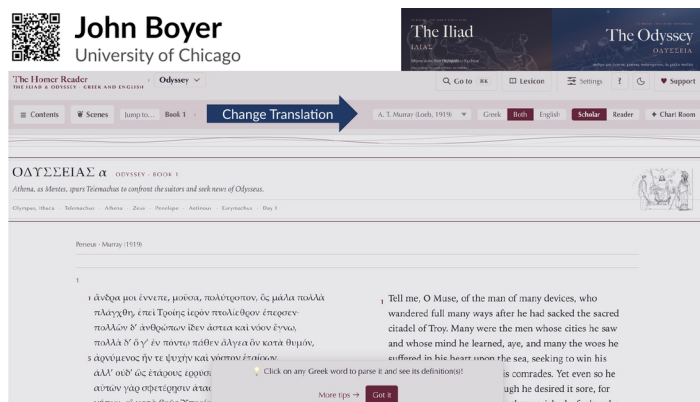
Babaei-Balderlou, S., & Shakya, S. (2025, July 25). The invisible hand of Gen-AI: Can AI-enhanced study groups improve learning outcomes? SSRN. [working-paper version, the one cited on the slide] <https://doi.org/10.2139/ssrn.5696622>

When and Where Game



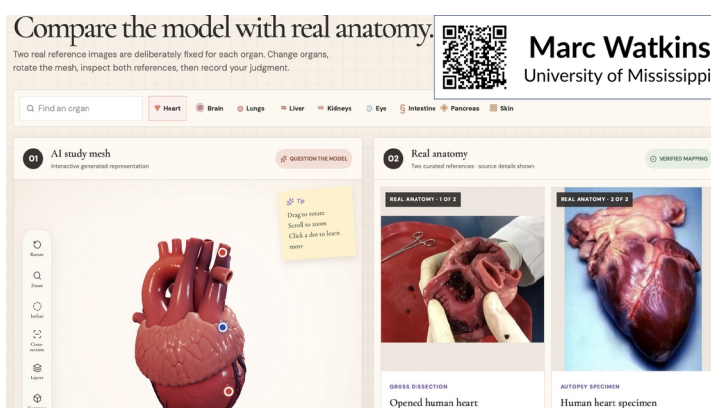
A student-built when-and-where game: drag through time, then place the event on the map. The example here is the Assyrian siege of Jerusalem, c. 701 BC.

► [When and Where](#)



A parallel-text Homer with a Change Translation control: swap translators mid-page, click any Greek word to parse it and see its definitions. John Boyer, University of Chicago.

► [The Homer Reader — Odyssey, Book 1](#)



Compare the model with real anatomy: an AI-generated study mesh beside curated dissection and autopsy images, with a question-the-model button on the generated side. The verification is the assignment. Marc Watkins, University of Mississippi.

► [Anatomy Studio](#)

WORKSHOP: The President and the Economy Simulation Game (slide 96)

Create a presidential simulation game about the relationship between the economy and actions of the US President. You will guide me (the student responding as if I were the US president) through a multi-year simulation where I will create policies and you will simulate their effect on the US economy. Use the actual political situation of each time period. Start by asking me to pick a year (1800–present); reply with a summary of the US economic and political situation in January of that year using actual data and prompt me to take executive action. Do not allow actions that are not constitutionally possible for the President; point out if my actions exceed Presidential power and cite the sources for these limitations. Assess my strategy, describe how the economy would change over the next three months, update me, and repeat — advancing three months at a time for up to four years. When I am done, summarize my performance, compare it to what actually happened, tell me who the actual president was, and suggest ways I might have had greater impact within the limits of the US Constitution.

► [Workshop Prompts & Materials](#)

WORKSHOP: Meta-Prompting for Custom Assignments and Assessments (slides 108–109)

PROMPT 1: Provide me with 5 innovative ideas for how I could teach/assess student learning with a set of AI-led interactive exercises or an AI custom bot interactive simulation or game, where students have

to demonstrate learning by interacting with a chatbot. + Learning Goals, Rubric or Professional Standard. + Context, Knowledge Base or Existing Assignment.

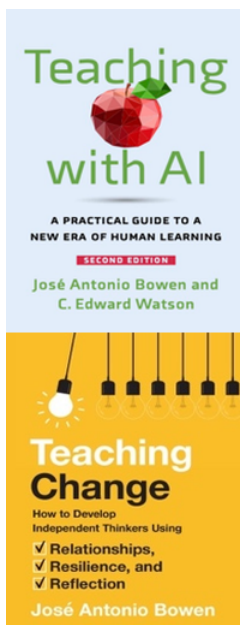
PROMPT 2 (iterate or pick your favorite idea): Now write an excellent prompt that will provide the instructions needed for an AI chatbot to create simulation #. The prompt should include instructions for customizing the experience for each student so that it is maximally motivating to individual student interests and will intellectually stretch the student. The assignment should be done in X number of parts...

- ▶ [Example conversation \(Claude\)](#)
- ▶ [Workshop Prompts & Materials](#)



Kranzberg, M. (1986). Technology and history: "Kranzberg's laws." *Technology and Culture*, 27(3), 544–560.

CITATIONS & RESOURCES



- ▶ [WeTeachWithAI.com](#) contains many many more resources, prompts, assignments and links. It is updated weekly if not daily.
- ▶ **Buy the book at 30% off!**
- ▶ [Teaching with AI at Johns Hopkins University Press — code HTAI25 for 30% off](#)
- ▶ [Teaching with AI on Amazon](#)
- ▶ If you don't want to use AI, but want students to want to do things the hard way, then read **Teaching Change: How to Develop Independent Thinkers Using Relationships, Resilience and Reflection**.
- ▶ [Teaching Change at Johns Hopkins University Press — code HTWN for 30% off](#)
- ▶ [Teaching Change on Amazon \(often 25% off\)](#)