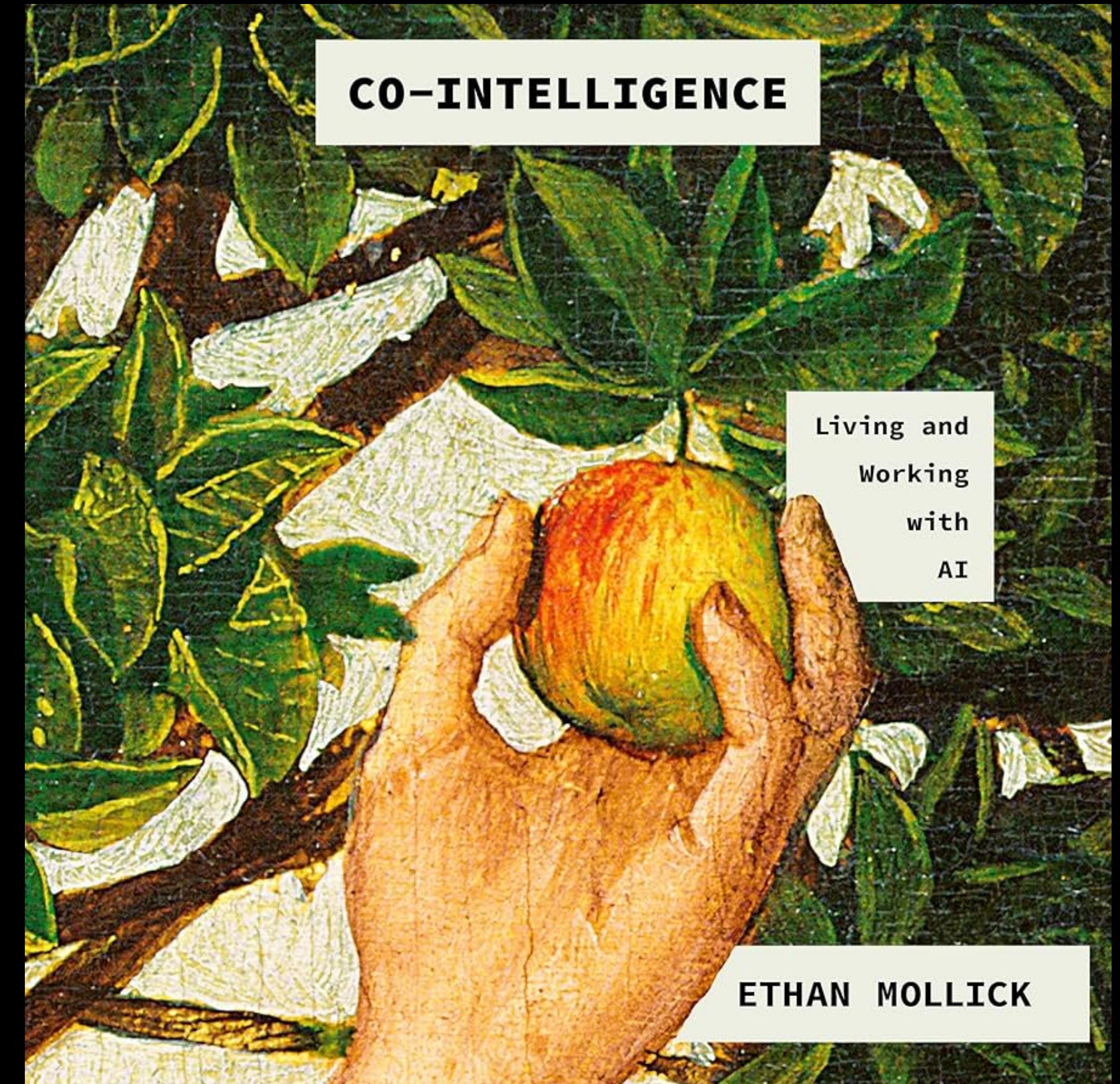


Co-intelligence: Living and Working with AI

By Ethan Mollick

