

A circular inset image showing a library with rows of bookshelves filled with books. The shelves are labeled with categories like 'Hda DANSKA' and 'Hdb N'. A large white circle is overlaid on the center of the image, containing the main title and subtitle.

MEETING THE CHALLENGE

FIVE PRINCIPLES FOR INTEGRATING GENERATIVE AI INTO HIGHER EDUCATION

The image features a dark blue, textured background that resembles a close-up of a rough surface or a microscopic view of a material. The texture is composed of various shades of blue, from deep navy to lighter, almost white highlights, creating a sense of depth and complexity. A prominent feature is a horizontal black banner that spans across the middle of the image. Centered within this banner is the text "EVERYONE IS STRUGGLING" in a bold, white, sans-serif font. The overall composition is simple yet impactful, with the high-contrast text standing out sharply against the dark, textured background.

EVERYONE IS STRUGGLING

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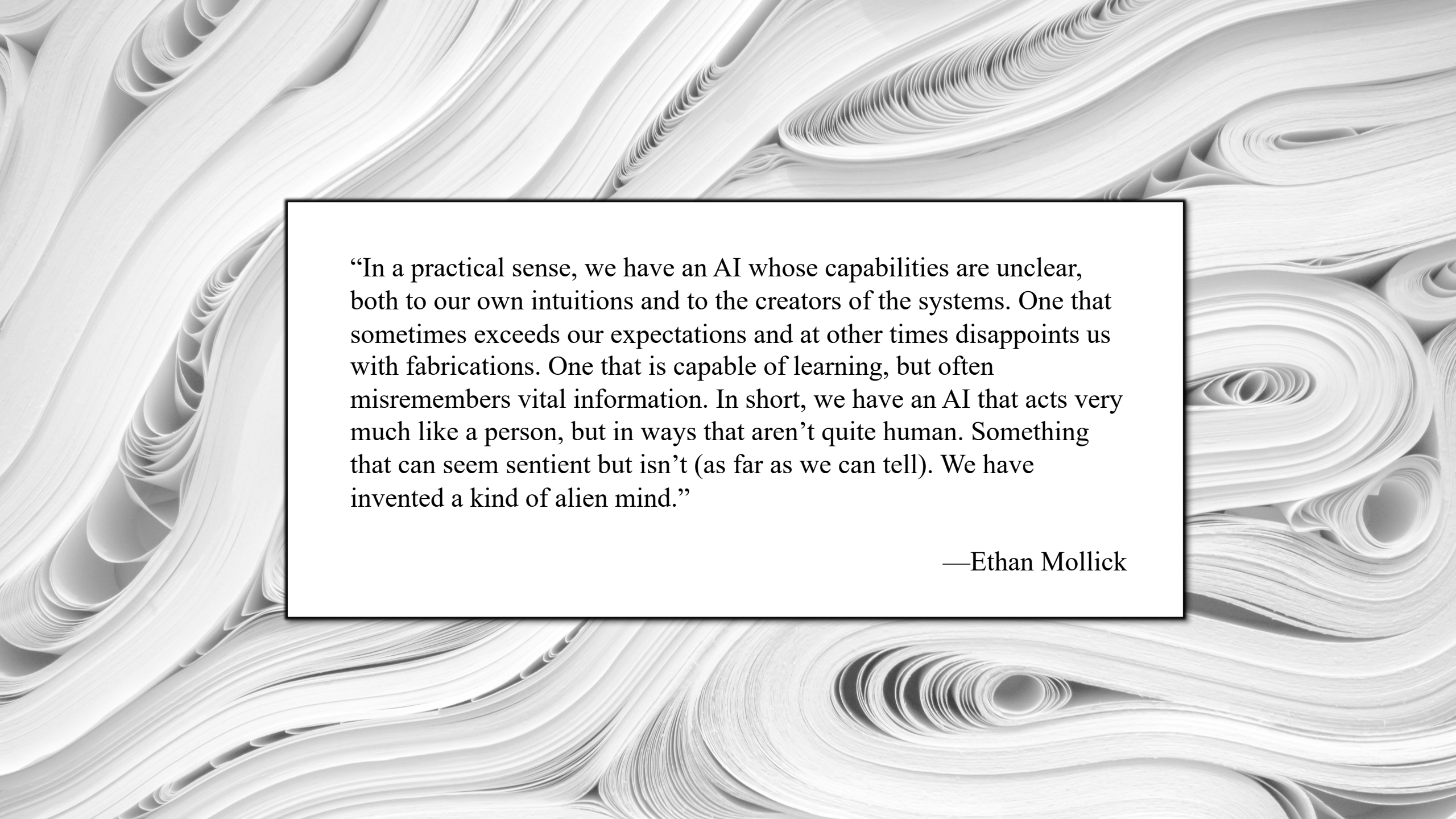
1. Perceived absence of coherent leadership that allows generative AI to be integrated effectively and efficiently in higher education. Let's call this the "Operations" problem.
2. Perceived absence of coherent leadership on how to detect unsanctioned uses of generative AI in student work. Let's call this the "Accountability" problem.
3. Perceived absence of coherent leadership that recognizes the overwhelming demand that generative AI places on faculty and staff who are already struggling to complete their work. Let's call this the "Labor recognition" problem.

