NEGATION

Resolved: In the United States, the benefits of the use of generative artificial intelligence in education outweigh the harms.

Framework: Effectiveness

First – You should be skeptical of AI's effectiveness – almost no research supports it, and those studies which do are corporate-funded and have methodological flaws.

Williamson concludes (Ben Williamson is a Chancellor's Fellow at the Centre for Research in Digital Education and the Edinburgh Futures Institute at the University of Edinburgh. Alex Molnar is a Research Professor at the University of Colorado Boulder. Faith Boninger is NEPC's Publications Manager and Co-Director of NEPC's Commercialism in Education Research Unit and holds a PhD from Ohio State University. Williamson, B. Molnar, A., & Boninger, F. (2024). "Time for a pause: Without effective public oversight, AI in schools will do more harm than good." Boulder, CO: National Education Policy Center. http://nepc.colorado.edu/publication/ai)

AI in Education Since the 1960s, scientists and technology companies have explored ways to apply AI in education. AI in Education (AIED) is a major field of research and development.55 The AI applications being promoted to schools today were preceded in the 1960s and 1970s by "Intelligent Tutoring Systems" and "Computer Assisted Instruction" systems, 56 Since the early 2000s, researchers have gathered, stored, and analyzed massive quantities of educational data with the intention of informing institutional and instructional strategies.57 These approaches are now routinely considered synonymous with AIED, and have also been rapidly commercialized by the ed tech industry.58 Most AIED applications employ big data and machine learning to produce various predictions and automated actions-such as predicting that a student may fail an assessment or creating a "personalized" intervention intended to produce a desired learning outcome, 59 Research on AI in education has developed and tested various approaches and reported modest effectiveness on measurable learning achievement—performance on quizzes and tests, for example 60 Current excitement about its potential is motivating both public and private sources to generously fund researchers trying to find ways to improve learning outcomes using AI.61 However, the assumption that AI in education can be understood primarily as a technical matter best addressed by scientists and companies is increasingly challenged by researchers who argue that a narrowly technical perspective may lead to both bad policy and bad pedagogy 62 They point out that AI exists in social, economic, and political contexts that shape its development and uses.63 How AI is adopted by different educational stakeholders (including AIED researchers, ed tech entrepreneurs, corporate leaders, and policymakers) will have significant implications for its use in schools.64 The fact that entrepreneurs and corporations funded by venture capital and private equity are rushing to promote AI in education will inevitably narrow possible applications to those preferred by stakeholders with financial interests. 65 Small-scale ed tech start-ups and Big Tech corporations alike see AI as an opportunity, 66 leveraging popular hype to market such education products as personalized learning programs, automated lesson plan generators, and AI tutoring chatbots, called "tutorbots," to schools.67 Compelling evidence for the effectiveness of tutorbots in education remains scarce, 68 though this does not prevent entrepreneurs and researchers from proclaiming their usefulness. 69 Policymakers routinely invoke AI rhetorically, calling on schools to embark on "digital transformation," 70 often with little attention to social, economic, legal, or ethical implications, 71 These calls dovetail with existing political priorities on performance monitoring, account, ability, efficiency, and effectiveness—all of which require extensive collection of data about students.72 Although systems of test-based accountability have existed in schools since the 1990s,73 they will expand and intensify as AI is used to continuously monitor and assess student learning,74 As a result, commercial AI systems will increasingly serve as private actors in public education as schools, districts, and governments relinquish key tasks, functions, and responsibilities to third-party technology vendors. 75 Existing and potential uses of AI in education are not merely innovative technical add-ons to teaching and learning practices or engineering solutions to schools' existing pedagogic and administrative problems. Rather, AI in education has been spurred by multiple forces: longstanding efforts by scientists to measure, predict, and support learning processes and outcomes; commercial aspirations to profit from selling products to schools; and the political objective of being perceived as having improved school efficiency and accountability while cutting costs. As things currently stand, these ambitions have begun to coalesce into a vision of AI-driven schooling in which commercial products assess student learning, automate teaching, and make decisions about student progress. Inadequate Research Base¶ Despite the extensive research in the field of AI in Education (AIED) and the burgeoning research on machine learning, there is remarkably little evidence to support claims of AI's ability to "transform" schools 76 while AIED researchers have produced many research findings, their studies tend to focus primarily on measures of individual student engagement and performance (assessed by standardized achievements tests), or on "engineering" problems such as designing increasingly sophisticated algorithms and enhancing machine learning effectiveness.77 Overall, AIED studies tend to find ambiguous results, lack independence and scale, and fail to address more fundamental questions about educational goals 78 AIED research therefore often promotes a view of education transformation as improving measurable individual outcomes despite very limited evidence that AI "works." 79 In effect, such studies reduce well-researched and nuanced theories of how humans learn to whatever can be made into a mathematical model (however complex), and they ignore the contested terrain of exactly which goals and curriculum public schools should embrace. 80 Moreover, claims that AI can solve major educational problems—such as lack of qualified teachers, student underachievement, and educational inequalities—rely to a considerable extent on conjecture rather than evidence, 81 Even more problematic are the serious methodological flaws in machine learning research, that call into question the validity of hundreds of studies, 82 The nature of the flaws, in general, leads toward "over optimism" with respect to the usefulness and value of machine learning applications in a variety of fields. 83 These findings are particularly concerning because they call into question not only commercial marketing claims, but also the scientific evidence base supporting the widespread implementation of AI systems in all sectors,84 including education. Finally, because of the very high computing costs associated with running machine learning models, most

researchers have to rely on systems from the dominant AI companies themselves in order to conduct research85—the same corporations that often fund AI studies. 86 This makes research dependent on corporate resources, funds, and business practices, giving AI firms considerable influence over not only AI development, but also the academic research that depends on their systems. 87 It also compromises an important part of the research process, which is reproducing findings to verify their validity.

When a company changes or stops supporting a particular model, researchers cannot reproduce studies conducted earlier. 88 This renders the research base unstable and unverifiable—and thus unusable as a basis for assessing subsequent models.

The entire AI industry is a bubble. The "inevitable" rise of AI is an industry catchphrase which is rapidly falling apart to scrutiny.

Widder & Hicks 24 (David Gray Widder is a Postdoctoral Fellow at the Digital Life Initiative at Cornell Tech, and earned his PhD from the School of Computer Science at Carnegie Mellon University., Mar Hicks is an Associate Professor in data science at UVA, and was Associate Professor of History of Technology at Illinois Institute of Technology in Chicago, and was a fellow at the National Humanities Center in 2018-2019., "Watching the Generative AI Hype Bubble Deflate – Ash Center", Harvard Kennedy School Ash Center,

https://ash.harvard.edu/resources/watching-the-generative-ai-hype-bubble-deflate/, 11-20-2024, DOA: 2-17-2025)

