

Open Education Under Fascism

Jonathan A. Poritz

jonathan@poritz.net
poritz.net/jonathan



3 March 2025
Northeast OER Summit



This slide deck, except where otherwise indicated, is by [Jonathan Poritz](#) and is released under a [Creative Commons Attribution-ShareAlike 4.0 International License](#). This version: 03 Mar 2025 15:11CET
These slides, also in editable form, are available at poritz.net/jonathan/share/OEUFatNEOER/.

This just might do nobody any good

This just might do nobody any good. At the end of this discourse a few people may accuse this reporter of fouling his own comfortable nest, and your organization may be accused of having given hospitality to heretical and even dangerous thoughts. But I am persuaded that the elaborate structure of networks, advertising agencies and sponsors will not be shaken or altered. It is my desire, if not my duty, to try to talk to you journeymen with some candor about what is happening to radio and television in this generous and capacious land.

Edward R. Murrow's¹ *Wires and Lights in a Box* speech to the Radio-Television News Directors Association, 15 October 1958²

¹ Murrow was a reporter for CBS News whose *See It Now* show "criticized McCarthyism and the Red Scare, contributing, if not leading, to the political downfall of Senator Joseph McCarthy," in [Wikipedia's description](#).

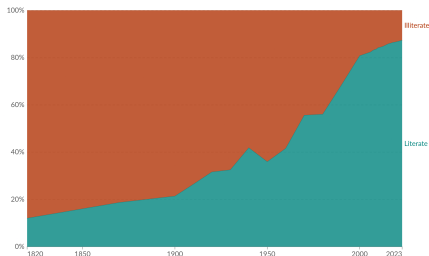
² You can read [the text](#), listen to [an audio recording of Murrow giving the speech](#), or watch [the actor David Strathairn deliver part of the speech](#) as he played Murrow in the surprisingly excellent 2005 movie "[Good night, and Good Luck](#)," directed by George Clooney. The RTDNA is now the [RTDNA](#).

Is education today an abject failure?

Maybe the answer is “no?”

Literate and illiterate world population

The share of adults aged 15 and older who can read and write a short, simple statement on their everyday life.



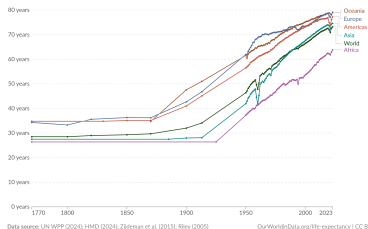
Data source: World Bank (2024); van Zanden, J. et al. (2014)

OurWorldinData.org/literacy | CC BY

4

Life expectancy

The period life expectancy¹ at birth, in a given year.



Data source: UN WFP (2024); HMD (2024); Zijdenman et al. (2015); Riley (2005)

OurWorldinData.org/life-expectancy | CC BY

1. Period life expectancy: Period life expectancy is a metric that summarizes death rates across all age groups in one particular year. For a given year, it represents the average lifespan for a hypothetical group of people, if they experienced the same age-specific death rates throughout their whole lives as the age-specific death rates seen in that particular year. Learn more in our articles: "Life expectancy" - "What does this actually mean?" and "Period versus cohort measures: what's the difference?"

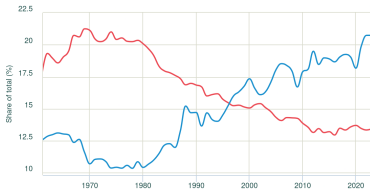
5

⁴ Literate and illiterate world population by Our World in Data was released under CC BY 4.0.

⁵ Life Expectancy by Our World in Data was released under CC BY 4.0.

Talking about inequality

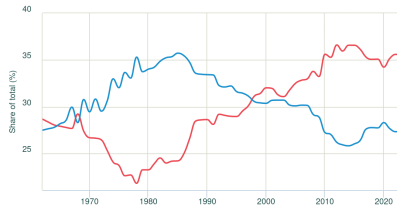
Income inequality, USA, 1962-2023



— Pre-tax national income | Bottom 50% | share | adults | equal split
— Pre-tax national income | Top 1% | share | adults | equal split
Graph provided by www.wid.world

6

Wealth inequality, USA, 1962-2023



— Net personal wealth | Top 1% | share | adults | equal split
— Net personal wealth | Middle 40% | share | adults | equal split
Graph provided by www.wid.world

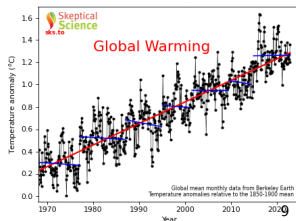
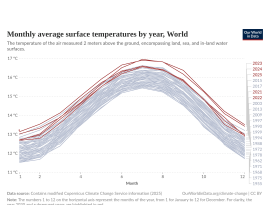
7

⁶ Income Inequality, USA 1962-2023 by World Inequality Database was released under CC BY 4.0.