Imogen Drews, 18 December 2024







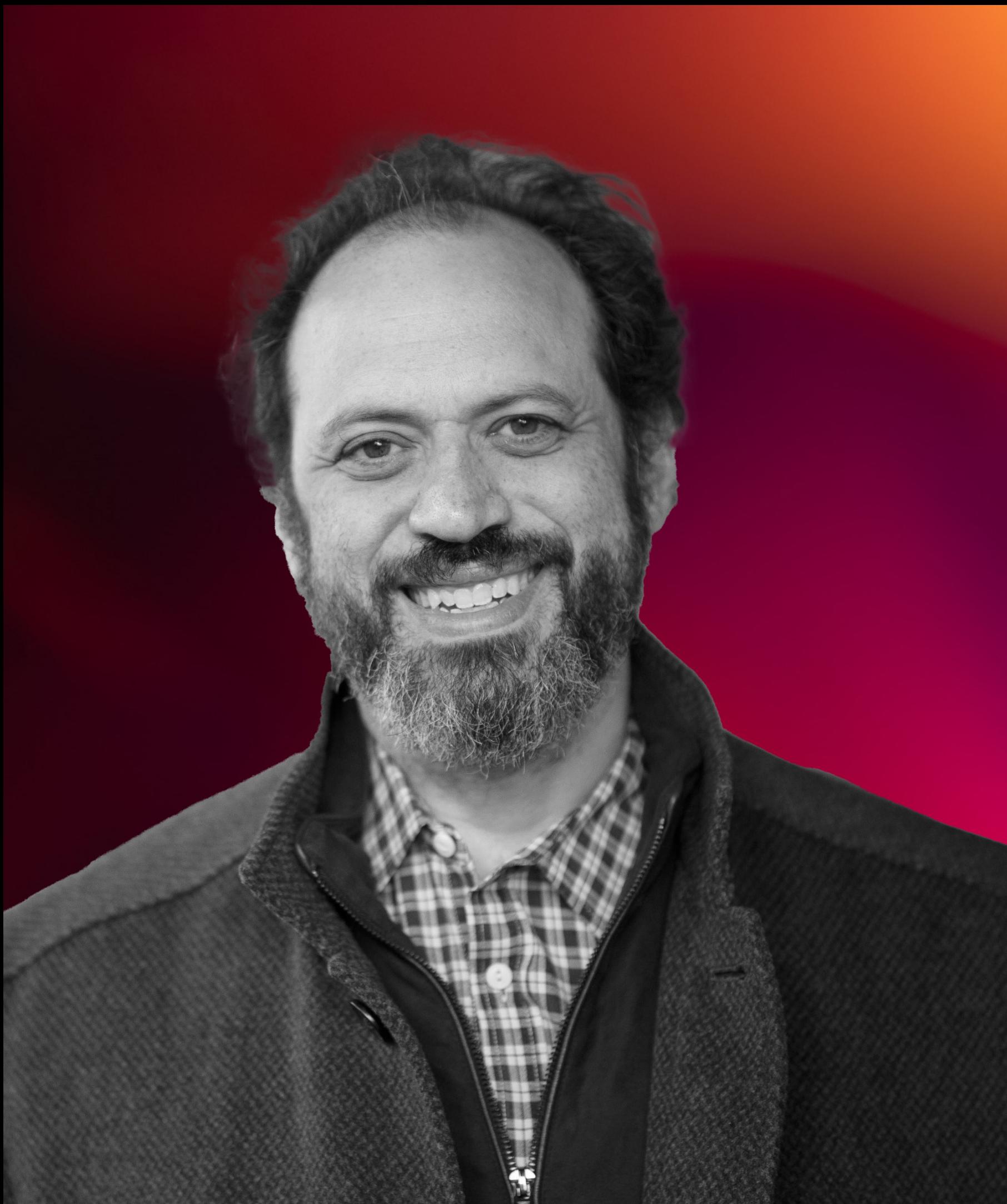
Source: TED AI San Francisco, n.d.

