

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

Generative AI: MIT in 2023 <https://news.mit.edu/2023/explained-generative-ai-1109> defines:

Generative AI can be thought of as a machine-learning model that is **trained to create new data**, rather than making a prediction about a specific dataset. A generative AI system is **one that learns to generate more objects** that look like the data it was trained on.

Education: Cambridge <https://dictionary.cambridge.org/us/dictionary/english/education> defines: **the process of teaching or learning, especially in a school or college, or the knowledge that you get from**

Overview: 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 24 (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 lev. eraging 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.⁷⁶ 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.

AND The entire AI industry is a bubble. The “inevitable” rise of AI is an industry catchphrase which is rapidly falling apart.

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 AI 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 chance 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

and applications will become enmeshed in school processes and procedures in ways that allow private entities to increasingly control the structure and content of public education, to reinforce surveillance practices, and to amplify existing biases and inequalities.¹⁴ For decades, academic researchers have worked on AI models for use in schools.¹⁵ Today, however, it is commercial enterprises that are aggressively pushing AI (and its attendant risks) into classrooms.¹⁶ The campaign to promote AI in education follows the logic of a half century of commercial, political, and ideological efforts to privatize and commercialize education.¹⁷ Given this logic it is not surprising that, despite the known dangers, corporations, private researchers, and governments are aggressively promoting the use of AI¹⁸ before a statutory and regulatory framework has been put in place to ensure that AI programs are transparent and subject to effective public scrutiny and control.¹⁹ This puts schools under tremendous pressure to accept AI as an inevitable upgrade to existing processes.²⁰ Computer scientists and software developers focus primarily on technical engineering questions²¹ and corporate leaders and investors prioritize profit²² over the common good. Nevertheless, educators are being asked to trust that these people, who have no educational expertise and who stand to financially benefit when AI is used in schools, are best suited to imagine and lead educational transformation.

AI systems take money from poor districts.

Williamson et.al²⁴ (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>)

Dangers in Administration Increased Costs Learning management systems already used in many schools, such as Google Classroom, Blackboard, and Canvas, are beginning to integrate AI into their platforms.¹⁵⁰ Google Classroom, with its suite of nominally "free" software and low-cost Chromebook hardware, dominates the market.¹⁵¹ It has already announced the launch of AI-based adaptive learning add-ons to Classroom, with associated additional costs for schools, as well as plans to upgrade Classroom further with generative language AI.¹⁵² "Practice Sets" is Google's AI-based adaptive learning system for education, and "Duet AI" is its "collaboration partner" for teachers.¹⁵³ In addition to any pedagogical implications associated with using Google Classroom, its integration of further AI and automation into many aspects of school functioning also carries potentially significant administrative implications.¹⁵⁴ The most significant of these is to obscure the rationale for administrative decisions about critical institutional issues when decision-making is ceded to opaque machine learning systems controlled by tech firms. Google Classroom, for example, integrates with hundreds of other ed tech products and can synchronize with a school's student information systems.¹⁵⁵ It offers Google cloud services such as single sign-on, identity management, and device management, as well as plagiarism detection, automated grading, teaching templates, student grouping, and administrative analytics to facilitate "data-driven decisions."¹⁵⁶ Such management systems facilitate the transfer of control of schools from the public to private corporations by acting as central conduits through which all of a school's digital activities must pass—making it hard for educators or administrators to see how any decisions based on the data have been made.¹⁵⁷ Because running AI is costly, the use of AI programs in schools will necessarily require schools to pay for operating costs for an increasing number of pedagogic and administrative AI applications. The promise that AI can save schools money by reducing staffing costs is likely illusory, as schools will probably be required to pay costly fees for accessing AI facilities. In other words, rather than saving money, administrative applications are more likely to shift existing funds to monopolistic technology providers. Khanmigo and Google Classroom already illustrate how this works. Khan Academy, when it provides Khanmigo to districts, currently charges those districts \$60 per student for annual use, citing high computing costs associated with OpenAI's GPT-4 as the justification for the charges.¹⁵⁸ Likewise, districts must also pay for Google Classroom's AI upgrades. © 2024 Google LLC. All rights reserved. Google, the Google logo, and Classroom are trademarks of Google LLC. All other marks are the property of their respective owners. must switch from the free basic offering to a for-fee premium package.¹⁵⁹ In other words, tech firms are extracting value from school budgets to defray the high computing costs associated with AI (and grow company value).¹⁶⁰