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“In a practical sense, we have an AI whose capabilities are unclear, both to our own intuitions and to the creators of the systems. One that sometimes exceeds our expectations and at other times disappoints us with fabrications. One that is capable of learning, but often misremembers vital information. In short, we have an AI that acts very much like a person, but in ways that aren’t quite human. Something that can seem sentient but isn’t (as far as we can tell). We have invented a kind of alien mind.”

—Ethan Mollick

The background is a monochromatic blue-toned abstract composition. It features numerous horizontal brushstrokes of varying thickness and intensity, creating a sense of movement and depth. The colors range from deep, dark blues to lighter, almost white highlights. A solid black rectangular box is centered horizontally and vertically, containing the text.

CURIOSITY IS THE KEY

WHAT IS CURIOSITY?

The capacity to search for new ways of thinking, feeling, or behaving when the limits of one's knowledge or perspective become apparent.

FIVE PRINCIPLES

1. Find a higher love.
2. Solve the story problems.
3. Interest compounds.
4. Interfaces set expectations.
5. Emphasize domain expertise.

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Things look so bad everywhere
In this whole world, what is fair?
We walk blind and we try to see
Falling behind in what could be

—Steve Winwood, “Higher Love”

INTERMEZZO #1

Stand up and walk over to an easel. Write down a galvanizing principle that distinguishes your department, college, or university from others. For example, ASU is guided by its “access” mission. In practical terms, the university evaluates all educational initiatives through this mission. We literally ask, “Can this practice scale to serve historically underserved populations.” The goal here is to find a purpose for integrating generative AI that transcends the use of specific technologies.

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The Top Fears and Dangers of Generative AI — and What to Do About Them

Here are a few of the biggest reasons people fear generative AI and potential solutions for each.

The Race to Prevent ‘the Worst Case Scenario for Machine Learning’

A.I. companies have an edge in blocking the creation and distribution of child sexual abuse material. They’ve seen how social media companies failed.

A.I. Poses ‘Risk of Extinction,’ Industry Leaders Warn

Leaders from OpenAI, Google DeepMind, Anthropic and other A.I. labs warn that future systems could be as deadly as pandemics and nuclear weapons.

 Share full article   1.4K



‘The Godfather of A.I.’ Leaves Google and Warns of Danger Ahead

For half a century, Geoffrey Hinton nurtured the technology at the heart of chatbots like ChatGPT. Now he worries it will cause serious harm.

TECHNOLOGY

AI Cheating Is Getting Worse

Colleges still don't have a plan.