Ethan Mollick



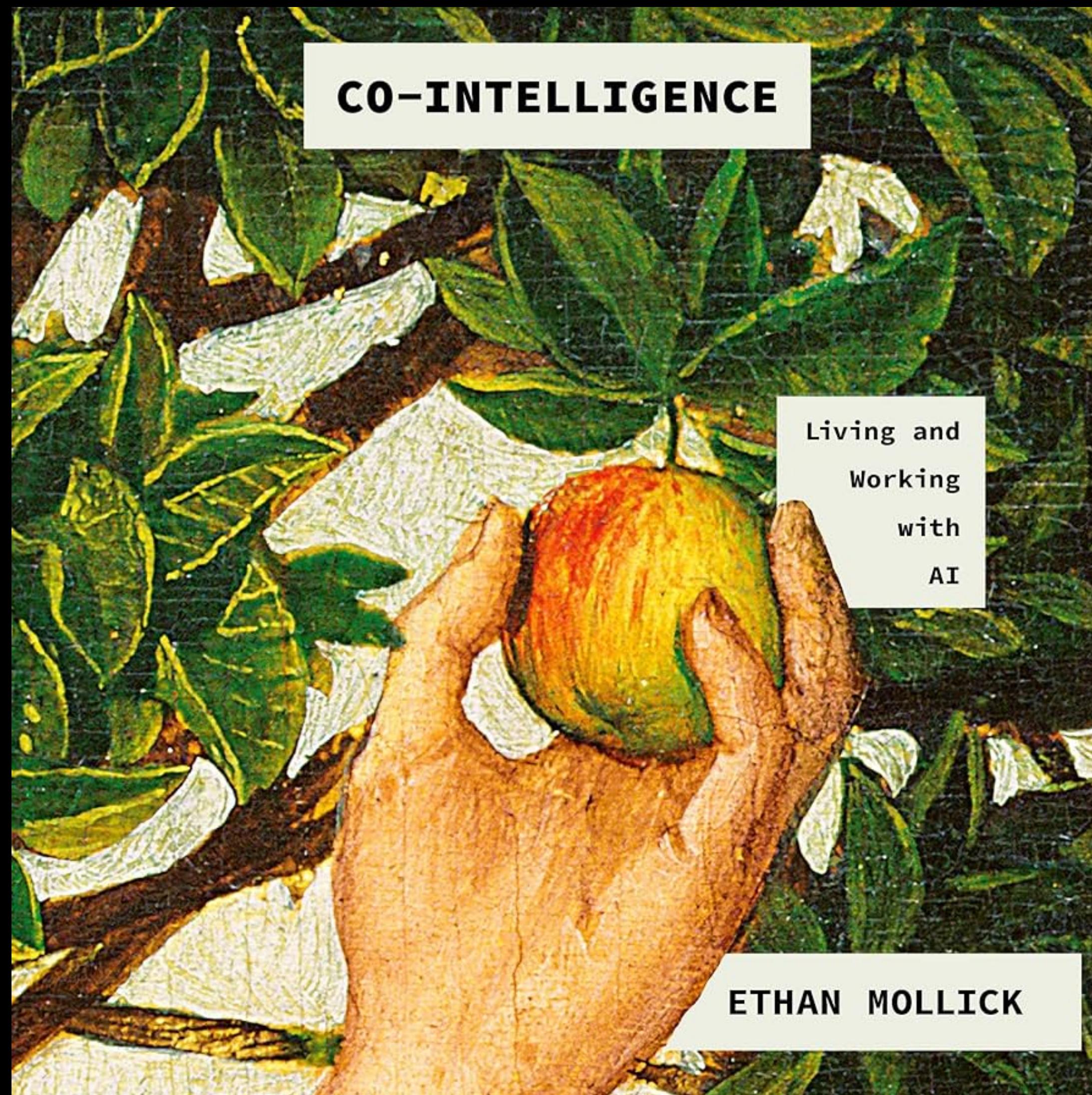
- **Professor of Management at Wharton School at the University of Pennsylvania**

Ethan Mollick



- Professor of Management at Wharton School at the University of Pennsylvania
- Got his bachelors at Harvard and his PhD and MBA from MIT's Sloan School of Management

Ethan Mollick



Penguin Random House, n.d.