⁷ Wealth inequality, USA, 1962-2023 by World Inequality Database was released under CC BY 4.0.

Results of educational failure

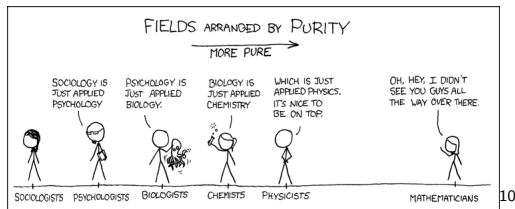
- Climate catastrophe
- Rejection of vaccines
- Rejection of the value of diversity, equity, inclusion, and ally
- “Nuclear war isn’t so bad” – Musk
- Demonization of migrants
- Barely disguised racism, sexism, anti-LGBTQI+ policies, colonialism, eugenics
- The abandonment of the liberal arts education
- (Neoliberal) contempt for the humanities
- STEM instruction producing an “elite” of arrogant tech-bros and masses of folks with enormous STEM anxiety



⁸ Monthly average surface temperatures by year, World by Our World in Data was released under CC BY 4.0.

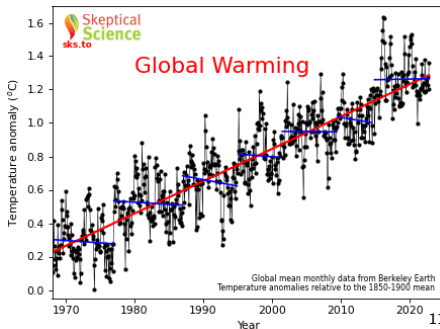
⁹ Escalator 2022 by Skeptical Science was released under CC BY-SA 4.0.

The toxicity of STEM education, for STEMmists and others



You have to ask *cui bono* when mathematicians and other “hard scientists” set themselves up as some kind of priests of intellectual purity and truth... and the answer is pretty obvious.

The short downward blue line segments show that these data are, in pieces, negatively correlated ... and yet the overall correlation is positive. That's called “Simpson's Paradox” by statisticians – *oooo, fancy!*



¹⁰ Purity by Randall Monroe was released under CC BY-NC 2.5.

¹¹ Escalator 2022 by Skeptical Science was released under CC BY-SA 4.0.

Let's try to do better education and critical thinking about AIInt

The extraordinary claims of the genAIInt hype cycle have been for utopia or apocalypse, a complete transformation of work and science and education, and, fundamentally, that some performance vs scale curve would continue on its merry climb as long as the investment funds kept coming. The evidence has been an *uncanny mountain range*.

We are often told that one of the troubles of making policy around AIInt is that the technology is moving so fast. **Nonsense**, it's actually moving quite slowly (there was *one* new idea in a computer science paper called [Attention is All You Need](#) in 2017, which is actually poorly understood in the small but perfectly understood in the large; all the haste of the AIInt industry has been fast-moving money and businesses.

Let me disagree with my esteemed colleagues and friends Maha Bali, Nate Angell, Eamon Costello, Martin Weller, and others, who have approached AIInt through metaphor. I have to think that they do this because somehow we believe that to handle the realities of mathematics and computer science bare-brained would somehow burn out all of our neurons and leave as as addled as a mad cow.

What *is* AI, without metaphors

The recent technical innovation which is used to justify the hype above is based on something called a **Large Language Model [LLM]** or **Generative Pre-trained Transformer [GPT]**.

LLMs consist of a data structure called a “neural network”¹² and two accompanying algorithms:

- one which processes (hundreds of) TB (or more) of *training data* - text and data usually copied from the internet (“scraped”) - to create (hundreds of) MB of values in the data structure (“model parameters”);
- another which uses the data structure to transform sequences of *input tokens* into sequences of *output tokens* in a way that maximizes the probability of the output given the input and the training data.

