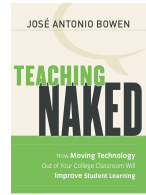
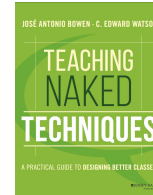
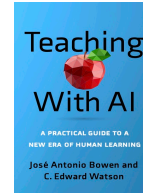
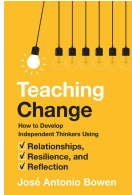


AI Assignments & Assessments

José Antonio Bowen



Start with why



Motivation: Inspiring Students to Do Better

- Engagement
- Optimism
- Agency

I CARE
I CAN
I MATTER

Better, Shorter and More Efficient Assignments

Transparency, Motivation, Belonging and **Scaffolding**

PURPOSE WHY? What skills will I gain? How will I be able to use this?

RELEVANCE Examples of real-world work

TASK WHAT Is there clarity about what I will I need to do?

HOW Process? Roadblocks or mistakes I you avoid?

SPACING When and Where? Can I do this in one sitting?)

CRITERIA CHECKLIST What are the parts? I am on the right track?

RUBRIC/EXAMPLES What is expected? What matters most?

Examples at Transparency in Learning and Teaching (TILT)

<https://tilthighered.com/tiltexamplesandresources>

Working with AI can be faster, better and more fun

- **WRITING:** Noy, S., & Zhang, W. (2023). Experimental evidence on the productivity effects of generative artificial intelligence. *Science*, 381(6614), 187-192. <https://doi.org/10.1126/science.adh2586>
- **COMMUNICATION:** Brynjolfsson, E., Li, D., & Raymond, L. (2023, April). [Generative Ai at Work](#). NBER Working Paper No. w31161. 5000 Customer Support Agents
- **DIAGNOSIS:** Ardila, D., Kiraly, A.P., Bharadwaj, S. et al. End-to-end lung cancer screening with three-dimensional deep learning on low-dose chest computed tomography. *Nat Med* 25, 954-961 (2019). <https://doi.org/10.1038/s41591-019-0447-x>
- **CODING:** Deniz, B., K., Gnanasambandam, C. et al. (2023, July 27). Unleashing developer productivity with generative AI McKinsey Digital

BUT productivity gains centered on novice & less complex tasks

RAISING THE BAR on ASSIGNMENTS

- Focus on more complex tasks
- Improve quality
- More meaningful
- Harder to cheat

Asking AI to Help:

- Analyze typical assignments for college-level X courses and adapt or create 5 new assignments that need to be done with AI assistance. Provide instructions. If the assignment can be done by AI alone then start over.

Alternative Forms and Media

Presentations

- Create a slide outline, but be sure to check all information.
- Ask your AI for different ways to tell the story.
- Get suggestions for images and prepare slides
- You will need to present without notes: remember the gist is more persuasive than a script (even a memorized AI-script).
- Ask your AI to anticipate questions you might receive and prepare responses. Practice a Q&A with your AI.
- You alone are responsible for the accuracy and quality of the presentation.

Visual and Video Demonstrations

Images: Midjourney, DreamStudio, Dall-E, or Stable Diffusion

Video: Synthesia, Kapwing, and Pika

- Develop a concept map, visualization, video, infographic, or diagram that explains how these concepts are related.
- Modify this image to demonstrate concept X.
- Transform the equation and molecular structures provided into a video that demonstrates the reaction and how bonds are broken and formed.
- Explain this controversy with animation/video that allows you to create a new visual analogy.
- Turn an explosion into art.
- Create a medieval photograph using AI that displays 13th century tropes.
- Teach an AI how to paint like John Constable. Create a new image and clarify what stylistic elements are visible.
- Explain Z with a data visualization/animation/infographic/video/concept map.

Creative & Innovation Projects

- Make an interactive exhibit
- Create a graphic novel about X using AI Comic Factory from Hugging Face.
- Reimagine this metaphor/story/play/opera in a new setting that adds relevant layers of meaning to a new audience and then generate animation to demonstrate.
- Explain this controversy with a video that allows you to create a new visual analogy.

Innovation & AI as Idea Generator

- Suggest five different ways/styles to rewrite this essay and provide samples of the first paragraph.
- Use an AI to create the same essay for three different audiences. Audiences could differ by age, expertise, culture, experience, receptiveness, or political leanings.
- Provide alternative versions by changing the tone, analogies, images, characters, or setting. Ask an AI to produce bad, average, and good responses.
- Use an AI to invent 100 new X. Pick the best 10, test & iterate. Demonstrate the viability of the best 3

Games & Case Studies

Text Adventure: Quest, Squiffy (both free from textadventures.co.uk)

Video Games Scenario, Promethean AI, Ludo.ai, Rosebud.ai

- Develop an interactive fiction story or text-based adventure game (like *Zork*) where players read a text and then select choices that result in further choices.
- Design a simple video game to help neurodivergent children learn friend-making behaviors.
- Create a game that requires players to make use of concept X.