Increased Threats to Student Privacy AI applications collect and aggregate data in order to function. In so doing, they normalize digital surveillance and privacy invasions in school.¹⁶¹ In practice, education technology companies use applications like Google Classroom to routinely collect as much data as possible, well beyond that required to perform their assigned tasks.¹⁶² Although proponents of using AI in education tend to emphasize the efficiency of data-driven administrative systems, privacy-related threats to equity are inherent in it.¹⁶³ This is because AI models are built using massive data sets that can be used to profile, compare, and assess individuals who are then subject to potentially discriminatory decisions based on "statistical dossiers" of their personal lives.¹⁶⁴ Thus, a significant danger of digital technology in general, and of the privacy-invasive model of AI in particular, is that they can reproduce and amplify existing forms of inequality in education by using datasets containing examples of historic bias and discrimination.¹⁶⁵ For example, if a big data set indicates that certain marginalized groups have underperformed historically, then a software application may be biased against individuals from such groups in the future, singling out and targeting them as "at-risk" and closing down or limiting their opportunities to access information and resources.¹⁶⁶ Moreover, school data systems are vulnerable to breaches, hacks, ransomware, and denial-of-service attacks.¹⁶⁷ A data breach at the student-tracking ed tech company Illuminate, for example, compromised the educational data of at least a million public school students and prompted New York City's Department of Education to ask schools to stop using Illuminate's products.¹⁶⁸ School data systems feature highly detailed and intimate student information, including personal and demographic data, grades,

attendance, behavioral information, and other confidential information. Increasing AI capacity in ed tech products may exacerbate these vulnerabilities, as student data are collected at even greater scale by a wide range of companies—including AI companies—that offer only vague data privacy protections.¹⁶⁹ Reduced Transparency and Accountability Finally, enabling AI to play a role in school administration will reduce the transparency and accountability of decision-making.¹⁷⁰ Many digital products already used in schools are neither transparent nor accountable because current law and regulation allows companies to shield the inner working of their products behind proprietary protections.¹⁷¹ AI is even more opaque than other digital programs.¹⁷² Black box machine learning and AI models are so complicated that their outputs are often impossible to explain or interpret.¹⁷³ Although in many cases simpler and more accessible statistical models can produce equally accurate results, companies benefit from selling access to proprietary models that require customers to trust the systems and simply accept being unable to verify results.¹⁷⁴ If the system makes a mistake, it might never be identified or redressed and the public suffers the consequences. For example, the facial identification systems used for remote testing often fail to accurately identify individuals or mistakenly flag student behaviors as suspicious, but they are very hard for students to challenge.¹⁷⁵ In high-stakes decision-making in a sector like education, allowing such impenetrable models to assume responsibility for key administrative procedures necessarily means the creation of schools in which school leaders and teachers will be unable to exercise judgment, provide a rationale, or take responsibility for classroom and institutional decisions.¹⁷⁶ Considerations for the Future Is AI Development Responsible?