By Ian Bogost

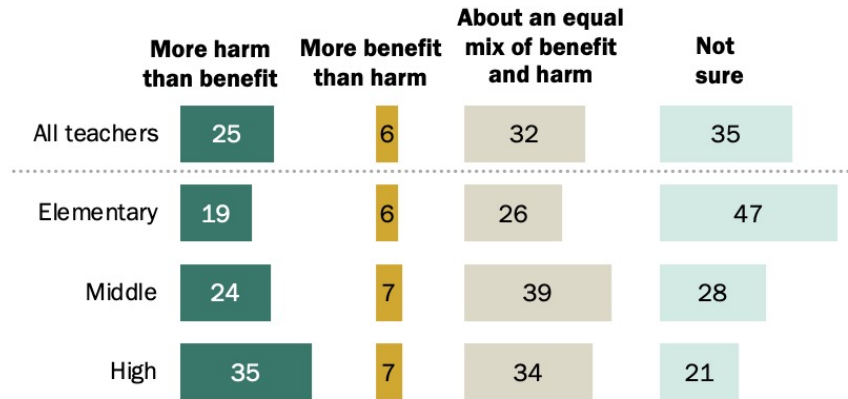
As generative AI booms, students dive in and educators lag behind

ARTIFICIAL INTELLIGENCE

As More AI Tools Emerge in Education, so Does Concern Among Teachers About Being Replaced

High school teachers are more likely than other teachers to view AI in K-12 education negatively

% of public K-12 teachers saying there is generally ___ when it comes to the use of artificial intelligence tools, such as ChatGPT, in K-12 education

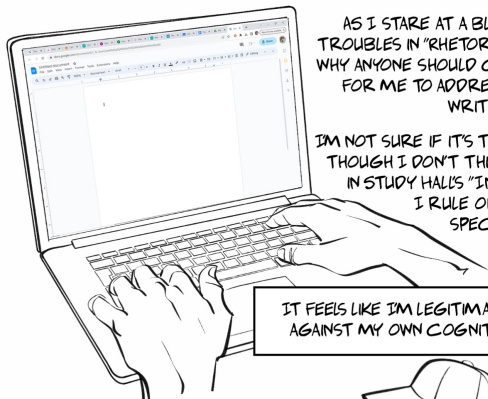


Note: Shares of respondents who didn't offer an answer are not shown.
Source: Survey of U.S. public K-12 teachers conducted Oct. 17-Nov. 14, 2023.

PEW RESEARCH CENTER

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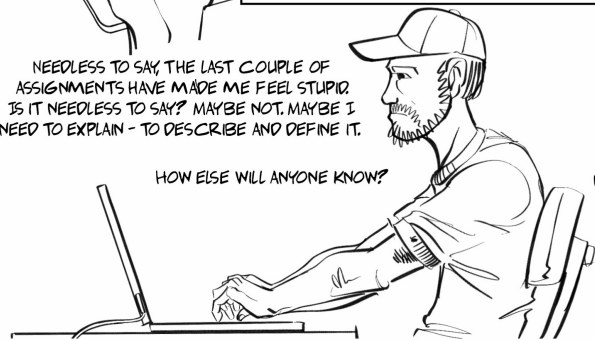


AS I STARE AT A BLANK SCREEN CONSIDERING MY TROUBLES IN "RHETORIC AND COMPOSITION," I WONDER WHY ANYONE SHOULD CARE. IT'S A DILEMMA AS DIFFICULT FOR ME TO ADDRESS AS HAVE BEEN SOME OF THE WRITING ASSIGNMENTS.

IM NOT SURE IF ITS THE FORMAT OF ONLINE LEARNING, THOUGH I DON'T THINK SO, AS I PREVIOUSLY DID WELL IN STUDY HALLS "INTRO TO HUMAN COMMUNICATION." I RULE OUT THE STRUCTURE OF THIS CLASS, SPECIFICALLY. NO, THERE IS NO PROBLEM WITH THE CURRICULUM.

IT FEELS LIKE IM LEGITIMATELY BUMPING UP AGAINST MY OWN COGNITIVE LIMITATIONS.

NEEDLESS TO SAY, THE LAST COUPLE OF ASSIGNMENTS HAVE MADE ME FEEL STUPID. IS IT NEEDLESS TO SAY? MAYBE NOT. MAYBE I NEED TO EXPLAIN - TO DESCRIBE AND DEFINE IT.



HOW ELSE WILL ANYONE KNOW?

I DON'T THINK IM DUMB. SOMETIMES I EVEN THINK IM A DECENT WRITER.