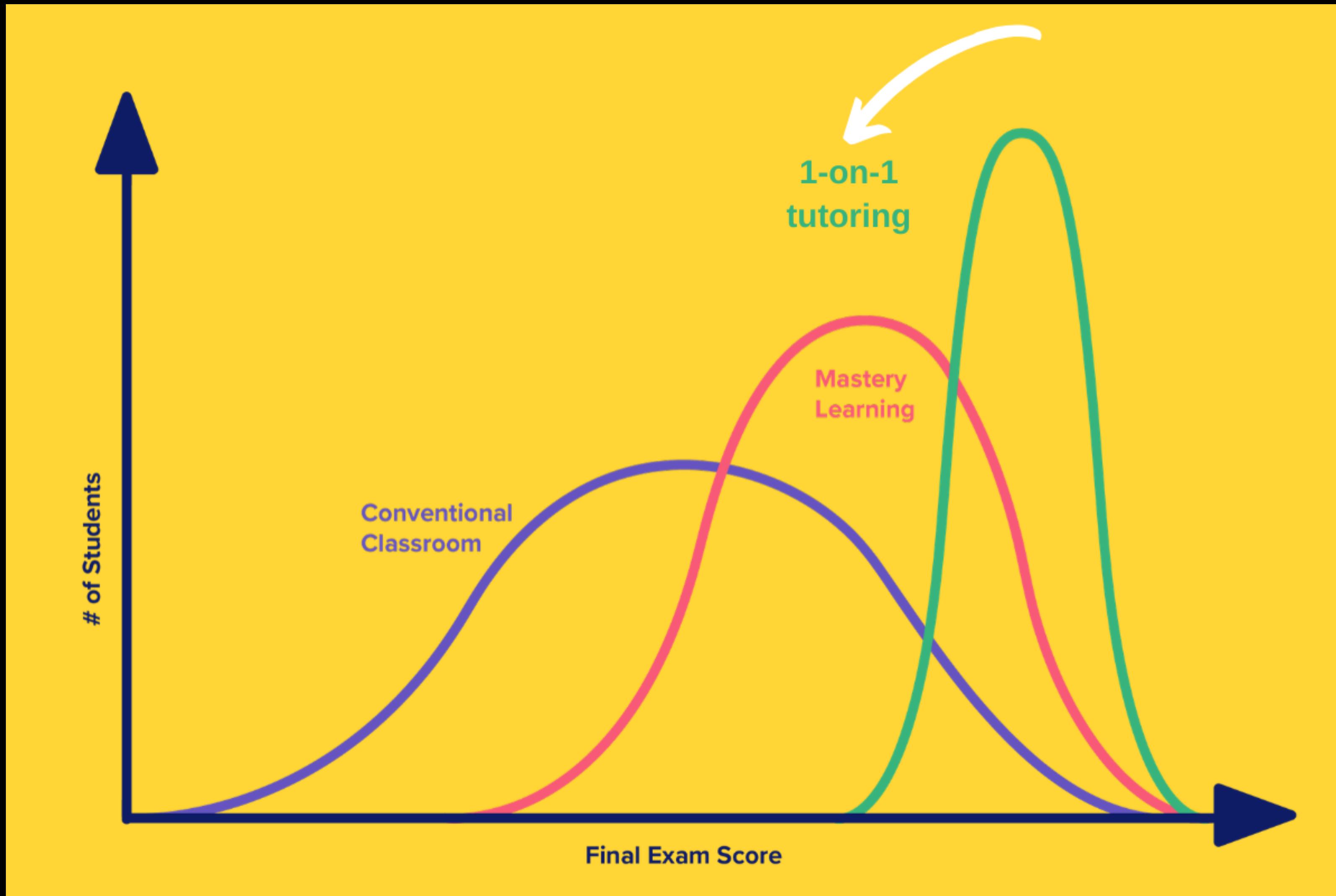
- Similar fear when calculators enters schools in mid-70s
- They ended up accelerating allowing students to solve more complex problems
- Like calculators, AI can elevate our work and open new possibilities