Only a few short months ago, generative AI was sold to us as inevitable by AI company leaders, their partners, and venture capitalists, Certain media outlets promoted these claims, fueling online discourse about what each new beta release could accomplish with a few simple prompts. As AI became a viral sensation, every business tried to become an AI business. Some even added "AI" to their names to juice their stock prices, 1 and companies that mentioned "AI" in their earnings calls saw similar increases, 2 Investors and consultants urged businesses not to get left behind, Morgan Stanley positioned AI as key to a \$6 trillion opportunity.3 McKinsey hailed generative AI as "the next productivity frontier" and estimated \$2.6 to 4.4 trillion gains, 4 comparable to the annual GDP of the United Kingdom or all the world's agricultural production. 5 6 Conveniently, McKinsey also offers consulting services to help businesses "create unimagined opportunities in a constantly changing world." 7 Readers of this piece can likely recall being exhorted by news media or their own industry leaders to "learn AI" while encountering targeted ads hawking AI "boot camps." While some have long been wise to the hype, 8 9 10 11 global financial institutions and venture capitalists are now beginning to ask if generative Al is overhyped. 12 In this essay, we argue that even as the generative AI hype bubble slowly deflates, its harmful effects will last; carbon can't be put back in the ground, workers continue to face AI's disciplining pressures, and the poisonous effect on our information commons will be hard to undo. Historical Hype Cycles in the Digital Economy Attempts to present AI as desirable, inevitable, and as a more stable concept than it actually is follow well-worn historical patterns. 13 A key strategy for a technology to gain market share and buy-in is to present it as an inevitable and necessary part of future infrastructure, encouraging the development of new, anticipatory infrastructures around it. From the early history of automobiles and railroads to the rise of electricity and computers, this dynamic has played a significant role. All these technologies required major infrastructure investments — roads, tracks, electrical grids, and workflow changes — to become functional and dominant. None were inevitable, though they may appear so in retrospect. 14 15 16 17 The well-known phrase "nobody ever got fired for buying IBM" is a good, if partial, historical analogue to the current feeding frenzy around AI. IBM, while expensive, was a recognized leader in automating workplaces, ostensibly to the advantage of those corporations. IBM famously re-engineered the environments where its systems were installed, ensuring that office infrastructures and workflows were optimally reconfigured to fit its computers, rather than the other way around. Similarly, AI corporations have repeatedly claimed that we are in a new age of not just adoption but of proactive adaptation to their technology. Ironically, in AI waves past, IBM itself over-promised and under-delivered; some described their "Watson AI" product as a "mismatch" for the health care context it was sold for, while others described it as "dangerous." 18 Time and again, AI has been crowned as an inevitable "advance" despite its many problems and shortcomings: built-in biases, inaccurate results, privacy and intellectual property violations, and voracious energy use. Nevertheless, in the media and — early on at least — among investors and corporations seeking to profit, AI has been publicly presented as unstoppable. 19 20 21 This was a key form of rhetoric came from those eager to pave the way for a new set of heavily funded technologies; it was never a statement of fact about the technology's robustness, utility, or even its likely future utility. Rather, it reflects a standard stage in the development of many technologies, where a technology's manufacturers, boosters, and investors attempt to make it indispensable by integrating it, often prematurely, into existing infrastructures and workflows, counting on this entanglement to "save a spot" for the technology to be more fully

integrated in the future. The more far-reaching this early integration, the more difficult it will be to disentangle or roll back the attendant changes—meaning that even broken or substandard technologies stand a better change of becoming entrenched.22 In the case of AI, however, as with many other recent technology booms or boomlets (from blockchain to the metaverse to clunky VR goggles23 24), this stage was also accompanied by severe criticism of both the rhetorical positioning of the technology as indispensable and of the technology's current and potential states. Historically, this form of critique is an important stage of technological development, offering consumers, users, and potential users a chance to alter or improve upon the technology by challenging designers' assumptions before the "black box" of the technology is closed.25 It also offers a small and sometimes unlikely — but not impossible — window for partial or full rejection of the technology. Deflating the Generative AI Bubble While talk of a bubble has simmered beneath the surface while the money faucet continues to flow,26 we observe a recent inflection point. Interlocutors are beginning to sound the alarm that AI is overvalued. The perception that AI is a bubble, rather than a gold rush, is making its way into wider discourse with increasing frequency and strength. The more industry bosses protest that it's not a bubble,27 the more people have begun to look twice. For instance, users and artists slammed Adobe for ambiguous statements about using customers' creative work to train generative AI, forcing the company to later clarify that it would only do so in specific circumstances. At the same time, the explicit promise of not using customer data for AI training has started to become a selling point for others, with a rival positioning their product as "not a trick to access your media for AI training." 28 Another company boasted a "100% LLM [large-language model]-Free" product, spotlighting that it "never present[s] chatbot[s] that act human or imitate human experts."29 Even major players like Amazon and Google have attempted to lower business expectations for generative AI, recognizing its expense, accuracy issues, and as yet uncertain value proposition. 30 Nonetheless, they have done so in ways that attempt to preserve the hype surrounding AI, which will likely remain profitable for their cloud businesses. It's not just technology companies questioning something they initially framed as inevitable. Recently, venture capital firm Sequoia Capital said that "the AI bubble is reaching a tipping point"31 after failing to find a satisfactory answer to a question they posed last year: "Where is all the revenue?"32 Similarly, in Goldman Sachs' recent report, "Gen AI: too much spend, too little benefit?",33 their global head of equity research stated, "AI technology is exceptionally expensive, and to justify those costs, the technology must be able to solve complex problems, which it isn't designed to do." Still, the report tellingly notes that even if AI doesn't "deliver on its promise," it may still generate investor returns, as "bubbles take a long time to burst." In short, financial experts are pointing out that capital expenditures on things like graphics cards or cloud compute have not been met by commensurate revenue, nor does there seem to be a clear pathway to remedy this. This shift is a recognizable stage in which a product and its promoters do not suffer swift devaluation but begin to lose their top spots on the NASDAQ and other major exchanges. Why is this happening? Technically, large-language models (LLMs) continue to produce erroneous but confident text ("hallucinations") because they are inherently probabilistic machines, and no clear fixes exist because this is a fundamental feature of how the technology works.34 In many cases, LLMs fail to automate the labor that CEOs confidently claimed they could, and instead often decrease employee productivity 35 Economically, interest rates have risen, so "easy money" is no longer available to fund boosters' loftiest and horrifically expensive generative AI dreams 36 Meanwhile, federal regulators have intensified their scrutiny, even as they struggle to reign in social media platforms. FTC chair Lina Khan has said, "There is no AI exemption to the laws on the books," encouraging regulators to apply standard regulatory tools to AL 37 Legally, after misappropriating or allegedly stealing much of their training data during early generative AI development, companies now face lawsuits and must pay for their inputs 38 Public discourse is catching up too. We were promised that AI would automate tedious tasks, freeing people for more fulfilling work. Increasingly, users recognize that these technologies are built to "do my art and writing so that I can do my laundry and dishes," in the words of one user, rather than the reverse, 39 Hype's Hammful Effects Are Not Easily Reversed While critics of any technology bubble may feel vindicated by seeing it pop — and when stock markets and the broader world catch up with their gimlet-eyed early critiques — those who have been questioning the AI hype also know that the deflation, or even popping, of the budoes not undo the harm already caused. Hype has material and often harmful effects in the real world. The ephemerality of these technologies is grounded in real-world resources. bodies, and lives, reminiscent of the destructive industrial practices of past ages. Decades of regulation were required to roll back the environmental and public health harms of technologies we no longer use, from short-lived ones like radium to longer-lived ones like leaded gasoline 40 41 Even ephemeral phenomena can have long-lasting negative effects. The hype around AI has already impacted climate goals in the United States, plans to retire polluting coal power plants have slowed by 40%, with politicians and industry lobbyists citing the need to win the "AI war." 42 Microsoft, which planned to be carbon negative by 2030.43 walked back that goal after its 2023 emissions were 30% higher than 2020.44 Brad Smith, its president, said that this "moonshot" goal was made before the "explosion in artificial intelligence," and now "the moon is five times as far away," with

C1: Individual Skills

Employing ChatGPT in information searches degrades quality and critical thinking. It makes students less engaged and eliminates nuance.

