The Last Generation of Humans Who Will Ever Have to Think

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My daughter was born in 2024.

She will never know what it feels like to stare at a blank page. She will never experience the friction of not knowing. She will never sit with a hard problem long enough for the discomfort to force an original thought out of her brain.

And that is either the greatest gift in human history — or the greatest loss.

We are about to find out.

I write about AI every day. I build with it. I teach people how to use it. I believe in it more than most people reading this.

But there is one question I cannot stop thinking about — one that nobody in the AI industry wants to answer honestly:

What happens to the human brain when it never has to struggle?

Not in fifty years. Not hypothetically. Right now. In classrooms, in homes, on phones that children are using this morning.

The data is coming in. And it is not good.

The brain is a muscle. We just stopped exercising it

Here is a biological fact that changes how you think about AI.

Your brain builds new neural pathways through struggle. The neuroscience term is *synaptic strengthening* — when you work through a hard problem, when you sit with uncertainty, when you fail and try again, your neurons form stronger connections. The discomfort of not knowing the answer is not a bug. It is the mechanism by which human cognition develops.

Cognitive offloading — the scientific term for letting an external tool do your thinking — works exactly like muscle atrophy. Stop lifting weights, your muscles shrink. Stop solving problems, your problem-solving circuitry weakens.

This is not speculation. A landmark study published in *Nature* found that GPS users experienced dose-dependent spatial memory decline and measurable shrinkage of the hippocampus — the brain region responsible for navigation and memory formation. The more they relied on GPS, the worse their brains got at spatial reasoning.

Conversely, researchers at UCLA found that London cab drivers — who spend years memorizing the city's 25,000 streets — had significantly larger hippocampi than the general population. The brain literally grew because it was forced to work.

GPS offloaded navigation. The hippocampus shrank.

AI is offloading everything else.

The data that should keep every parent awake

In November 2025, Harvard's Gazette published a study that found ChatGPT users showed the **least cognitive activity and the lowest creativity scores** compared to users of other AI tools and non-AI control groups. The conclusion was blunt: the easier AI makes thinking, the less thinking happens.

MIT Media Lab researchers coined a phrase for it: **cognitive atrophy.** Not cognitive offloading. Atrophy. The same word we use for muscles that waste away from disuse.

Carnegie Mellon's research identified the mechanism: *automation bias*. People stop checking whether the AI is right. They stop reasoning through the answer independently. They accept the first output and move on. The thinking muscle goes slack.

But that is adults. Adults who already built their neural architecture. Adults who learned to think before AI existed.

The question nobody is asking loudly enough: what happens to children who never build those circuits in the first place?

In January 2026, the Brookings Institution published a report warning that AI is causing a "great unwiring" of students' brains. Their researchers called frictionless AI the "fast food of education" — satisfying in the moment, devastating over time.

By February 2026, Fortune was running headlines that read: *"Students can't reason. They can't think. They can't solve problems."* These were not quotes from op-ed columnists. They

were quotes from teachers. Teachers describing what they are seeing happen in real time.

By March 2026, RAND Corporation released data showing that AI homework use had risen from 48% to 62% among students in under a year. The most striking finding: 67% of students themselves said AI was harming their critical thinking skills.

The students know. The students know and they are using it anyway.

NPR interviewed a student who said it out loud: *"It's easy. You don't need to use your brain."*

That sentence should be carved into the wall of every school board office in the country.

The generation that never learns to think

Here is the part that the AI optimists do not want to sit with.

In March 2026, *Psychology Today* published what may be the most important finding on this topic. Researchers found that ages 17 to 25 — the demographic with the highest AI reliance — now show the **lowest critical thinking scores** of any age group measured.

Read that again. The youngest adults — the ones who grew up with AI — are the worst at thinking independently. The researchers drew a distinction that should define the entire conversation:

"Adults lose skills to AI. Children never build them."

There is a fundamental difference between a surgeon who retires and a child who never learns anatomy. The surgeon had the knowledge and lost it. The child never acquired the capacity in the first place. One is decline. The other is absence.

Pew Research and VICE reported that 54% of teenagers now use AI for homework. 10% use it for every single assignment. Among low-income and minority students — the ones with the least access to enrichment outside the classroom — the dependence is highest.

This is not evenly distributed, either. AI was supposed to be the great equalizer. It is becoming the great stratifier. The children whose parents can afford tutors, Montessori programs, and deliberate screen-time limits will learn to think in spite of AI. The children who cannot — the ones in underfunded schools with overworked teachers and a phone as their primary learning tool — will have their only cognitive training ground replaced by a machine that does the training for them.

In April 2026, the *Washington Times* published an editorial with a headline that said what the data has been whispering for months: *"As AI gets smarter, our children get dumber."*

Harsh. And supported by every data point we have.

The uncomfortable counterargument

I need to be honest with you, because the people writing doomer articles rarely are.

There is a version of this story where AI is the greatest gift we ever

give our children.

A Harvard study found that AI tutors doubled learning gains in a physics class compared to traditional active learning. Students who worked with an AI tutor learned faster, retained more, and reported higher engagement.

In parts of the developing world where a single teacher serves 80 students in a concrete room with no textbooks, AI is not replacing education. It is providing it for the first time. Personalized instruction at scale. For free. On a phone.

The counterargument is real: AI used as a **coach** can make us stronger. AI used as a **crutch** makes us weaker.