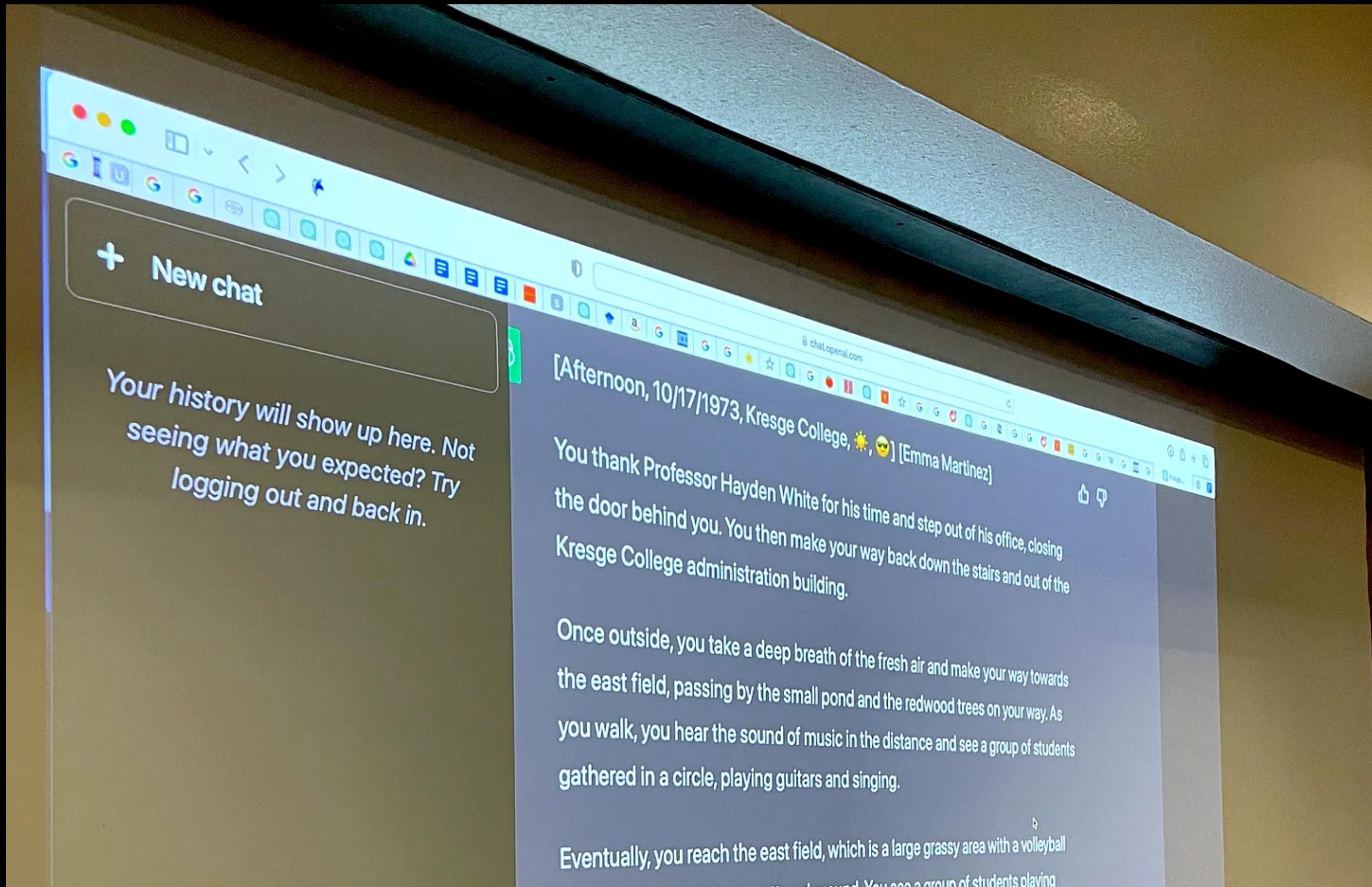
Source: *Active vs. Passive Learning: What are the Differences?*, via Vietnam Teaching Jobs, n.d.

Flipping the classroom

Students learn content at home via videos tailored to learning styles and then apply skills in the classroom



1 to 1 tutoring helped the average student score higher than 98 percent of the students in the control group