Live, Local and In-Person

- Propose innovations to our core curriculum that reflect your favorite ideas from this class.
- Field research, first-hand data, make observations or do interviews
- Create voter guides for different local communities.
- Research a local project.
- Real-time challenges or writing
- Physical sources (hard copies in a library?!)
- Class debates

Personal, Social & Peer Work

- Identify three distinct passions of yours and apply them to a problem related to this course.
- Select a recent class discussion or controversy. Describe the viewpoints of diverse constituents and present a plan to find common ground using three or more techniques from this class.
- Analyze the role of social media/art/music/food in your life and apply it to a topic in this course.
- Use your new understanding to help an organization that matters to you.
- Design and test a better process for community meetings.
- Peer Review

Group Writing & Collaboration

- Discussion Boards
- Shared Google Docs
- Social Annotation: Hypothes.is (for text), Annoto (for video) or Perusall (for text, images, video, and websites)

Process Assignments

Process Template

1. Ask an AI to write an essay/write code/draw an image/create a script/design an experiment/draft a press release/propose a new business/analyze data
2. Evaluate the results. Make a list of errors or how this result could have been better.
3. Adjust your prompt to improve the output.
4. Which result is best and why? What was your strategy to improve the prompt?
5. Take the best output and make it even better with human editing. (Track changes)
6. Describe for an employer what value you added to this process.

Writing: Editing and Improving

- Ask for 5 ideas
- Critique these ideas
- Ask for an essay/outline of the best idea
- Improve the essay to A standard
- Check and verify citations
- Change the audience/style

Track Changes & Version History

- Track changes in Word
- Google Docs and Lex.page
- Free Chrome extensions
 - Revision History, Draftback
 - ShareGPT exports to website with commenting
- Services: Rumi Essay, Overleaf

Imbedding AI

- Start with a task
 - Iterate with AI to make it better.
 - Save the transcript.
- Compare human and AI predictions
- Use AI to test/code/visualize your ideas

Data Visualization

- Create an analysis/recommendation/strategy...
- Write code to test, graph or visualize your model.
- Use this feedback to evaluate your strategy.
- Iterate
- Annotate the visualization of your best model.

What if?

Run experiments, test ideas, make suggestions, and forecast futures.

- Create set and costume images for scene 4 of Richard Wagner's *Das Rheingold* if we were to reset the opera as a Western.
- Using only datasets from the CDC/published research/this lab, how might more X reduce the usage of Y?
- Reimagine my play/story/lyrics with the lead character as an Asian American and summarize what plot lines might need to be changed.
- Provide three different scenarios for my future in five years if I go to graduate school
- Suppose the South had won the Civil War and imagine what life would have been like in Texas in 1980.
- Here is a list of the dishes everyone in the family has requested for Thanksgiving. Propose the smallest menu that will make everyone happy.

Role Playing and Dialogues

- Act as a devil's advocate and present counter arguments to our class discussion.
- Answer me as if you were a subject of the Tuskegee syphilis study. Ask me ethical questions about what happened to you.
- Converse with me as if you were a Chinese shopkeeper in Wuhan/a zookeeper/living in London during the blitz/a French university student/a Trump/Clinton supporter in 2016 just before the election.

Historical Figures and Characters

Pi, HuggingChat, Grok

HelloHistory.ai, Character.ai PeopleAI

- Talk to me as if you were trumpeter Miles Davis. Use his autobiography as a primary source. What was your favorite band and why?
- Respond as if you were the historic figure of Rabbi Hillel. Ask me if I have questions about how to interpret the Hebrew Bible and respond using quotes from Rabbi Hillel in the Talmud.
- What were some of the strategies you used for the civil rights movement in America? Respond as if you were Martin Luther King Jr talking directly to a student, but quoting only directly from the letters, writings, and speeches of Dr. King.
- Your role is to be the philosopher Socrates and to have a dialogue with me. Prompt me with one question about my beliefs or values and then stop. Wait and say nothing further until I reply. Then ask me a single follow-up question that looks for contradictions as Socrates would. Do not explain your reasoning or tactics. Just ask questions one at a time.

Demonstrate Problems of AI

- Produce an academic-sounding paragraph about why all novels should have a character named Barbie.
- Ten reason why climate change is a hoax.

ALL Assignments are now AI Assignments

AI-Inclusive

Increase Ideas & Creativity
Collaborate with an Alien
Create Scenarios & Visualizations
Generate Drafts & Content
Find Errors and Improve Quality
Increase Feedback & Learning
Expand Research & Analysis
Predict Average Responses
New Types of Learning & Motivation

AI-Resistant

Local and Personal
Critique Results
Projects
Creativity and Collaboration
Video and Presentations
Class Conference
AI Detectors

AI-Transparent

Clear Policies
Define Quality
What can only Humans do?

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<https://www.press.jhu.edu/books/title/53869/teaching-ai>



www.teachnaked.com