A personal trainer who pushes you to lift heavier makes you stronger. A personal trainer who lifts the weights for you while you watch makes you weaker. The tool is identical. The relationship with the tool is everything.

And here is the problem: we are not teaching anyone — not children, not adults, not teachers, not parents — how to build a coaching relationship with AI. We handed the entire species the most powerful cognitive tool ever created and said, *"Figure it out."*

Most people figured out the crutch.

The cognitive class divide

Here is where this stops being a technology story and becomes a civilization story.

World Psychiatry published a paper describing the internet as a

"supernormal stimulus" — a stimulus so powerful it makes all other options feel redundant. AI is that principle on steroids. Why wrestle with a math problem for twenty minutes when the answer is one prompt away? Why draft three versions of an essay when the first AI output is "good enough"?

The result is a sorting mechanism that will define the next fifty years:

On one side, people who use AI to eliminate cognitive friction.

They let AI think for them. They consume AI-processed information. They make AI-suggested decisions. They outsource judgment. Their cognitive capacity decreases over time, not because they are unintelligent, but because they are unstressed. They are the equivalent of a person who takes an elevator every day and wonders why they cannot climb stairs.

On the other side, people who use AI to amplify cognitive friction.

They use AI to expose themselves to harder problems. They use AI to challenge their assumptions. They use AI as a sparring partner, not a ghostwriter. They think *more* because of AI, not less. Their cognitive capacity increases over time because they are using the tool to stress-test their own thinking.

The gap between these two groups will be the defining inequality of the 21st century.

Not wealth. Not access. Not education. **Cognition.**

The ability to think independently — to reason through ambiguity,

to hold contradictory ideas without collapsing, to sit with not-knowing long enough to produce an original thought — will become the rarest and most valuable human skill on Earth. Not because it is hard to develop. Because most people will never be forced to develop it.

What we lose when we stop struggling

The defenders of unrestricted AI access will tell you that we have seen this before. Calculators. Spell check. Google. Wikipedia. Every time a new tool offloaded a cognitive task, people panicked, doomsayers predicted civilizational collapse, and society adapted. We survived the calculator. We survived Google. We will survive AI.
They are right. And they are wrong.

Calculators offloaded arithmetic. Spell check offloaded orthography. Google offloaded factual recall. These are *narrow* cognitive functions. Important, but narrow.

AI is offloading **reasoning itself.** The capacity to analyze. To synthesize. To evaluate. To create. Not one cognitive function. The entire stack. The thing that makes human cognition human.

When you offload arithmetic, you lose the ability to multiply in your head. Inconvenient.

When you offload reasoning, you lose the ability to know whether someone is lying to you. Dangerous.

A generation that cannot reason independently is a generation that cannot evaluate AI's own outputs. They cannot tell when the AI is wrong. They cannot tell when the AI is biased. They cannot tell when the AI is being used to manipulate them. They accept.

They do not interrogate.

That is not a workforce problem. That is a democracy problem.

An electorate that cannot reason is an electorate that cannot self-govern. A consumer base that cannot evaluate is a consumer base that can be endlessly manipulated. A society that cannot think is a society that will be run by the few who still can — and by the machines they control.

The question that will define the next decade

I do not have a clean answer for you. Anyone who does is selling something.

What I have is the question, and I believe it is the most important question in AI that nobody is asking at the board meetings, the investor calls, or the product launches:

How do we give the next generation access to the most powerful cognitive tool in history without destroying the cognitive capacity it was meant to augment?

Because right now, we are doing both simultaneously. We are handing children a tool that can make them superhuman and watching it make them dependent. We are building a generation that can produce anything and evaluate nothing.

My daughter will grow up in a world where AI writes her essays, plans her schedule, answers her questions, navigates her cities, manages her finances, filters her information, and curates her reality. She will never have to struggle the way I did. She will never have to stare at a blank page for thirty minutes before the first sentence comes.

And part of me thinks: good. That struggle was inefficient. That friction was painful. Why would I wish pain on my own child?

But another part of me knows — from the Harvard data, the MIT research, the Nature studies, the RAND numbers, the teachers' testimonies, and the look on a student's face when they say *"You don't need to use your brain"* — that the struggle was never the cost. **The struggle was the point.**

The friction of not knowing is where knowledge is born. The pain of a blank page is where creativity is born. The discomfort of being wrong is where judgment is born.

Remove the friction, and you do not get a smarter human. You get a smoother experience wrapped around a hollowing mind.

The last generation

We are the last generation of humans who were forced to think without AI.

We are the last generation that learned to navigate without GPS, remember phone numbers without contacts, write without autocomplete, research without search engines that hand you the answer, and solve problems without a chatbot that does it faster.

Every generation after us will have a choice our generation never faced: whether to develop their own cognitive abilities or outsource them entirely.

Most will outsource.

Not because they are lazy. Because the alternative — choosing

struggle when ease is available — is one of the hardest decisions a human being can make. And nobody is teaching them to make it.

The AI companies are not going to solve this. Their incentive is engagement, not cognitive development. The schools are not going to solve this. They are banning AI or surrendering to it, with almost nothing in between. The governments are not going to solve this. They are still arguing about content moderation.

If this gets solved, it gets solved by people like you. People who understand AI deeply enough to see both its power and its cost. People who use AI every day and still choose to do their own thinking. People who can teach the next generation not to reject the tool, but to *master their relationship* with it.

The question is not whether AI will change how humans think.

It already has.

The question is whether we will be the last generation that noticed.