The rapid creation of AI applications for schools raises the urgency of prioritizing ethics, student rights, and social responsibility in their development.¹⁷⁷ Responsible AI development would ensure that products are safe and trustworthy, designed to benefit people, communities, and society, and mitigate harms.¹⁷⁸ As yet, there is little indication that such values are adequately addressed in education applications.¹⁷⁹ Unfortunately, academic AIED researchers have tended to ignore them or delegate addressing them to the educational technology industry and policy centers.¹⁸⁰ This complacency—along with the money and power held by commercial actors—enables commercial rather than educational imperatives to guide the development of AI and furthers political interests promoting relentless testing and school surveillance.¹⁸¹ Responsible governance would require the companies developing AI to commit to transparent and responsible product design, and also to monitoring, understanding, and mitigating the continuous impacts of AI in various contexts. Of particular concern is the automation of decisions with “irreversible and severe consequences.”¹⁸² For example, technologies to identify emotions are currently being developed to assess if a person is lying and cheating.¹⁸³ These technologies are inherently inaccurate, however, and an inaccurate judgment that a student has cheated or that a witness is lying could have dire consequences for their lives. Responsible AI governance might lead to delaying or indefinitely pausing development of such technologies. Although several responsible AI initiatives have produced principles, frameworks or checklists for safe and trustworthy AI development and accountability,¹⁸⁴ these agendas can be manipulated through various forms of industry lobbying and efforts to water down their scope or possibilities of enforcement.¹⁸⁵ Expanding responsibility for product safety to include the wide range of people or organizations that build and use AI—rather than leaving it to technicians and business alone—would mitigate such dangers.¹⁸⁶ Among the many obstacles to the implementation of responsible policies governing AI is their cost. The goal of profit-seeking business is to shift to the public as many costs as possible while garnering the highest possible private rate of return on investments. Public oversight of AI necessarily entails either public ownership or a comprehensive regulatory regime adequately financed to achieve its mission. The question is, where will the money come from? Moreover, the required regulation flies in the face of 50 years of policy devoted to deregulation and privatization. It would demand a fundamental rethinking of the government’s relationship to commercial interests. Such rethinking would, without a doubt, be attacked by self-interested parties as not only too costly but also as stifling innovation and promoting inefficiency. While these arguments may be relevant in individual circumstances, they are neither generally nor self-evidently true. From the perspective of education, responsible governance of AI therefore entails significantly more commitment than the simple principles of responsible development issued by industry. It also requires costly and ongoing monitoring of the effects of AI in classroom contexts. It may also require delays and indefinite pauses in development where warranted—such as, for example, in cases where commercial AI providers seek to introduce products into schools with insufficient evidence that they produce beneficial outcomes, or when those products automate professional judgment with potentially negative consequences, or when they inadequately address questions of AI ethics directly relevant to education. Is AI Inevitable? AI products are moving into schools at dizzying speed. As we have noted, this is in part the result of the pressure on schools to “modernize” by adopting the latest products that the technology industry offers. There is already a consensus of sorts that the move to AI is inevitable. The director of educational technology at Newark Public Schools made the case to the New York Times when he explained why his district adopted Khanmigo: “It’s important to introduce our students to it, because it’s not going away.”¹⁸⁷ The de facto requirement that students serve as a technology company’s experimental subjects might be explained by the initially low entry cost for school districts. Struggling districts, especially, might be willing to gamble that a technological innovation might turn things around for their students. However, before placing that bet it would be valuable to first ask some fundamental questions. Computer scientist Joseph Weizenbaum posed such concerns 50 years ago, essentially arguing that no technology—including AI—should be implemented unless we know that it is both necessary and good.¹⁸⁸

The impact is tradeoff – programs like special education will be cut first when AI saps public budgets.

Sinha 24 (Tannistha Sinha covers education, housing, and politics in Houston for the Houston Defender Network as a Report for America corps member. She graduated with a master of science in journalism from the University of Southern California in 2022, and was the recipient of the Annenberg Graduate fellowship. , "Texas school districts face \$300 million federal special education funding cut", DefenderNetwork, <https://defendernetwork.com/news/education/texas-special-education-funding-cuts/>, 1-26-2024, DOA: 2-21-2025)

Texas public schools unexpectedly lost \$300 million per year in federal special education funding amidst rising costs the Texas Health and Human Services Commission notified school districts on Dec. 15. The cuts are to the School Health and Related Services (SHARS), a federal special education program that allows Texas local educational agencies (LEAs) and shared service arrangements (SSAs) to request reimbursement for Medicaid health-related services. School districts are eligible for partial reimbursements when they directly offer medical services to students with special needs, instead of relying on a doctor or nurse. The loss in annual funding relates to Medicaid reimbursements for special education students. It followed a court ruling in a billing disagreement between school districts and the federal government, dating back to 2017.

Contention 2 : Exploitation

Gen harms - exploited workers prove

Rowe 2023

Rowe, Niamh. 2023. “‘It’s Destroyed Me Completely’: Kenyan Moderators Decry Toll of Training of AI Models.” The Guardian, August 2, 2023, sec. Technology.

<https://www.theguardian.com/technology/2023/aug/02/ai-chatbot-training-human-toll-content-moderator-meta-openai>.

‘It’s destroyed me completely’: Kenyan moderators decry toll of training of AI models

Okinyi, a former content moderator for Open AI’s ChatGPT in Nairobi, Kenya, is one of four people in that role who have filed a petition to the Kenyan government calling for an investigation into what they describe as exploitative conditions for contractors reviewing the content that powers artificial intelligence programs.

“It has really damaged my mental health,” said **Okinyi**.

The 27-year-old said he would view up to **700 text passages a day**, many **depicting graphic sexual violence**. He recalls he started avoiding people after having read texts about rapists and found himself projecting paranoid narratives on to people around him. Then last year, his wife told him he was a changed man, and left. She was pregnant at the time. “I lost my family,” he said.