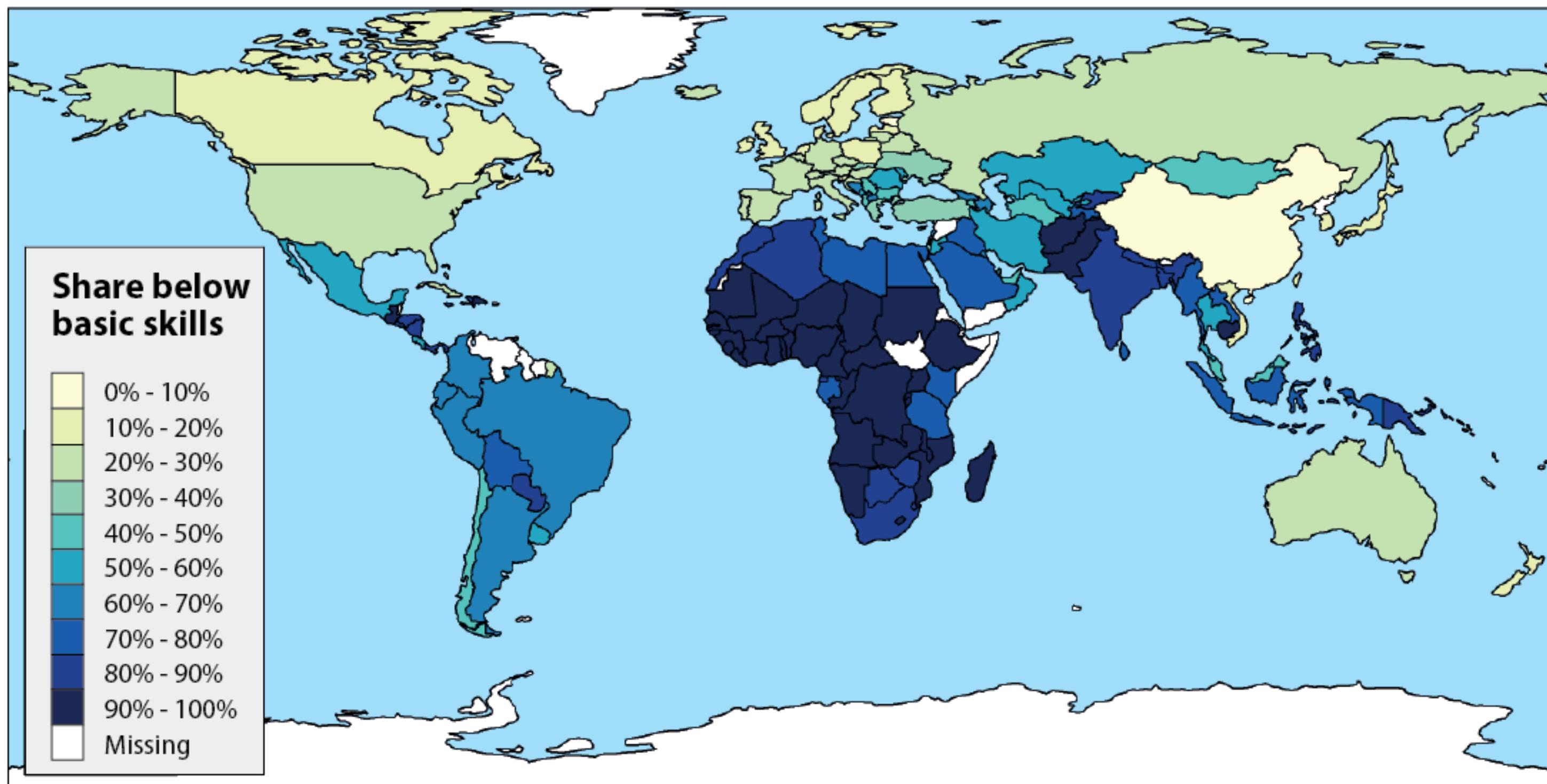


- **Active learning takes a lot of time and resources to make**
- **Great example is the simulation made by history professor Benjamin Breen**

Source: *Simulating History with ChatGPT*, via Res Obscure Substack.

World map of lack of basic skills

In many countries, over 90 percent of children do not reach basic skill levels.