OMF 24, foundation dedicated to promoting critical thinking (The Open Minds Foun- dation, 10-30-2024, "AI Eases Our Mental Load at the Expense of Critical Thinking," Psychology Today, <a href="https://www.psychologytoday.com/us/blog/the-art-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critical-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/202410/ai-eases-our-mental-dat-thinking/2024

A new study of students at a German university has found that employing **ChatGPT** in the search for information makes the work easier and reduces mental load, but it **comes at the expense of** quality arguments, grades, and **critical**

thinking. Ultimately, using it created superficial assignment results. The study was established specifically to measure both the cognitive load of students, and the quality and diversity of their arguments. It split students into two groups: those who used AI, and those who used traditional search methods, and tasked them with researching information about the safety of sun cream for their fictional friend "Paul." Students were asked to draw conclusions and give advice to Paul, who had concerns over the safety of some ingredients. The study found that: Students

using AI (large language models - LLM) had a lower cognitive load and less stress There was no significant difference between the diversity of their arguments, suggesting that AI does not specifically lead to homogenous conclusions Students that use AI have weaker reasoning in their arguments, likely because of lower engagement with the content and significantly reduced critical thinking. The ultimate conclusion was that use of AI can help improve student experience because it provides direct answers rather than needing a student to draw their own conclusions,

but it currently comes at the cost of **deep engagement and high-quality learning**, with recommendation that the study be extended beyond the original pool of 91 students. What's more, the study did not provide scope for evaluating the quality of their LLM queries, which could – in other studies – lead to misleading or misinformed answers. The study highlights one of the key concerns over AI, in that individuals that default to using it may lose skills that are essential in recognising how accurate information is a whether the information could be being used to intentionally mislead (disinformation). Otherwise known as critical thinking skills, the **pursuit of knowledge and**

accuracy is essential in navigating the world of ever-increasing data points, and the flood of infor- mation we are receiving from real-world encounters, social media feeds, news engines, magazines, broadcast, and other forms of digital medi. At offers a service of immediacy while aggregating multiple sources, but often loses or eliminates the nuance of that information and the opportunity for depth of learning. This is particularly important as highlighted by Rainie and colleagues, 2019, given that a large majority of participants from an American study (81 percent) report they rely on their own web research over friends and family (43 percent) or professional experts (31 percent) when gathering information before making an important decision. "While LLMs like ChatGPT offer an efficient way to reduce intrinsic and extraneous cognitive load, they may not always facilitate the deep learning necessary for complex decision-making tasks. Traditional search engines, by necessitating more active engage- ment, may promote a higher quality of learning, underscoring the need for educational practices that encourage critical engagement with diverse information sources," study authors concluded.

Impact Critical thinking is essential to combat fake news and extremism, BUT requires constant practice and effort.

OMF 24, foundation dedicated to promoting critical thinking (The Open Minds Foun- dation, 10-30-2024, "AI Eases Our Mental Load at the Expense of Critical Thinking," Psychology

Today, https://www.psychologytoday.com/us/blog/the-art-of-critical-thinking/202410/ai-eases-our-mental-load-at-the-expense-of-critica) We know that the practice of critical thinking is an essential one in mentally inoculating us to the effects of misinformation and disinformation, but it is also a skill that takes continuous practice, significant effort, and has an ongoing effect on mental loads. It is not a stretch therefore to assume that a significant contributing factor to why critical thinking rates are so low, is that it requires a lot of mental effort, and therefore we find it boring, unpleasant, or a task to be avoided. Critical thinking is the simplest approach to tackling fake news, and fake news is so prevalent specifically because of the lack of critical thinking. What's more, the conse-quences of fake news are more and more dangerous, from manipulated voting to mis-leading health information,

hate crimes to political extremism, all directly being fuelled by shares on social media, and the growing presence of digital content. Fake news is so dangerous that the World Economic Forum

has listed misinformation/disinformation as the most severe global threat to the next two years, and the fifth most severe for the next decade, behind only climate- and geo-political threats. The Digital News Publishers Association (DNPA) has highlighted that 50 percent of information on the internet is not true or verified, which according to the Pew Research Centre Study is because of a habit of "othering" responsibility to social media platforms or new outlets, rather than taking responsibility ourselves. What is very clear is that critical thinking is an essential skill, and we need to continue practicing it regardless of cognitive fatigue or feelings of discomfort. It is the best and arguably only defence we have against fake news and we should therefore be cautious when employing AI queries for tasks that require more than surface-deep research.

Using AI creates illusions of understanding and hinders skill development.

Macnamara et al. 24, cognitive psychologist, currently serving as an associate professor in the Department of Psychological Sciences at Case Western Reserve University (Brooke N. Mac- namara, Ibrahim Berber, M. Cenk Çavuşoğlu, Elizabeth A. Krupinski, Naren Nalla- pareddy, Noelle E. Nelson, Philip J. Smith, Amy L. Wilson-Delfosse & Soumya Ray, 7-12-2024, "Does using artificial intelligence assistance accelerate skill decay and hin- der skill development without performers' awareness?," Cognitive Research: Principles and Implications, Volume 9, Article number: 46, https://doi.org/10.1186/s41235-024-00572-8)

Potential AI-induced skill development hindrance As AI assistants become increasingly prevalent, the role AI might have on skill devel- opment needs to be considered. AI-learning aids are designed to improve the rate of learner's skill or knowledge development. We propose that frequent engagement with an AI assistant during skill development might hinder learning in some cases, depend- ing on the ultimate goal for which the AI-learning aid was developed. Educational aids that are designed to personalize instruction for students with the goal of students inde- pendently performing the task are unlikely to hinder learning. In contrast, AI-learning

aids designed to prepare trainees for work where AI assistants are used may focus on preparing the learner to work with an AI

rather than focusing on developing learners' cognitive skills independent of AI. For example, a radiologist trainee may not develop as keen visual detection skills or a surgical resident may not develop as robust spatial navigation skills as if they would have developed had they trained without assistance. Here, it is important to distinguish between learning and performance. Suppose learn- ers are randomly assigned to either learn a task with a high-performing AI assistant or without. We would expect the learners with the AI assistant to improve their perfor- mance rapidly and outperform the learners without AI. However, these performance gains may not reflect the learners' gains in skill independent of the AI. That is, now suppose that after a period of learning that the AI is withheld, as may happen in the real world if the system is unavailable or fails. We might expect that the group who pre-viously had access to the AI assistant to perform worse than those who never learned with the AI. In this case, those who learned with AI assistance might not have devel- oped independent cognitive skills that the control group developed. Stated differently, we might expect to observe a pattern opposite of latent learning—high performance is observed in the AI-assisted group, but the limits on learning remain hidden until AI assistance is removed. As with potential AI-induced skill decay, learners who have engaged with AI to assist in their skill development might be unaware of where their skills are lacking. In partic- ular, AI assistants may promote illusions of understanding in learners, leading them to believe they have a greater understanding than they actually do (Messeri & Crockett, 2024). These illusions of understanding may occur when learners believe they have a deeper understanding than they actually do (i.e., illusion of

explanatory depth); when learners believe they are considering all possibilities rather than only those avail- able through the AI assistant (i.e., illusion of exploratory breadth); and when learners believe that the AI assistant is objective, failing to consider the bias embedded in the AI tool from the developers and training data (i.e., illusion of objectivity) (Messeri & Crockett, 2024)

As such, AI-induced skill development hindrances may not only limit the level of learning obtained but may change the nature of the understanding of the task.