The **petition filed** by the moderators **relates to** a contract between **OpenAI** and Sama — **a data annotation services company headquartered in California that employs content moderators around the world**. While employed by Sama in 2021 and 2022 in Nairobi to review content for OpenAI, the content moderators allege, **they suffered psychological trauma, low pay and abrupt dismissal**.

Bots like ChatGPT are examples of **large language models**, a type of AI algorithm that teaches computers to learn by example. To teach Bard, Bing or ChatGPT to recognize prompts **that would generate harmful materials**, algorithms **must be fed examples of hate speech, violence and sexual abuse**. The work of feeding the algorithms examples is a growing business, and the **data collection and labeling industry** is expected to **grow to over \$14bn by 2030**, according to GlobalData, a data analytics and consultancy firm.

Much of that labeling **work is performed** thousands of miles from Silicon Valley, **in east Africa, India, the Philippines, and even refugees living in Kenya’s Dadaab and Lebanon’s Shatila — camps** with a large pool of multilingual workers who are willing to do the work **for a fraction of the cost**, said Sravya Chandhramowuli, a researcher of data annotation at the University of London.

Global Ai is growing and so is exploitation

Graham 24

We, AI. 2024. “Newsreel Asia.” Newsreel Asia. July 13, 2024.
<https://www.newsreel.asia/articles/the-exploited-workers-behind-the-ai-we-use>.

The global AI market, projected to grow from \$200 billion in 2023 to nearly \$2 trillion by 2030, is drawing millions of workers into its rapidly expanding sector. This surge in artificial intelligence affects industries like logistics, manufacturing, and healthcare but masks a harsh reality: **the widespread exploitation of labour that powers these advanced systems**

Thish supercedes human rights

Arun 2024 “Transnational AI and Corporate Imperialism.” 2024. Carnegie Endowment for International Peace. 2024.
<https://carnegieendowment.org/research/2024/10/transnational-ai-and-corporate-imperialism?lang=en>

Global informational capitalism and **corporate imperialism drive companies** to take advantage of the uneven geographical conditions of capital accumulation, which explains why **AI's business models inevitably harm vulnerable people** that cannot access state protection.⁵⁰ If one state legislates to protect data annotators companies can move to a different state that permits their exploitative practices. If one state bans an AI product, companies can sell it in a more permissive market. Companies are driven to compete to maximize profits, and they seek access to new markets as they reach the limits of their initial markets. They engage in exploitation of resources to increase their profit margins.

Given the distribution of capital, it is unsurprising that a significant proportion of the demand for digital labor comes from the so-called Global North, while the supply of labor tends to come from what was once called the Global South.⁵ ^{More than one scholar focusing on global capitalism has noted that the exploited workforce tend to be concentrated in the Global South.” After painstaking empirical work on the people who}
annotate and verify data for three major platforms operating in Latin America, Julian Ponsda concluded that, American technology companies, often through intermediaries, use poorly paid workers in countries in crisis as a source of cheap labor.⁵³ The platformization of labor breaks down traditional organizing structures: workers are unable to bargain with the companies since they see themselves as being in competition, not in solidarity, with each other.” There are no institutional or structural solutions to protect them. Kalladi Venu argued that there are
“structural inequalities that result from histories of colonial, racial, and gender dispossession that map directly onto new technological platforms.”⁵⁵

The lucrative business of data annotation, through which companies hire Kenyan workers for less than \$2 an hour, is an example of how the **exploitation of cognitive labor is a part of the creation of global AI systems.**⁵⁶ While the exploitation of physical labor—whether that of the miners and assembly line workers or those who clean the waste that these systems generate—is also a part of AI's value chain, informational capitalism has inherited this set of practices from industrial capitalism. **The exploitation of cognitive labor is characteristic of informational capitalism but derives from,** and is co-extensive with, industrial **capitalism's** systems for labor **exploitation.** Industrial capitalism also exploited immaterial labor such as affective and biological labor.⁵⁷ Informational capitalism has created new practices to do so. These new practices can be more easily understood in terms of their connection to capitalism.⁵⁸