Source: Gust, Hanushek, and Woessmann (forthcoming).

Note: Estimated share of children who do not reach at least basic skill levels (equivalent to Programme for International Student Assessment Level 1) in math and science.

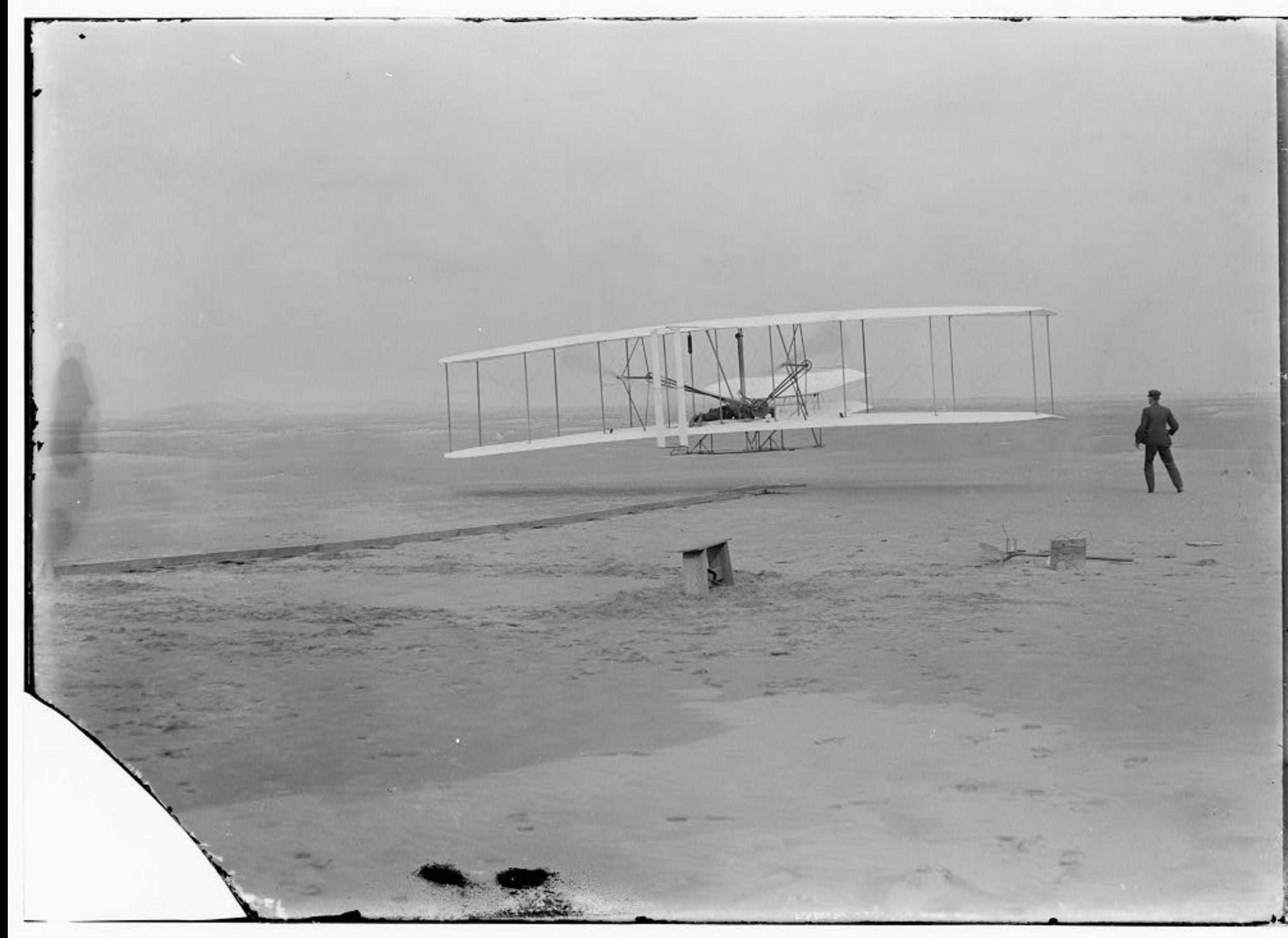
Source: *World map of lack of basic skills* via IMF.