HOWEVER, WRITING ASSIGNMENTS "2," "3," AND NOW "4" HAVE ALL BEEN AGGRAVATINGLY DIFFICULT FOR ME TO WRAP MY BRAIN AROUND. IS IT POSSIBLE THAT I HAVE AN UNDIAGNOSED LEARNING DISABILITY? COULD IT BE THAT IM TRYING TO FLEX MUSCLES THAT ARE SO ATROPHIED FROM LACK OF USE THAT IT FEELS LIKE THERE'S NO MUSCLE THERE AT ALL?

THE SOLUTION THUS FAR HAS BEEN TO LEAN INTO THE MUSCLES I DO KNOW HOW TO FLEX, BUT I WORRY THAT WON'T CARRY ME FAR IN MY ACADEMIC ENDEAVORS.

IN PROJECT "2," "WRITING TO IDENTIFY," I EXPERIENCED DIFFICULTY FINDING ENOUGH RELEVANT QUOTES FROM THE ARTICLE TO SUPPORT MY CONCLUSION. IN MY ANALYSIS OF IAN BOGOST'S "CHATGPT IS DUMBER THAN YOU THINK," I STAKE MY POSITION THAT BOGOST IS STATING EXACTLY WHAT HIS TITLE CLAIMS - CHATGPT IS DUMB. IT IS A TOOL, NOT A THREAT. HOWEVER, IN SOURCING QUOTES FROM THE ARTICLE TO SUPPORT MY ASSESSMENT, I FIND BOGOST'S CRITIQUE OF CHATGPT IS THAT IT FAILS TO COMPOSE AN OBSCURE FORM OF MEDIEVAL POEM WITHIN THE REQUIRED PARAMETERS - OCTOSYLLABIC COUPLETS.



BOGOST CALLS CHATGPT "DUMB," MEANWHILE IM SITTING HERE IGNORANT OF WHAT A "LAI" IS, OR THAT IT IS FORMED OF OCTOSYLLABIC COUPLETS. IF IAN BOGOST THINKS CHATGPT IS STUPID, WHAT'LL HE MAKE OF ME?

WHILE THIS HIGH-MINDED EXAMPLE MADE ME FEEL DUMB, I GRASPED BOGOST'S INTENT, THAT CHATGPT WAS A TOOL THAT DIDN'T REALLY GROK THE MEANING BEHIND WHAT IT WAS DOING.

WELL, WHADDAYA KNOW?

SOMETIMES I FEEL THAT WAY TOO, IAN. AND IM NOT EVEN AN AI CHATBOT, IM A REAL BOY!

AS FAR AS I KNOW, ANYWAY.

I DID WHAT I USUALLY DO IN SUCH SCENARIOS - I POWERED THROUGH, I WROTE, AND I WROTE, AND I WROTE, CALLING ON AN OVERFLOWING INNER FONT OF WORDS TO CREATE THE IMPRESSION I UNDERSTOOD WHAT I WAS DOING.

BUT DID I REALLY?

IN AI ASSISTED WRITING PROJECT "2," WE RAN A BLOCK OF OUR WRITTEN ANALYSIS THROUGH WORDTUNE. WE WERE ASKED TO MAKE CHANGES, THEN ANALYZE AND REFLECT ON WHICH CHANGES WE MADE AND WHY. HOWEVER, ID PREVIOUSLY FOUND THAT WORDTUNE WASN'T PARTICULARLY HELPFUL BEYOND BEING A SOPHISTICATED SPELLCHECKER. I FOUND THAT AT BEST IT ALTERS MY VOICE AS A WRITER, AT WORST IT CHANGES THE MEANING OF SENTENCES. SOMETIMES IN HILARIOUS WAYS. HERE'S A SNIPPET FROM THAT PROJECT -

"In the previous sample, I was using WordTune exclusively to sharpen my writing. To aid in clarity. I have often found that if I give WordTune a longer leash, it tends to alter my voice after a fashion that I find unpalatable. However when it suggested changing "I straddle the dangerous tool and thought partner sides of this discussion" to "As a thought partner and a dangerous tool," I actually LAUGHED OUT LOUD. As my LOL'ing subsided to a chuckle, something occurred to me - embrace it."