AI will lead to brain atrophy, undermining the ability to people to make reasoned decisions.

_Al-Sibai 24, is a writer for Futurism (Noor Al-Sibai, 2-15-2024, "AI May Be Atro- phying Our Brains, Professor Warns," Futurism, https://futurism.com/the-byte/ai- atrophying-brain)

Just like smartphone GPS has harmed our sense of spatial cognition and memory, an intelligence may soon impair our ability to make decisions for ourselves – an outcome that would be, one expert warns, "catastrophic." In an interview with PsyPost, neuropsychology expert Umberto León Domínguez of the University of Monterrey in Mexico said that his new research shows that AI chat- bots may end up not just

mimicking our speech patterns, but **significantly harming our cognitive functioning in general**. Like many other educators, Dominguez said he's concerned about how his students are using tools like OpenAI's ChatGPT. Spurred by those concerns, he told PsyPost, he be- gan to explore ways AI chatbots "could interfere with higher-order executive functions to understand how to also train these skills. "I began to explore and generalize the impact," the researcher said, "not only as a student but as humanity, of the catastrophic effects these technologies could have on a significant portion of the population by blocking the development of these cognitive functions." In his paper, which was recently published in the American Psychology Association's journal Neuropsychology, the researcher claimed that AI may act as a "cognitive pros- thesis." First theorized back in 2019 by Falk Lieder, an AI researcher at the Max Planck Institute for Intelligent Systems, these purported synthetic mental limbs that would process mental tasks and eventually assist in decision-making were initially thought of as a positive thing — but to Domínguez's mind, they're anything but.

Think It Through Instead of being a helpful addition to human consciousness, the Mexican researcher argued in his paper that he's worried about "cognitive offloading," or the **use of AI** in place of the types of mental tasks like problem-solving that we currently do the old-fashioned way, by thinking. To use a physical metaphor, over-reliance on AI for thoughtprocesses may **weaken our minds the**

way not exercising weakens our muscles—lead- ing, ultimately, to atrophy. Though cognitive offloading can be helpful because it "frees up cognitive load that can then be directed towards more complex cognitions," Dominguez said he's concerned that ChatGPT and its ilk may be capable of "planning and making decisions on your behalf"—which is a pretty freaky thought indeed. "Just as one cannot become skilled at basketball without actually playing the game," he explained, "the development of complex intellectual abilities requires active participa- tion and cannot solely rely on technological assistance."

While the thought of using ChatGPT in its current state to make decisions seems ridicu- lous to anyone following the technology's advancement, there's already evidence that folks are experimenting with it that way — and looking at

the way phones have affected our brains, there's no reason to think AI couldn't <u>have equally</u> <u>far-reaching effects.</u>

C2: Don't trust AI

Argument: Generative AI is inherently unverifiable and creates false information. This means that even if students use it, they aren't learning anything new.

Warrant: Because the training data is private, we can't verify the accuracy of generative AI tools.

Lalli, John. "The Problem with ChatGPT Writing Your Essay." Seven Pillars Institute. October 19, 2023,

https://sevenpillarsinstitute.org/the-problem-with-chatgpt- writing-your-essay/. Accessed February 15, 2025.

The second factor is **ChatGPT operates with private training data**. There is often no way to know exactly the source of the information. When asking ChatGPT to provide sources for information included in the essay it responds, "As an AI language model, I don't have direct access to my training data or know where it came from." [12] Since the AI and **thus** the plagiarizing individual **do not know the exact source of the information**, they are not even afforded the opportunity of skimming through these sources for bits of information. In short, using ChatGPT allows for even less effort and time to be put into the assignment and thus for even less educational benefit to be reaped.

Warrant: More than 50% of the answers given by generative AI, regarding current affairs topics, are inaccurate. Weaver, Matthew. "AI chatbots distort and mislead when asked about current affairs, BBC finds." The Guardian, February 10, 2025, https://www.theguardian.com/technology/2025/feb/11/ai-chatbots-distort-

and-mislead-when-asked-about-current-affairs-bbc-finds. Accessed February 15, 2025.

Leading artificial intelligence assistants create distortions, factual inaccuracies and misleading content in response to questions about news and current affairs, research has found. More than half of the AI-generated answers provided by ChatGPT, Copilot, Gemini and Perplexity were judged to have "significant issues", according to the study by the BBC. The errors included stating that Rishi Sunak was still the prime minister and that Nicola Sturgeon was still Scotland's first minister; misrepresenting NHS advice about vaping; and mistaking opinions and archive material for up-to-date facts. The researchers asked the four generative AI tools to answer 100 questions using BBC articles as a source. The answers were then rated by BBC journalists who specialise in the relevant subject areas. About a fifth of the answers introduced factual errors on numbers, dates or statements; 13% of quotes sourced to the BBC were either altered or did not exist in the articles cited.

Because of its frequent errors, generative AI threatens to weaken public trust in facts and media. Weaver, Matthew. "AI chatbots distort and mislead when asked about current affairs, BBC finds." The Guardian, February 10, 2025, https://www.theguardian.com/technology/2025/feb/11/ai-chatbots-distort-and-mislead-when-asked-about-current-affairs-bbc-finds. Accessed February 15, 2025.

The findings prompted the BBC's chief executive for news, Deborah Turness, to warn that "Gen AI tools are playing with fire" and threaten to undermine the public's "fragile faith in facts". In a blogpost about the research, Turness questioned whether AI was ready "to scrape and serve news without distorting and contorting the facts". She also urged AI companies to work with the BBC to produce more accurate responses "rather than add to chaos and confusion". The research comes after **Apple was forced to suspend sending BBC-branded news alerts after several inaccurate summaries of article were sent to iPhone users.** Apple's errors included falsely telling users that Luigi Mangione – who is accused of killing Brian Thompson, the chief executive of UnitedHealthcare's insurance arm – had shot himself.

Many accounts on AI websites get Hacked and stolen

Fender 23 https://www.bitdefender.com > blog > hotforsecurity

"Bitdefender - Global Leader in Cybersecurity Software." n.d. Www.bitdefender.com. https://www.bitdefender.com. In the 12 months running up to May 2023, the login credentials of over 100,000 hacked ChatGPT accounts found their way onto dark web marketplaces. That's the finding of researchers at Group-IB, who discovered the usernames and passwords within the information-stealing malware sold via underground cybercrime forums. The distribution of the AI-powered chatbot account credentials is concerning for a number of reason. Firstly, the rising use of OpenAI's ChatGPT in the workplace raises the risk that confidential and sensitive information will fall into unauthorised hands as a result of account passwords being distributed.

Buck, Daniel. "AI is a serious threat to student privacy." Thomas B. Fordham Institute, October 5, 2023,

https://fordhaminstitute.org/national/commentary/ai-serious-threat-student-privacy. Accessed February 18, 2025.

Ask ChatGPT to consume educational research in the What Works Clearinghouse, for example, and the chatbot can become an expert pedagogical advice-giver. The better the data, the better the output. At the fringes of this conversation, we approach what once seemed like science fiction. Some schools in China already require students to wear biofeedback headbands that send information to teachers about who is paying attention, who is angry, who is daydreaming, or who is drooling on their desk. Pair that with the recent advances in brain imaging that have produced relatively accurate text from brainwaves alone, and soon our own private thoughts will not be so private. There are obvious concerns about data breaches, as when hackers accessed an online test-proctoring platform and subsequently leaked private information about 444,000 students. Similarly.

glitches in a popular program that lets teachers view and control student screens would allow hackers to gain access to students' webcams and microphones.