**How is this book relevant to us
CTech Students?**

How is this book relevant to us
CTech Students?

LLM's are better at creative tasks rather than repetitive analytical tasks.

LLM's hallucinate. They don't memorise facts or store text but rather predict what should come next based on patterns they've learned from their training data.



Source: *Wright brothers aeroplane*, via Astronomy, 2021.

Famous example of this being how the Wright brothers came up with how to make an aeroplane

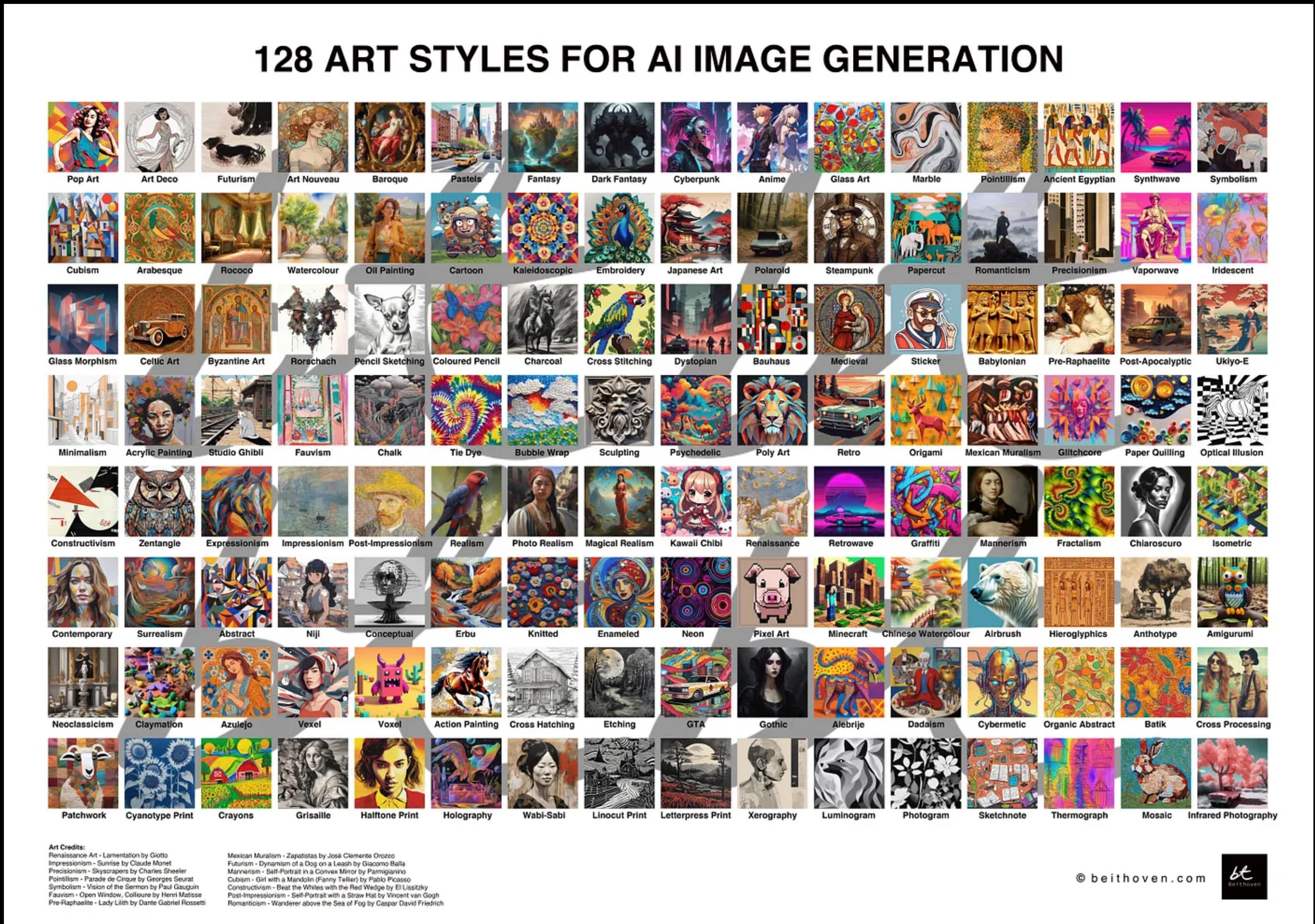


ALTERNATIVE USES TEST

Source: *Alternative Uses Test*, via davebirss.com

A panel of humans were made to judge the creativity of AI compared to humans and the GPT-4 model won all but 9.4% of the humans tested.

**Humanity majors and writers
are coming up with the most
interesting and effective
prompts.**



Source: 128 Art Styles for AI Image Generation, via Beethoven

- Important to not use AI to help us with the first draft of any project
- We need to be the human in the loop



Ethan Mollick

Q & A

How do you feel about the idea of "flipping the classroom" by using AI tools to enhance both passive and active learning? Are there any lessons that we have had that you feel lend themselves to this method?

**Can we ensure AI remains a collaborator
rather than a competitor in creative
industries?**

What are the ethical responsibilities of AI users, particularly artists and educators, when leveraging AI systems trained on human cultural heritage?

References

1. Astronomy. (2021). Relic from the Wright brothers' first plane flies again on Mars [Image]. Retrieved from <https://www.astronomy.com/science/relic-from-the-wright-brothers-first-plane-flies-again-on-mars/>.
2. Beethoven. (n.d.). 128 art styles for AI image generation [Image]. Retrieved from <https://beethoven.medium.com/128-art-styles-for-ai-image-generation-free-download-812c57b95e5a>.
4. Breen, B. (n.d.). Simulating history with ChatGPT. Retrieved from <https://resobscura.substack.com/p/simulating-history-with-chatgpt>.
5. Gust, E., Hanushek, E., & Woessmann, L. (forthcoming). World map of lack of basic skills. Retrieved from International Monetary Fund: <https://www.imf.org/en/Publications/fandd/issues/2022/06/basic-skills-gap-hanushek-woessmann>.
6. Meyer, D. (n.d.). [Image of relic from Wright brothers' plane on Mars]. CC BY-SA 3.0. Retrieved from <http://creativecommons.org/licenses/by-sa/3.0/>, via Wikimedia Commons.
7. Penguin Random House. (n.d.). Co-Intelligence by Ethan Mollick [Image]. Retrieved from <https://www.penguinrandomhouse.com/books/741805/co-intelligence-by-ethan-mollick/>
- 8.TED AI San Francisco. (n.d.). Ethan Mollick [Image]. Retrieved from <https://tedai-sanfrancisco.ted.com/speakers/ethan-mollick/>.
9. TutorOcean. (n.d.). TutorOcean's solution to Bloom's 2 sigma problem. Retrieved from <https://corp.tutorocean.com/tutoroceans-solution-to-blooms-2-sigma-problem/>.
10. Vietnam Teaching Jobs. (n.d.). Active vs Passive Learning. Retrieved from <https://vietnamteachingjobs.com/active-vs-passive-learning/>.