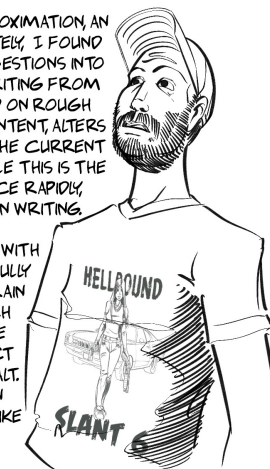
AFTER THAT I DID EMBRACE IT, I TOOK WORDTUNE'S ABSURD SUGGESTIONS AND PLUGGED THEM IN, REPLACING MY WRITING. THE RESULT WAS A MISH-MASH OF GIBBERISH WORDS THAT REMINDED ME OF NOAM CHOMSKY'S

"COLORLESS GREEN IDEAS SLEEP FURIOUSLY."

THE LINGUIST CRAFTED THAT STATEMENT TO DEMONSTRATE THAT SYNTAX IS INDEPENDENT OF MEANING. THE SENTENCE SOUNDS CORRECTLY WRITTEN, LIKE IT SHOULD MEAN SOMETHING, BUT IT'S COMPLETE NONSENSE.



THAT'S WHAT WORDTUNE AND CHATGPT REMIND ME OF: AN APPROXIMATION, AN IMITATION OF LANGUAGE, WITH NOTHING UNDERNEATH. ULTIMATELY, I FOUND THAT WHILE I DIDN'T LIKE INCORPORATING WORDTUNE'S SUGGESTIONS INTO MY WRITING, SOMETIMES IT DID GET ME LOOKING AT MY WRITING FROM DIFFERENT ANGLES. THIS LED TO SELF-EDITS THAT IMPROVED ON ROUGH DRAFTS. PROBLEM - WORDTUNE CHANGES VOICE, DISTORTS INTENT, ALTERS MEANING. SOLUTION: EMBRACE IT TO FURTHER SHOW THAT THE CURRENT ITERATION OF SUCH AI TECH IS A TOOL, NOT A TECHNICIAN. WHILE THIS IS THE CASE FOR THE TIME BEING, THE TECHNOLOGY WILL ADVANCE RAPIDLY, PERHAPS SOON BECOMING INDISTINGUISHABLE FROM HUMAN WRITING.



FINALLY, ENTER WRITING PROJECT "4" - THIS ONE, I STRUGGLE WITH THESE ANALYTICAL WRITING ASSIGNMENTS. I EITHER DO NOT FULLY COMPREHEND WHAT IM SUPPOSED TO BE DOING, OR MY BRAIN GRINDS TO A HALT WHEN CONTEMPLATING HOW TO APPROACH THE PROCESS OF ANALYSIS AND REFLECTION. LIKE IF YOU'VE EVER SWUNG A HEAVY DOOR AND A PEBBLE OF THE PERFECT SIZE GETS STUCK UNDER THE DOOR AND GRINDS IT TO A HALT. SEIZED IT WON'T MOVE. IT'S DONE. STUCK. IT'S NOT EVEN WRITER'S BLOCK. NO, I CAN PONTIFICATE FOR DAYS, MUCH LIKE BOGOST'S IMPLICATION ABOUT CHATGPT, I CAN FAKE IT - BUT I DON'T ALWAYS UNDERSTAND WHAT IM DOING.



THIS ANALYTICAL WRITING ACTIVATES AN AREA OF MY BRAIN THAT FEELS LIKE RUSTED PISTONS SWELLED UP IN DECAYED CYLINDER WALLS TO THE POINT WHERE NO AMOUNT OF LUBRICATION COULD COAX THINGS LOOSE. SO THE CREATIVE PROBLEM SOLVING SOLUTION I APPLY TO THIS DILEMMA? "BUT I KNOW I'VE GOT ONE THING I GOT TO DO," ROBERT PLANT SANG IN THE LED ZEPPELIN CLASSIC, "RAMBLE ON," WHICH CONTINUES, "AH, THERE'S NOTHING I CAN DO NOW... I GUESS I'LL KEEP ON RAMBLING..." AND YES, LIKE ROBERT PLANT, I WILL SING MY SONG - AND KEEP ON RAMBLING.