No Ouick Fixes

Matt Burgess Apr 13, 2023 "The Hacking of ChatGPT Is Just Getting Started"

https://www.wired.com/story/chatgpt-jailbreak-generative-ai-hacking/

Generative AI systems are on the edge of disrupting the economy and the way people work. from practicing law to creating a startup gold rush. However, those creating the technology are aware of the risks that jailbreaks and prompt injections could pose as more people gain access to these systems. Most companies use red-teaming, where a group of attackers tries to poke holes in a system before it is released. Generative AI development uses this approach, but it may not be enough.

Continued

Fox, Jacob. "Top 40 AI Cybersecurity Statistics | Cobalt." Cobalt. Cobalt. 10 Oct. 20**24**, www.cobalt.io/blog/top-40-ai-cybersecurity-statistics.

The latest AI cybersecurity statistics show an increase in artificial intelligence to power phishing, ransomware

attacks, crypto-related crime, and other forms of attack. Organizations are already feeling the impact of AI-generated attacks and anticipate the increased prevalence of low-level vulns becoming more common targets for amateur attackers empowered by LLM technology. In response, security teams are turning to AI-powered tools to fight AI with AI. Here's a roundup of some top AI cybersecurity statistics that illustrate current trends and likely future trajectories. Cost and Frequency of AI Cyberattacks Security stakeholders rank the highest AI-powered cybersecurity threat categories as malware distribution, vulnerability exploits, sensitive data exposure from generative AI, social engineering, net unknown and zero day threats, and reconnaissance for attack preparation (Darktrace). 74% of IT security professionals report their

organizations are suffering significant impact from AI-powered threats (Darktrace).75% of cybersecurity professionals had to modify their strategies last year to address AI-generated incidents (Deep Instinct),97% of cybersecurity professionals fear their organizations will face AI-generated security incidents (Deep Instinct)

.93% of businesses expect to face daily AI attacks over the next year (Netacea).

87% of IT professionals anticipate AI-generated threats will continue to impact their organizations for years (Darktrace). The global cost of data breaches averaged \$4.88 million over the past year, representing a 10% increase and an all-time high (IBM). Organizations most frequently experience social engineering and phishing attacks (reported by 56% of IT professionals), web-based attacks (50%), and credential theft (49%) (Ponemon Institute).

AI Phishing

Fox 24, Jacob. "Top 40 AI Cybersecurity Statistics | Cobalt." Cobalt. Cobalt. Oct. 2024, www.cobalt.io/blog/top-40-ai-cybersecurity-statistics.

40% of all phishing emails targeting businesses are now generated by AI (VIPRE Security Group). **60% of recipients fall victim to AI-generated phishing emails**, equivalent to rates for non-AI generated emails (Harvard Business Review).

Spammers save 95% in campaign costs using large language models (LLMs) to generate phishing emails (Harvard Business Review).

Phishing attacks cost an average \$4.88 million per breach (IBM).

AI Deepfakes

61% of organizations saw an increase in deepfake attacks over the past year (Deep Instinct).

Deepfake attacks are projected to increase 50% to 60% in 2024, with 140,000 to 150,000 global incidents (VPNRanks). 75% of deepfakes impersonated a CEO or other C-suite executive (Deep Instinct).

Generative AI will multiply losses from deepfakes and other attacks 32% to \$40 billion annually by 2027 (Deloitte).

C3: Poverty

Access to Generative AI technology, and the ability to integrate it into a meaningful education, highly depends on access to wealth. Integrating AI into the education system will stratify the education system into AI-augmented and un-augmented. This will further perpetuate cycles of poverty. Warrant: Tech access varies by socioeconomic status, education solves.

Ritzhaupt, Albert. "The Digital Divide in Formal Educational Settings: The Past, Present, and Future Relevance." Handbook of Research in Educational Communications and Technology. September 2020. https://doi.org/10.1007/978-3-030-36119-8 23. Accessed February 14, 2025.

Technology. September 20 20. https://doi.org/10.1007/978-3-030-36119-8_23. Accessed February 14, 2025.

The Digital Divide has been a topic under investigation since the mid-1990s both within and outside the USA. The Digital Divide historically has referred to a social inequity between those individuals who have access to information and communication technology (ICT) and those that do not. In recent years, the notion of the Digital Divide has expanded to include other dimensions beyond access, such as use, knowledge, skills, and dispositions of ICT resources. The Digital Divide manifests itself on a number of dividing factors, such as Socioeconomic status, gender, age, culture, geographic location, and more. As formal educational programs are often perceived to be the instrument to correct this social inequity, studying the structure of the Digital Divide in the context of formal educational settings is important to ensure programs are narrowing as opposed to widening the ICT gaps. This chapter presents the Levels of the Digital Divide in Schools presented by Hohlfeld, Ritzhaupt, Barron, and Kemker (2008) as a conceptual framework to characterize the evolving phenomenon.

Warrant: Generative AI undermines this by creating a tiered educational experience.

Farahani, Milad Shahvaroughi and Ghazal Ghasemi. "Artificial Intelligence and Inequality: Challenges and Opportunities." Khatam University. February 2024.

https://radensa.ru/wp-content/uploads/2024/05/Artificial_Intelligence_and_Inequality_Challenges_.pd f. Accessed February 14, 2025. Access to Education

Disparities in access to quality education serve as a fundamental driver of inequality in the AI era. Socioeconomically disadvantaged communities often lack access to educational resources, including high-quality schools, trained teachers, and technology infrastructure, which can

limit their ability to acquire the skills needed to participate in the AI-driven economy. Addressing disparities in access to education is essential for ensuring that all individuals have equal opportunities to develop the skills required to thrive in the AI era. Digital Divide The digital divide refers to the gap between individuals and communities that have access to digital technologies and those that do not. In the AI era, access to digital literacy skills and technology infrastructure is critical for participation in the digital economy. However, marginalized groups, including low-income individuals, rural communities, and people with disabilities, are often disproportionately affected by the digital divide, limiting their ability to access online learning platforms, AI tools, and digital skills training programs.

Warrant: This allows higher socioeconomic students to gain cumulative advantage.

DiPrete, Thomas and Gregory M. Eirich. "Cumulative Advantage as a Mechanism for Inequality: A Review of Theoretical and Empirical Developments. Columbia University. 2006. https://doi.org/10.1146/annurev.soc.32.061604.123127. Accessed February 14, 2025.

The central descriptive idea in the CA literature is that the advantage of one individual or group over another grows (i.e., accumulates) over time, which is often taken to mean that **the inequality of this advantage grows over time.** The advantage in question is typically a key resource or reward in the stratification process, for example, cognitive development, career position, income, wealth, or health. The use of CA as a description for growing inequality is just that, another term for describing a pattern of growing inequality. CA becomes part of an explanation for growing inequality when current levels of accumulation have a direct causal relationship on future levels of accumulation. A CA process is capable of magnifying small differences over time and **makes it difficult for** an individual or group that is behind at a point in time in **educational development,** income, or other measures to catch up. Ironically, despite the obvious theoretical and policy importance of CA models, and despite widespread references to their existence in the literature, the sustained development and testing of CA models has been more the exception than the rule.