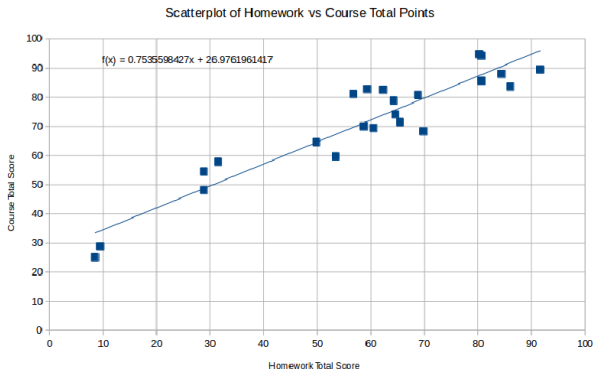
A “token” is a letter or word or image pixel, *etc.* Note the input tokens might be words in one language and the output words in another language, for machine translation, or outputs might be pixels, for image generation.

¹²in a very poor analogy with biology

In other words, a statistical model

Processing sample data to create parameters from which one can calculate output for new inputs is exactly what we call a *statistical model*.

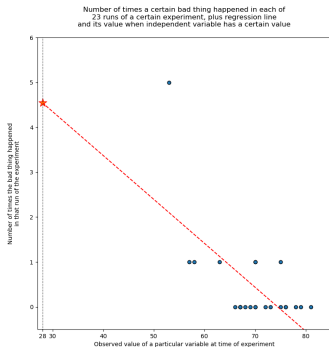
For example, you may have seen a statistical model called a “regression line.”



This *scatterplot* comes from an OER I wrote a few years ago. One calculates the coefficients of the equation of the line from the sample data and with this equation one can compute output values (“ $y = f(x)$ ”) from new input values (“ x ”).

Statistical models can do some wonderful things

Don't get me wrong, I love statistical models. They are very powerful. E.g.,



this one

might have prevented



Statistical models are not Skynet, nor do they have agency

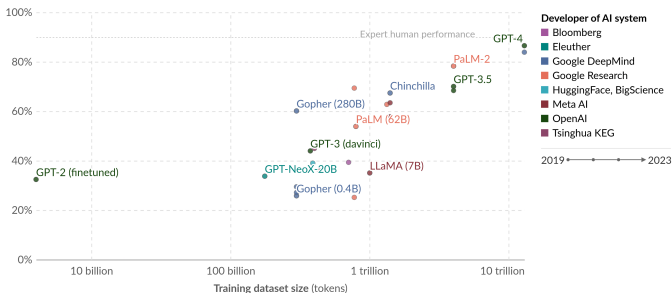
Every sentence that uses genAInt as the subject of a sentence with an active verb is *prima facie* ridiculous:

- When Google's genAInt-created search-results summary suggested to include a quarter of a cup of glue in a pizza recipe to prevent the cheese from slipping off when you pick up a slice, it was not “hallucinating.” Instead, it was outputting a statistically likely collection of tokens (words) in the context of its training data and the givens “pizza recipe” and “prevent slipping,”¹³
- An genAInt will never “start a nuclear war”: a statistical model has no agency, the very idea is ridiculous. A bad human actor who used hacking techniques and nuclear codes extracted by a clever choice of prompt from an LLM which was trained with a little too much information might launch a nuclear weapon, but that's pretty far from Skynet.
- An LLM cannot “summarize a scholarly article”: statistical models do not understand scholarly articles, that would be like saying that boats are good at swimming ... it's a context error. Although an LLM *might* assemble sequences of words which are statistically likely in the context of the sequence of words in the article, and that could be a useful output in particular situations.

¹³ Nate Angell and Anna Mills's “mirage” is much better than the widely-used “hallucination,” for the reasons mentioned here.

Another scatterplot: The famous “scaling law”

Artificial intelligence: Performance on knowledge tests vs. dataset size



Our World in Data

14

This hasn't been updated in a bit more than a year, in part because these performance scaling laws seem to be running into some sort of wall. See, e.g, Gary Marcus's [The new AI scaling law shell game - by Gary Marcus](#)

Nevertheless, the implied regression line here is taken to indicate exponential growth, and therefore an “AGI Singularity” predicted by some in 2025, by others in the next few years.