IT SEEMS TO WORK. THE MORE I RAMBLE, THE MORE I WRITE, AND BEFORE I KNOW IT IM AT A THOUSAND WORDS. WHICH IS FANTASTIC FOR DRAFTING! IT GIVES ME LOTS OF FODDER FOR REVISION AND REFLECTION. MAYBE THE OBSERVATION HERE RE MY PROBLEM SOLVING PROCESS IS THAT MY CREATIVE PROBLEM SOLVING ABILITY IS HARNESS BY LOSING FOCUS ON THE TASK ITSELF THEN RAMBLING AIMLESSLY UNTIL MY SUBCONSCIOUS DRAGS ME BACK AROUND TO THE POINT.

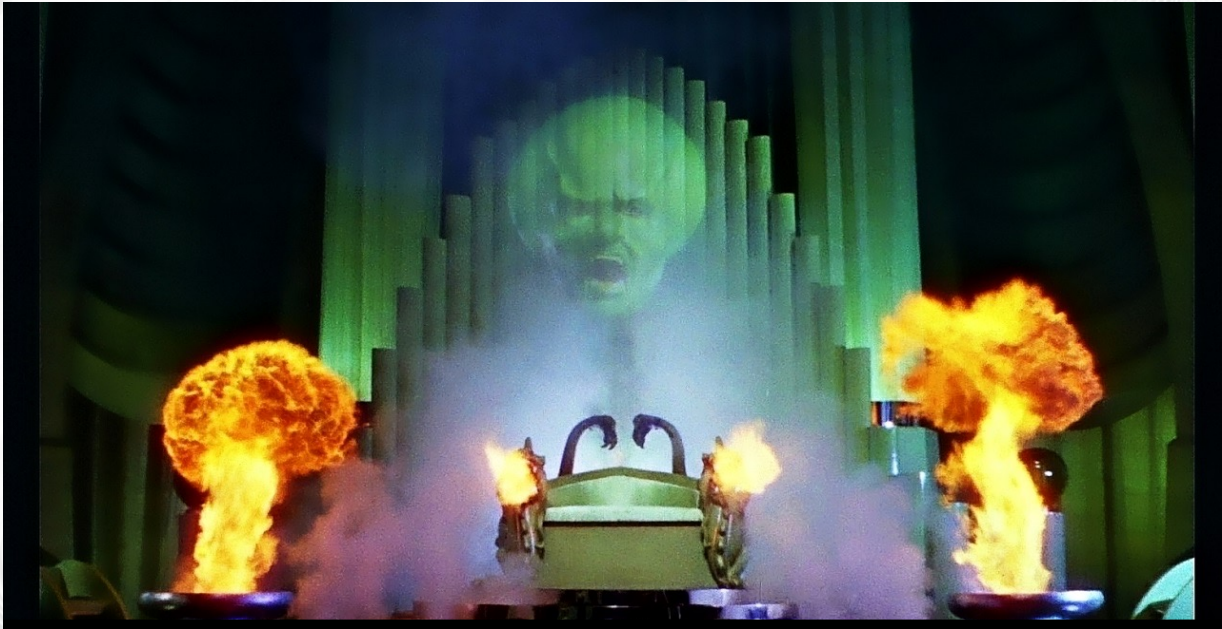
KEEP WRITING. HIT THAT FLOW STATE. COME BACK LATER AND REVISE. LIKE DORI SAID, "JUST KEEP SWIMMING, JUST KEEP SWIMMING," OR MAYBE I AM AS DUMB AS CHATGPT AND WORDTUNE, REGURGITATING WORDS WITHOUT GENUINE COMPREHENSION OF WHAT'S BEHIND THEM.



BY FRANK "KEN" CARLSON

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Create an illustration for a bakery



Write a report based on my data



Quiz me on world capitals



Write a story in my favorite genre



Message ChatGPT



ChatGPT can make mistakes. Check important info.