Impact: The result is a stratified education system.

Brezis, Elise and Joel Hellier. "Social mobility at the top and the higher education system." European Journal of Political Economy. March 2018. https://doi.org/10.1016/j.ejpoleco.2017.04.005. Accessed February 14, 2025.

This paper shows that social stratification and social mobility are closely related to the structure of higher education. An education system characterized by a division of higher education into elite and standard universities leads to permanent social stratification between the middle class and the elite, the latter being to a large extent self-reproducing. This is even true in case of democratization and meritocracy in tertiary education. Moreover, we find that a two-tier higher education always tends towards a steady stratification and the simulations presented in Section 5 suggest that this stratification could be attained after a limited number of generations. A major outcome of the paper is that, the greater the difference in quality and per-student expenditures between the elite and standard universities, the lower the upward social mobility of the middle class, and the more self-reproducing the elite group.18 The simulations using plausible values of the parameters show that this impact can be large.

Impact: This perpetuates cycles of poverty.

Nusair, Reham Ershaid. "Education and Social Mobility: Assessing the Impact of Educational Reforms on Economic Inequality." University Science Islam (USIM). January 2025. https://easdjournals.com/index.php/oejsse/article/view/7. Accessed February 14, 2025.

The issue of education and economic **inequality is** particularly pressing in light of recent trends showing a **widening gap** between rich and poor. Studies conducted in the United States, for example, have shown that wealthier students are significantly more likely to attend and graduate from college than their lower-income peers, leading to better job prospects and higher lifetime earnings (Reardon, 2011). Similar patterns are observed in other countries, where **disparities in educational access and quality continue to perpetuate cycles of poverty and social immobility**. By examining these trends and the policies aimed at addressing them, this research will offer a comprehensive analysis of the role that education plays in shaping economic inequality and provide recommendations for future reforms.

Impact: Poverty is cyclical.

Hobbs, Steve. "Tending To The Spirit: A Proposal For Healing The Hearts Of Black Children In Poverty." University of Alabama School of Law, 2006, https://scholarship.law.ua.edu/cgi/viewcontent.cgi?article=1511&context=fac_a rticles. Accessed February 14, 2025.

Failing to meet the basic needs for survival negatively impacts the general well-being of poor children. Their families are under severe stress, which can cause depression and problems that impact family relationships. Poor households tend to have fewer resources for coping, especially those resources necessary for meeting the developmental needs (educational and social) of growing children. Consequently, school achievement is low because of delayed cognitive development and social and behavioral problems. Needless to say, such children have limited job prospects that could lift them out of poverty. Compounding the problem further is the fact that poor teenagers have a much higher pregnancy rate, thus possibly extending the consequences of poverty to the next generation.

Impact: Increases in poverty lead to increases in lives lost.

Galea, Sandro. "How Many U.S. Deaths are Caused by Poverty, Lack of Education, and Other Social Factors?" Columbia University. July 5, 2011. https://www.mailman.columbia.edu/public-health-now/news/how-many-us-deaths-are-caused-poverty-lack-education-and-other-social-factors. Accessed February 14, 2025.

After calculating for the relative risks of mortality from social factors, researchers obtained prevalence estimates for each social factor using primarily Census Bureau data. Individual social factors included education, poverty, health insurance status, employment status and job stress, social support, racism or discrimination, housing conditions and early childhood stressors.

Area-level social factors included area-level poverty, income inequality, deteriorating built environment, racial segregation, crime and violence, social capital and availability of open or green spaces. The investigators found that approximately 245,000 deaths in the United States in the years 2000 were attributed to law levels of education.

deaths in the United States in the year 2000 were attributable to low levels of education,

176,000 to racial segregation, 162,000 to low social support, 133,000[deaths were attributable] to individual-level poverty, 119,000 to income inequality, and 39,000 to area-level poverty. Overall, 4.5% of U.S. deaths were found to be attributable to poverty—midway between previous estimates of 6% and 2.3%. However the risks associated with both poverty and low education were higher for individuals aged 25 to 64 than for those 65 or older.

Warrant: This need for in person learning is especially strong among the underprivileged as evidenced by their poor recovery from Covid.

Miller, Claire Cain, Sarah Mervosh, & Francesca Paris. "Students Are Making a 'Surprising' Rebound From Pandemic Closures. But Some May Never Catch Up." The New York Times, January 31, 2024, https://www.nytimes.com/interactive/2024/01/31/us/pandemic-learning-loss- recovery.html. Accessed February 14, 2025.

Still, the gap between students from rich and poor communities — already huge before the pandemic — has widened. "One of the big and surprising findings is there actually has been a substantial recovery," said Sean F. Reardon, a professor of poverty and inequality in education at Stanford, who conducted the new analysis with Thomas J. Kane, an economist at Harvard; Erin Fahle, executive director of the Educational Opportunity Project at Stanford; and Douglas O. Staiger, an economist at Dartmouth. "But it's an unevenly felt recovery," Professor Reardon said, "so the worry there is that means inequality is getting baked in." Some children may never catch up and could enter adulthood without the full set of skills they need to succeed in the work force and life. The students most at risk are those in poor districts, whose test scores fell further during the pandemic. Though the new data shows that they have begun to catch up, they had much more to make up than their peers from higher-income families, who are already closer to a recovery. The result: Students in poor communities are at a greater disadvantage today than they were five years ago.

Impact: Education for those in poor communities is extremely important because it is a way out of poverty.

"How does education affect poverty?" **Concern** Worldwide, September 19, 20**23**, https://www.concern.net/news/how-does-education-affect-poverty. Accessed February 14, 2025.

Education is the best way out of poverty in part because it is strongly linked to economic growth. A 2021 study co-published by Stanford University and Munich's Ludwig Maximilian University shows us that, between 1960 and 2000, 75% of the growth in g_ d_ p_ around the world was linked to increased maths and science skills. "The relationship between... the knowledge capital of a nation, and the long-run growth rate is extraordinarily strong," the study's authors conclude. This is just one of the most recent studies linking education and economic growth that have been published since 1990. 2. Universal education can fight inequality A 2019 Oxfam report says it best: "Good-quality education can be liberating for individuals, and it can act as a leveller and equaliser within society." Poverty thrives in part on inequality. All types of systemic barriers (including physical ability, religion, race, and caste) serve as compound interest against a marginalisation that already accrues most for those living in extreme poverty. Education is a basic human

right for all, and - when tailored to the unique needs of marginalised communities - can be used as a lever against some of the systemic barriers that keep certain groups of people furthest behind. For example, one of the biggest inequalities that fuels the cycle of poverty is gender. When gender inequality in the classroom is addressed, this has a ripple effect on the way women are treated in their communities. We saw this at work in Afghanistan, where Concern developed a Community-Based Education programme. This allowed students in rural areas to attend classes closer to home, which was especially helpful for girls. Impact: Education could actually help solve global poverty.

Education is often referred to as the great equaliser: It can open the door to jobs, resources, and skills that help a person not only survive, but thrive. In fact, according to UNESCO, if all students in low-income countries had just basic reading skills (nothing else), an estimated 171 million people could escape extreme poverty. If all adults completed secondary education, we could cut the global poverty rate by more than half. At its core, a quality education supports a child's developing social, emotional, cognitive, and communication skills. Children who attend school also gain knowledge and skills, often at a higher level than those who aren't in the classroom. They can then use these skills to earn higher incomes and build successful lives.