Uneven legal protections in states around the world leave some populations vulnerable to exploitation and other harms resulting from the companies' practices. The history of capitalism is full of such examples. Consider product liability laws in the United States, which emerged from mass torts or from regulators: products like banned pesticides that cannot be sold or used in the United States are exported to other markets.⁵⁹ Apart from the harm that this causes to people in states without regulatory safeguards, the risk can boomerang to the United States through products further down the value chain.⁶⁰ When the United States imports produce grown using banned pesticides, its population is also affected. While international coordinated action is taken from time to time, like in the case of the insecticide DDT, capitalism's legal order permits risky products to find markets that are unable to offer resistance.⁶¹ **Informational**

capitalism is currently governed by a similarly permissive legal order—if the United States and EU regulate to protect their populations, **harmful AI products will continue to be developed and inflicted on the people of other states.**

Powerful states' legislators and regulators might wish to consider, right from the start, how to identify and restrict the algorithmic equivalent of DDT.

Even those who are not concerned about people at a distance should be concerned about the proliferation of harmful algorithmic systems and datasets that cause downstream problems.⁶² An AI system encoded with outdated and discriminatory information perpetuates harm. Take, for example, the databases that have designated certain freedom fighters and opposition leaders around the world as terrorists. Imagine how this could affect someone such as former South African President Nelson Mandela, who was once designated as a terrorist and later underwent a change of status.⁶³ AI systems trained on old datasets may not encode this change of status and similar changes of the corresponding statuses of people connected with such figures, meaning that such systems may still flag all these people as potential terrorists on the basis of outdated information. Even seemingly safe and stable states go through phases of discrimination and persecution and will probably eventually be affected by harmful AI products that are created and available because they are marketable.⁶⁴ Even if the products are never used in the United States or the EU, persecution, oppression, and violence elsewhere in the world will be visible at the borders of more privileged countries in the form of asylum-seekers, and an increase in global crime and terrorism.

The use of Gen AI props up exploitation in countries in the global south

C3: Don't trust AI

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

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.

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, 20**25**, <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, 20**25**, <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.

accounts on gen AI websites get Hacked and stolen

Graham 23

CLULEY, Graham. 2023. "100,000 Hacked ChatGPT Accounts up for Sale on the Dark Web." Hot for Security. 2023. <https://www.bitdefender.com/en-us/blog/hotforsecurity/100-000-hacked-chatgpt-accounts-up-for-sale-on-the-dark-web>.

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 reasons. 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.

Furthermore, there is the very real danger that workers will have reused the same password for their ChatGPT account as other online accounts, raising the prospect that **hackers** may be able to use the compromised **detail**s to access other online accounts and potentially **steal other corporate data**. According to the researchers, the logs indicated that most of the breached ChatGPT credentials were scooped up by the Raccoon information-stealing malware. The notorious Raccoon information-stealing malware is used by cybercriminals to steal sensitive data from victim's browsers and cryptocurrency wallets, scooping up saved credit card details, saved login details, and extracting information from cookies. For as little as US \$200-per month malicious hackers and fraudsters could purchase access to Raccoon's capabilities. The development of the Raccoon malware was disrupted after Ukrainian national Mark Sokolovsky, its alleged developer, was arrested in the Netherlands at the request of the FBI. The news of the arrest put to the malware-as-a-service group's earlier claim that their key developer had been killed in the early days of Russia's invasion of Ukraine. Although at the time of Sokolovsky's arrest the infrastructure for Raccoon was also dismantled, new versions of Raccoon have been released since - at an increased price of US \$275 per month. It is estimated that **approximately one million people had fallen victim** to Raccoon by the end of 2022, with users most commonly attacked via boobytrapped emails.

And this is leading to the rise of phishing

Jacob Fox, Jacob. "Top 40 AI Cybersecurity Statistics | Cobalt." Cobalt.io, Cobalt, 10 Oct. 2024.
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 is killing the economy

Jacob Fox 24, Jacob. "Top 40 AI Cybersecurity Statistics | Cobalt." Cobalt.io, Cobalt, 10 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 (VPNRank).

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).

Impersonation scams cost \$12.5 billion nationally in losses in 2023 (Federal Bureau of Investigation).

AI Ransomware

48% of security professionals believe AI will power future ransomware attacks (Netacea).

The average ransomware attack costs companies \$4,450,000 (IBM).

Ransomware attacks rose 13 times over the first half of 2023 as a percentage of total malware detections (Fortinet).

AI Cryptocrimes

Deepfakes will account for 70% of cryptocrimes by 2026 (Bitget).