¹⁴ From [Our World in Data](#), released under [CC BY 4.0](#)

AGI, TESCREAL, and eugenics

That “AGI” stands for “Artificial General Intelligence,” for which there have been given various definitions by researchers which mostly amount to human or more-than-human levels of creativity, problem-solving, agency, autonomy, and ability to improve itself (“learn”) – basically, Deep Thought or HAL 9000 on a good day, and Skynet on a bad day.

Timnit Gebru and Émile Torres have placed the pursuit of AGI in the context of a group of ideologies they call “the TESCREAL bundle,” which are basically a technoutopia version of something like a Calvinist (chauvinist) eschatology with deep roots in eugenics. Read [their paper](#), it’s disgusting and important. [TESCREAL stands for “transhumanism, Extropianism, singularitarianism, cosmism, Rationalism, Effective Altruism, and longtermism,” all related ideologies which seem very influential for the current AI companies. For example, the firing and re-hiring of OpenAI CEO Sam Altman in 2023 seems to have revolved around competing interpretations of some application of Effective Altruism their work!]

Even to mention these issues may seem to be stooping to making an *ad hominem* argument. Maybe. But how do we balance the benefit of automated help writing or grading quiz problems in large lecture classes against empowering rich eugenicists? or the timeliness of the trains against a little fascism, as Italians had to figure out under Mussolini?

More terminology: dividing genAInt into different categories

Mostly one uses the term “Artificial Intelligence” today to talk about programs which have come about since LLMs/GPTs were invented – in opposition to “old-school AI” (which **did** try to encode meaning and not merely statistical patterns of tokens!).

I’m interested in drawing a distinction between situations where huge corpora of human creativity are compressed and the resulting GPT produces outputs which I think is *justifiable* and *useful*. I propose these terms:

- **translational genAInt** is where the informational content¹⁵ of the prompt is large or larger¹⁶ than that of the output.
- **decompressive genAInt** when the output is larger than the prompt (another term would be **plagiaristic genAInt**, because it is about decompressing the human creativity of the training corpora lossily compressed into the model parameters).

I could see translational genAInt as being more permissible under that idea that it constitutes a human making a derivative work of the prompt using a tool, with some idea of scholarly norms and IP law, both with regards to the prompt, coming into play. And I could see decompressive genAInt as owing more debt to the human creators of training corpus via some reasoning that even finely diced harm/responsibility, at scale, must have consequences.

¹⁵ Probably as measure by something like [Kolmogorov complexity](#)

¹⁶ This clearly needs some additional precision....

Questions about genAI that deserve answers

Whether you are subject or object of the AI hype cycle, consider questions like these:

- Do you care about the climate?
- Do you care about violating the fundamental academic value of giving credit?
- Are you happy giving more money and power to powerful and wealthy fascists?
- Have you actually seen extraordinary evidence of the extraordinary claims?
- Have you done your homework to persist doggedly in learning enough to be able to understand the technology regardless of how intimidating it is?
- Are you reasoning about AI as it really is or via some weak and biased metaphor?
- Do you care that institutionalizing AI devalues human creativity and labor?¹⁷
- Are you OK with journalists, educators, and other creatives being fired en masse?
- Is a proposed AI “solution” really something that could be done (and done better!) by humans, if politics and economics were really supporting human flourishing rather than the further concentration of wealth and power?
- Is a proposed AI “solution” actually itself a little slice of dystopia, if you look at it without the starry eyes of a tech enthusiast?

¹⁷ by remixing it at scale and selling it without acknowledging or compensating the creative and laboring humans

Specific proposal for policy genAIInt

It seems I am proposing a specific response to genAIInt in (higher) ed:

- Teach math better, so no one need every draw back in fear from a beautiful statistical plot.
- Teach computer science better, so that we can reason about utopian and apocalyptic pronouncements from parties whose billions of dollars are otherwise blunting the edge of our critical thinking.
- Teach the liberal arts to technologists, so they know the history, sociology, and arts which swirl around the background of their toys.
- Come to think of it, teach all of the above to everyone.
- Maybe small doses of translation genAIInt are justified and not damaging, for a11y and pedagogical innovation.

To which I would love to add the beautiful dream:

- Fund research better: more public money for good research which might increase the common good, and not just shareholder value of big tech.
- And of course publicly funded research needs to be openly published and free of other chains of intellectual property.