Overall, we can see that AI not only doesn't teach new things, it stunts learning. Additionally, we can see it is a clear global threat, causing misinformation, security threats, and a digital divide. Therefore, judge, this is a clear vote for the negation.

Reb

C1- tutor/no human help

They stated that this ai does not need human intervention do they even know what gen ai is?

Brydon, Antony. "Council Post: Why AI Needs Human Input (and Always Will)." Forbes, 12 Aug. 2024, www.forbes.com/councils/forbestechcouncil/2019/10/30/why-ai-needs-human-input-and-always-will/. Indeed, the legacy of AI in entertainment has conditioned us to think of it as technology that operates without human input. No wonder so many have been shocked to discover that Google Assistant relies on human help to improve its understanding of voice conversations or that numerous tech startups hire human workers to prototype and imitate AI functionality. The reality is that we are still far from achieving generalized AI that is functionally equivalent to the human mind. As the cofounder and CEO of a customer support automation platform that helps enterprises launch and train virtual agents, I've realized that whether the first generalized AI is born a year or 100 years from now, AI will always require human input and expertise — technical and otherwise — to operate at its full potential in a way that's ethical, responsible and safe.

Jern 24 [Kelsey Jern (Senior Marketing Associate at eSpark Learning), Can AI Replace Teachers? We Finally Know the Answer, 1-19-2024, eSpark, https://www.esparklearning.com/blog/can-ai-replace-teachers-we-finally-know-the-answer/] accessed 2-17-2025 // bellaire FL

That said, we're at least going into the new year with a much clearer idea of what AI can and can't do. There have been some incredible advancements made in the time since ChatGPT first entered the mainstream consciousness, but there have also been some massive issues raised. Now that we've seen so much of what AI can (and can't) do, we can finally answer the question on every educator's mind: can AI replace teachers? It's true that AI is well-suited to take on several of the most tedious or time-consuming tasks teachers face. But while today's headlines are aglow with visions of AI-powered classrooms—where computers dispense knowledge and personalized learning paths to rows of attentive, independent students—it's clear that AI cannot, and will not, replace teachers in the classroom. Here's why: The impact of human connection First, the ability to make a lasting impact lies not in information delivery, but in genuine human connection. Students build more meaningful relationships with mentors than they do with

machines. That's why the U.S. Department of Education has stressed the importance of the ACE (Always Center Educators) approach to AI in the classroom. Teachers are there to give information, but also to help students navigate the emotional rollercoaster of learning. They provide a shoulder to cry on when concepts feel insurmountable, and cheer with enthusiasm when growth is made. Strong teacher-student relationships have been associated with higher student academic engagement, attendance, and grades, plus fewer disruptive behaviors and suspensions, and lower school dropout rates. AI, for all its processing power, lacks the emotional intelligence and empathy central to filling this need. The unpredictability of learning Secondly, learning is not a linear path. It's a messy, dynamic journey of discovery and change, and teachers are always prepared to adapt as needed. AI? Not so much. We know that students learn through mistakes and missteps. They learn through the unexpected insights that arise from a spontaneous classroom discussion. AI, however, struggles with the unpredictable nature of human interaction. It's designed to follow instructions to a T, sometimes to a fault. It can't tailor its outputs to the nuances of a class dynamic, respond to a student's unspoken anxieties, or adapt to the unexpected detours that often lead to the most profound learning experiences. AI can't replace teachers without these capabilities. The ethical dilemma Education is about shaping future generations of critical thinkers, empathetic citizens, and innovators. Not every situation is as simple as right vs. wrong, and so it's vital that students are taught strategies to use when they find themselves in the gray areas of life. Time and time again, AI has proven that those gray areas are where it struggles most. Research has shown that students are more likely to behave in a way that is consistent with behaviors modeled by their teachers than they are to behave in a manner consistent with the skills they have been taught in a lecture. Simply put, it's not enough to just tell students the right thing to do; it's important that students see positive behavior and decision-making processes modeled for them. AI, however, lacks the moral compass and life experience necessary to guide students on their ethical and social journeys. It is not capable of modeling behavior, and can often only respond appropriately in situations it has already been trained to handle. How AI will more likely fit into the picture All this isn't to say that AI has no place in the classroom. Its abilities to personalize learning paths, provide immediate feedback, and analyze data are already proving invaluable for educators. However, these tools should be seen as partners, not replacements. Just as a calculator doesn't replace the need for understanding math, AI won't replace the need for human connection, adaptability, and guidance in the classroom. The future of education doesn't lie in sterile, roboticized classrooms, but rather a balanced blend of human expertise and technological support.

Not only this but ai IS NOT TUTORING OR HELPING STUDENTS

Barshay 24, writes the weekly "Proof Points" column about education research and data, covering a range of topics from early childhood to higher education (Jill Barshay, 9-2-2024, "Kids who use ChatGPT as a study assistant do worse on tests," Hechinger Report, https://hechingerreport.org/kids-chatgpt-worse-on-tests/)Does AI actually help students learn? A recent experiment in a high school provides a cautionary tale. Researchers at the University of Pennsylvania found that Turkish high school students who had access to ChatGPT while doing practice math problems did worse on a math test compared with students who didn't have access to ChatGPT. Those with ChatGPTsolved 48 percent more of the practice problems correctly,

but they ultimately scored 17 percent worse on a test of the topic that the students were learning. A third group of students had access to a revised version of ChatGPT that functioned more like a tutor. This chatbot was programmed to provide hints without directly divulging the answer. The students who used it did spectacularly better on the practice problems, solving 127 percent more of them correctly compared with students who did their practice work without any high-tech aids. But on a test afterwards, these AI- tutored students did no better. Students who just did their practice problems the old fashioned way — on their own — matched their test scores. The researchers titled their paper, "Generative AI Can Harm Learning," to make clear to parents and educators that the current crop of freely available AI chatbots can "sub- stantially inhibit learning." Even a fine-tuned version of ChatGPT designed to mimic a tutor doesn't necessarily help. The researchers believe the problem is that students are using the chatbot as a "crutch." When they analyzed the questions that students typed into ChatGPT, students often simply asked for the answer. Students were not building the skills that come from solv- ing the problems themselves.

Knapp 25, Forbes senior editor covering healthcare and science (Alex Knapp, 1-10-2025, "The Prototype: Study Suggests AI Tools Decrease Critical Thinking Skills," Forbes, https://www.forbes.com/sites/alexknapp/2025/01/10/the-prototype-study-suggests-ai-tools-decrease-critical-thinking-skills/)

New AI tools are slowly becoming ubiquitous, being added to the software and hardware we use every day (sometimes whether we like it or not). But if we're using artificial

intelligence to perform tasks, search for information and solve problems, what does that mean for the intelligence we're born with?

To figure this out, a team of researchers conducted a study involving 666 individuals ages 17 and up, representing a diverse population. It first evaluated the extent to which each of them made use of AI tools, then tested their critical thinking skills. The results of the study, which were published in the journal Societies, found that those who used AI tools a lot showed worse critical thinking abilities than those who didn't use them often or at all. Whether someone used AI tools was a bigger predictor of a person's thinking skills than any other factor, including educational attainment.

The reason for this is a phenomenon called "cognitive offloading" – where people's thinking and problem-solving are essentially delegated. Frequent cognitive offloading reduces a person's ability to independently think and solve problems. "This relationship underscores the dual-edged nature of AI technology," the study authors wrote. "While it enhances efficiency and convenience, it inadvertently fosters dependence, which can compromise critical thinking skills over time."