Cryptocrime losses totaled \$5.6 billion nationally in 2023, accounting for 50% of total reported losses from financial fraud complaints (Federal Bureau of Investigation).

Cryptocurrency losses rose 53% from 2022 to 2023 (Federal Bureau of Investigation).

AI-generated Cybersecurity Risks

60% of IT professionals feel their organizations are not prepared to counter AI-generated threats (Darktrace).

While 79% of IT security executives say they've taken steps to mitigate AI-generated risks, just 54% of hands-on practitioners share their confidence (Darktrace).

41% of organizations still rely on endpoint detection and response (EDR) strategies to stop AI attacks (Deep Instinct). Previous research has found that over half of organizations say EDR solutions are ineffective against new types of threats (Ponemon Institute).

Despite the limitations of EDR, 31% of organizations plan to increase investment in EDR solutions (Deep Instinct).

Generative AI exacerbates educational divides.

Bozkurt et al. 24 [Aras Bozkurt, researcher and faculty member at Anadolu University, Türkiye, et al.

"The manifesto for teaching and learning in a time of generative AI: A critical collective stance to better navigate the future." Open Praxis 16.4 (2024): 487-513.

<https://openpraxis.org/articles/10.55982/openpraxis.16.4.777>] SDA

1. Digital Divide and Educational Inequality

GenAI may exacerbate existing inequalities within education:

Unequal Access: High costs of advanced GenAI tools along with infrastructure requirements limit accessibility for underprivileged students and institutions.

Widening the Gap: Those with access to premium GenAI services may gain advantages that increase the disparity between wealthy and disadvantaged learners.

Global Inequities: Developing countries may lack the infrastructure to support GenAI, hindering educational progress.

Critical Insight: While GenAI has the potential to transform education, it risks deepening the digital divide and exacerbating inequalities. Unequal access to AI-powered tools is a major concern, as advanced GenAI technologies are often costly and inaccessible to underprivileged students, particularly in low-income or rural areas. This economic barrier leaves many without access to GenAI's personalized learning and academic support, further disadvantaging them. As well-resourced institutions adopt premium, rather than freemium, GenAI services, their students gain a competitive edge, deepening social and educational hierarchies. In contrast, underfunded schools rely on outdated resources, widening the gap between wealthy and

disadvantaged learners. This disparity undermines education's role in promoting equal opportunity. Global inequities in AI accessibility are also pressing, as many developing nations lack the infrastructure to support GenAI integration. In resource-constrained settings, where access to GenAI tools often comes at the cost of increased surveillance, marginalized communities may face difficult trade-offs, such as sacrificing privacy for technological access. This cost-benefit balance varies widely across institutions and regions, impacting the extent to which GenAI can be integrated in an equitable and autonomous manner. Without addressing these access and ethical concerns, GenAI risks reinforcing, rather than bridging, existing educational disparities.

These AI chatbots have biases.

Nature 24

<https://www.nature.com/articles/d41586-024-00674-9#:~:text=Other%20researchers%20have%20found%20similar,%2C%20occupations%2C%20nationalities%20and%20more.&text=Perhaps%20this%20is%20unsurprising%2C%20given,is%20full%20of%20such%20stereotypes.>

Other researchers have found similar biases across the board: text-to-image generative AI models often produce images that include biased and stereotypical traits related to gender, skin colour, occupations, nationalities and more. Perhaps this is unsurprising, given that society is full of such stereotypes.

This shows how the people you want to educate are learning biases. Combine this with the fact of half of those

On Planned Parenthood, This chatbot requires access to internet, something that's a barrier for low-income communities and those who require Planned Parenthood the most

Scholl 24

<https://www.reviews.org/internet-service/how-many-us-households-are-without-internet-connection/>

An estimated 8.8% of households in the United States—or around 11.5 million homes—don't have a home internet connection, according to [2022 survey data from the U.S. Census Bureau](#). However, that number has fallen dramatically in recent years, as the number of homes without internet in 2015 was around 22.8%.

Although the number of Americans with internet access is going up, advocates worry that the recent end of the [Affordable Connectivity Program](#) could stand in the way of increased access. “Affordability is a huge barrier to getting home internet service,” say Corian Zacher and Stacey Baxter, two staff members of [Next Century Cities](#), a Washington D.C.-based nonprofit that pushes for increased broadband access nationwide. “Competition helps, but the Affordable Connectivity Program was so essential and brought over 22 million households online and then the program ended because of a lack of funding.”