🕒 Saving 25 min

🔍 Semantic search 📄 ⬇️ 🔗 Expand All

Artificial Intelligence (AI) is changing our society..

- Artificial intelligence (AI) is being deployed across all parts of society, including cars that drive themselves and computer programs that can talk with humans. AI presents huge opportunities for societal change, but who gets to decide what that change looks like and who it will affect?

A PEOPLE'S GUIDE TO AI

- ▶ This booklet aims to inform traditionally disadvantaged communities about AI, while emphasizing the importance of equity. It includes activities to help readers explore AI in an active way.

ARTIFICIAL INTELLIGENCE

- ▶ DIVERSITY Diversity refers to the various backgrounds and races that comprise a community, nation or other grouping. Racial equity is a society where the distribution of benefits and burdens is not skewed by race.

STRUCTURAL RACISM

- Structural racism is a feature of the social, economic and political systems in which we all exist, and is perpetuated by public policies, institutional practices, cultural representations, and other norms.

THE QUEST TO COMPUTE THE HUMAN BRAIN

- ▶ AI is a quest to imitate the human brain, focusing on mimicking human intelligence. Multiple intelligences exist in humans, and social environment influences how they are regarded.

1. NATURALIST INTELLIGENCE

- Naturalist intelligence is the ability to discriminate among living things and to be sensitive to other features of the natural world.

Which intelligences do you identify with the most?

- AI today is far from being conscious, but it is worth thinking about the types of intelligences that are being

Artificial Intelligence (AI) is changing our society.

What do listening to music, taking a flight, and getting stopped by the police all have in common? You might not realize it, but these actions could all involve artificial intelligence (AI) at work.

From cars that drive themselves to computer programs that can talk with humans, AI-based technologies are being deployed across all parts of society. This means that they're used in everyday spaces (like typing a text message) and in more serious situations (like deciding who is more likely to commit crime).

Because these technologies can process lots of information and make complex tasks more efficient, AI presents huge opportunities for societal change. But who gets to decide what that change looks like and who it will affect? As we learn to deal with new technologies, we also have to learn how to deal with the challenges that surround them. AI, in particular, prompts two big questions for us as a public to consider:



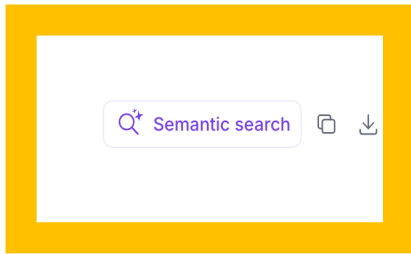
What does fairness look like when computers shape decision-making?



Who is creating... an we ensure that these



Saving 25 min



Expand All

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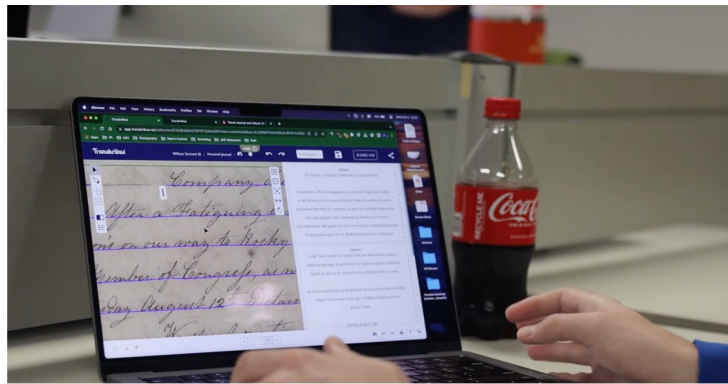
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INTERMEZZO #2

Stand up and walk over to an easel. Write down one or two problems that your department, College, or University are trying to address in the classroom irrespective of whether or not generative AI applications get involved? The goal here is to remember the core points of focus in our courses and to determine if and to what extent generative AI can help solve those problems.

A black and white photograph showing several hands raised in the air, suggesting a classroom or meeting setting. The hands are the central focus, with fingers spread. Overlaid on the hands is the word "QUESTIONS?" in a large, bold, white, sans-serif font. The background is blurred, showing what appears to be a classroom with desks and chairs.

QUESTIONS?