The big question again (“open” version)

Is open education today an abject failure?

I am sad and angry to watch as our labor, our care, our work, our schools, our communities, our planet are exploited to benefit a small and greedy plutocracy.

I am sending you this message from tomorrow. It's a tomorrow with huge cost savings from OER, and so many educators doing amazing pedagogical work for and with their students. But everything around you is rubble and you and the people you care for are about to be buried.

For some of us, it is already tomorrow.

– Robin DeRosa

Against Hope: OpenEd24

(ARR ©... WTF? used under fair use)

Open Education Under Fascism



Another hero of mine



The Italian anarchist Antonio Gramsci suggested we should have
*"Pessimism of the spirit;
optimism of the will."*

Woody Guthrie wrote a song
"All you fascists bound to lose,"

18

A logo of optimistic will

It becomes much harder to “do good quietly in our offices, AACing OERs,” as I used to say to my colleagues was what we couldn’t be prevented from doing.

We must:

- *Support each other*
- *Support our students*
- *Think critically*
- *Do not engage in anticipatory obedience*
- *Organize!*
- *Engage in small and large acts of resistance and opposition, if safe*
- *Learn from our own mistakes*
- *Dance and eat good food*



A few references

Books:

- [The AI Con: How to Fight Big Tech's Hype and Create the Future We Want](#) by Emily M. Bender and Alex Hanna, forthcoming
- [AI Snake Oil: What Artificial Intelligence Can Do, What It Can't, and How to Tell the Difference](#) by Arvind Narayanan and Sayash Kapoor, Princeton University Press (2024)
- [Unmasking AI: My Mission to Protect What Is Human in a World of Machines](#) by Joy Buolamwini, Random House (2023)
- [Blood in the Machine: The Origins of the Rebellion Against Big Tech](#), Brian Merchant, Little, Brown and Company (2023)
- [Race After Technology: Abolitionist Tools for the New Jim Code](#), Ruha Benjamin, Polity (2019)
- [Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy](#), Cathy O'Neil, Penguin Random House (2016)
- [Algorithms of Oppression: How Search Engines Reinforce Racism](#), Safiya Noble, NYU Press (2018)
- [Resisting AI: An Anti-fascist Approach to Artificial Intelligence](#), Dan McQuillan, Bristol University Press (2022)

Articles:

- [Data centers drain Ireland's power grid, add their own fossil fuel-powered generators – Pivot to AI](#)
- [OpenAI says it's "impossible" to create useful AI models without copyrighted material](#)
- [Zuckerberg approved Meta's use of 'pirated' books to train AI models, authors claim – Sarah Silverman and others file court case claiming CEO approved use of dataset despite warnings](#)
- [Knowing less about AI makes people more open to having it in their lives – new research](#)
- [Ex-Google CEO: AI startups can steal IP, hire lawyers to "clean up the mess" — The Verge](#)
- [What can AI do for affordable housing in emerging markets?](#)
- [AI is Making Housing Discrimination Easier Than Ever Before — Kreisman Initiative for Housing Law & Policy at UChicago](#)
- [AI has the potential to 'cure all diseases', says DeepMind chief](#)
- [Sorry, AI won't "fix" climate change – OpenAI's Sam Altman claims AI will deliver an "Intelligence Age," but tech breakthroughs alone can't solve global warming.](#)
- [Former Google CEO says climate goals are not meetable, so we might as well drop climate conservation — unshackle AI companies so AI can solve global warming](#)
- [\[2412.06288\] The Unpaid Toll: Quantifying the Public Health Impact of AI](#)
- [Microsoft and OpenAI have a financial definition of AGI: Report — TechCrunch](#)
- [The Impact of Generative AI on Critical Thinking: Self-Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers](#)

Contact Info

Email: jonathan@poritz.net

Fediverse: [@poritzj@mastodon.social](https://mastodon.social/@poritzj)

These slides:

poritz.net/j/share/OEUFatNEOER.pdf

and all files for remix:

poritz.net/j/share/OEUFatNEOER/

Or else use —————→

to go to my homepage, where you can follow
links to all of my shared materials.



Shameless promotion:

Look for new (started 20 January 2025) weekly podcast

**The Revolution Will Not Be Televised:
The Theory and Practice of Resistance**

jointly by [Kathy Giuffre](#) and [JP](#)