C2- personalized learning

REMEMBER AI IS EXTREMELY BIASED

Walther, Cornelia C. "Why AI Inclusion Is a Matter of Life and Death." Forbes, 29 July 2024, www.forbes.com/sites/corneliawalther/2024/07/29/why-ai-inclusion-is-a-matter-of-life-and-death/.

The status quo results in an AI that is lopsided and biased, the limited data-pool that is used to train the algorithms results in outputs that reflect only the people that this data comes from. Without careful oversight the utilization of these results can have deadly consequences. Because biased AI training data can lead to algorithmic discrimination.

Not only is AI biased but it also is not at all suitable in the field of special education

Hao 18, Karen. "Can You Make an AI That Isn't Ableist?" *MIT Technology Review*, 28 Nov. 2018 www.technologyreview.com/2018/11/28/1797/can-you-make-an-ai-that-isnt-ableist/.

Artificial intelligence has a well-known bias problem, particularly when it comes to race and gender. But while researchers have tried hard to address some of the most egregious issues, there's one group of people they have overlooked: those with disabilities. Take self-driving cars. Their algorithms rely on training data to learn what pedestrians look like so the vehicles won't run them over. If the training data doesn't include people in wheelchairs, the technology could put those people in life-threatening danger. They optimize for norms and don't treat outliers in any special way. But oftentimes, people with disabilities don't fit the norm. The way that machine learning judges people by who it thinks they're similar to—even when it may never have seen anybody similar to you—is a fundamental limitation in terms of fair treatment for people with disabilities.

Roman 24, David. "AI Must Be Anti-Ableist and Accessible." Acm.org, 18 Nov. 2024, cacm.acm.org/opinion/ai-must-be-anti-ableist-and-accessiblehttps://doi.org/10.1145//3662731. concerns about AI's potential negative impact on inclusion, representation, and equity for those in marginalized communities, including disabled people. When groups are historically marginalized and underrepresented, this is "imprinted in the data that shapes AI systems." Measurement error can exacerbate bias. For example, a sensor's failure to recognize wheelchair activity as exercise may lead to bias in algorithms

trained on associated data. Such systems render disabled people "invisible" and amplify existing biases internal to and across othering societal categories.

AI systems rely on their training data, which contain biases or reflect ableist attitudes.

Eileen O'Grady, 4-3-2024, [Eileen O'Grady is the education reporter at the Concord Monitor in Concord, New Hampshire, via Report for America. In her work she strives to connect communities, inform civic life and amplify voices that are often overlooked or mischaracterized by traditional media. Eileen is the former managing editor of the The Scope at Northeastern University, an experimental digital magazine focused on telling stories of justice, hope and resilience in Greater Boston. She is also a former staff writer for The Shelburne News and The Citizen, with bylines in The Boston Globe, U.S. News & World Report, The Bay State Banner and VTDigger. She holds a BA in politics and French from Mount Holyoke College and a MA in journalism from Northeastern University.] "Why AI fairness conversations must include disabled people — Harvard Gazette", Harvard Gazette,

https://news.harvard.edu/gazette/story/2024/04/why-ai-fairness-conversations-must-include-disabled-people/

A lot of research so far has focused on how AI technologies discriminate against people with disabilities, how algorithms harm people with disabilities," Shah said. "My aim for this project is to talk about how even the conversation on AI fairness, which was purportedly commenced to fix AI systems and to mitigate harms, also does not adequately account for the rights, challenges, and lived experiences of people with disabilities."

For his research, he's interviewing scholars who have studied the issue and evaluating frameworks designed to maintain AI fairness proposed by governments and the AI industry.

Shah said developers often consider disability data to be "outlier data," or data that differs greatly from the overall pattern and is sometimes excluded. But even when it's included, there are some disabilities — like non-apparent disabilities — that are overlooked more than others. If an AI is trained on a narrow "definition" of disability (like if data from people who stutter is not used to train a voice-activated AI tool) the outcome will be that the tool is not accessible.

"There is a paradox," Shah said. "If you don't incorporate disability data, your algorithms would be open to discriminating against people with disabilities because they don't fit the normative ideas of your algorithms. If you incorporate the data, a lot of people with disabilities would still be missed out because inherently, the way you incorporate datasets, you divide data on the axes of identity."

In his own life, Shah uses some AI technologies as assistive tools including "Be My AI," which describes images, and "Seeing AI," which provides users with visual information such as text, color, light, and scenery. Blind people were very involved in the development and testing process for both those tools.

But Shah said too often people with disabilities are not included in the high-level decision-making and development processes for AI that is purported to benefit them. He cited, as an example, technology designed to diagnose autism or address learning disabilities.

"The question is: Do people with autism or other disabilities even want these technologies? No one asks them," Shah said.

AI IS UNTRUSTWORTHY AND WORKPLACES DO NOT PLAN ON IMPLEMENTING IT

Popera 24, Ashleigh. "When Automation Backfires: How Rused AI Implementation Can Hurt Employee Engagement." Enterprise Solutions, November 14, 2024,

https://www.shrm.org/enterprise-solutions/insights/when-automation-backfires--how-rushed-ai-mplement ation-can-hurt. Accessed February 11, 2025. According to Accenture's Work, Workforce, Workers Age of Generative AI report, 95% of workers don't trust organizations to ensure positive AI outcomes for everyone. Employees struggling to grasp AI may experience a decrease in efficiency, compounded by fear and uncertainty about the future of their roles. These factors can cause confusion, uncertainty, and stress, negatively affecting job satisfaction and worker well-being. Missteps in AI implementation can also create operational challenges, such as integration difficulties and organizational liabilities, which, in turn, diminish productivity and foster frustration and distrust among employees.

Nadeem 25, Reem. "U.S. Workers Are More Worried than Hopeful about Future AI Use in the Workplace." Pew Research Center, 25 Feb. 2025,

www.pewresearch.org/social-trends/2025/02/25/u-s-workers-are-more-worried-than-hopeful-about-future -ai-use-in-the-workplace/.

Only 6% of workers say workplace AI use will lead to more job opportunities for them in the long run. Another 81% of workers could be considered non-AI users. This includes 63% who say they don't use AI much or at all in their job and 17% who have not heard of AI use in the workplace

Petropoulos, G. (2022) '

The dark side of artificial intelligence: manipulation of human behaviour',

Bruegel Blog, 2 February

It is no exaggeration to say that popular platforms with loyal users, like Google and Facebook, know those users better than their families and friends do. Many firms collect an enormous amount of data as an input for their artificial intelligence algorithms. Facebook Likes, for example, can be used to predict with a high degree of accuracy various characteristics of Facebook users: "sexual orientation, ethnicity, religious and political views, personality traits, intelligence, happiness, use of addictive substances, parental separation, age, and gender," according to one study. If proprietary AI algorithms can determine these from the use of something as simple as the 'like' button, imagine what information is extracted from search keywords, online clicks, posts and reviews.It is an issue that extends far beyond the digital giants. Giving comprehensive AI algorithms a central role in the digital lives of individuals carries risks. For example, the use of AI in the workplace may bring benefits for firm productivity, but can also be associated with lower quality jobs for workers. Algorithmic decision-making may incorporate biases that

can lead to discrimination (eg in hiring decisions, in access to bank loans, in health care, in housing and other areas)

Now moving on to defense with what my opponents said during their rebuttal.

They first repsonded saying ai will get better with no stated card

Teacher workload