

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

C1) Absence

One of the biggest issues in schools is absence

By — Gabrielle **Hays** Jan 17, 20**24** 5:23 PM EDT / St. Louis University was set to apologize for enslaving people. Hours before the ceremony, a group of descendants of Black people the school owned and traded backed out, citing concerns that the yearslong reconciliation process ultimately felt too symbolic. / Chronic absenteeism is up across the country. School leaders are trying to address why / <https://www.pbs.org/newshour/nation/chronic-absenteeism-is-up-across-the-country-school-leaders-are-trying-to-address-why#:~:text=Some%2029.7%20percent%20of%20the,according%20to%20its%20latest%20report.>

Federal guidelines say **districts** should **aim** to have **90 percent of students in attendance** 90 percent of the time. In Missouri, about **76** percent of students **meet this standard**, according to state data from the 2022-23 school year. This marks a **drop** of **more than 10 percentage** points from 2019, when 87.3 percent of students met this attendance target. The length of the average school year varies by state, but in Missouri, where students in schools with a five-day school week see 174 instructional days, being chronically absent would mean missing more than 17 days in a school year. **Research shows the effects of missing school can have lifelong impacts.** **Chronic absenteeism** **may make it harder for children to meet early learning milestones and can lead to poor academic performance,** according to the **Department of Education**. At Wednesday's event, **Tanden said absenteeism can account for up to 27 percent of test score declines in math and 45 percent of test score declines in reading, citing research from the Council of Economic Advisers. Absenteeism can also be a predictor of whether students will drop out before graduation, something that can lead to adverse health effects and lower lifetime earnings .** In Ross' district, the **attendance rate dropped** from 83 percent in 2019 to **around 75 percent in 2022-23** school year, he said. At St. Louis Public Schools, Superintendent Dr. Keisha Scarlett told the NewsHour **nearly half of the district's** more than 16,000 **students are chronically absent.**

Most students claim this is because class is boring

Author: Ric **Sweeney** April 12, 20**22** / Ric Sweeney is an Associate Professor in the Marketing Department at the University of Cincinnati's Carl H. Lindner College of Business, specializing in Principles of Marketing, Advertising, Services Marketing, Branding, and Promotions. / Why Students Get Bored in Class and What to Do About It / <https://www.mheducation.com/highered/blog/2024/06/why-students-get-bored-in-class-and-what-to-do-about-it.html>

Several studies have tried to uncover both the reasons why students are bored in the classroom, with some studies suggesting that students feel bored 1/3 of the time they're in the classroom and others suggesting that only 25% of 11th graders feel engaged by school. Either way, this is not good news for faculty, who work hard to create a stimulating experience for students. The results of boredom can be quite detrimental: bored students will likely skip class, pay less attention to important material, skip assignments, get lower grades, and have a likelihood to drop out of the class, a program, or College altogether because of lack classroom engagement.

Thankfully, ai makes learning more engaging

Cenage group October 31, 2024 / no qual / From Hesitation to Adoption: The Growing Role of GenAI in the Classroom

<https://www.cengagegroup.com/news/perspectives/2024/from-hesitation-to-adoption-the-growing-role-of-genai-in-the-classroom/#:~:text=Improving%20student%20engagement%3A%2063%25%20of,engagement%20in%20the%20learning%20process.>

Uncertainty of how to use AI and a lack of information about the technology are the primary reasons educators are reluctant to adopt GenAI. This insight exposes an opportunity for edtech providers to teach and train educators on potential use cases and learning outcomes that GenAI can support. In addition to increased GenAI adoption, there is also a notable shift in HED educators' perception of AI. In 2023, just 28% of instructors had a positive view of AI and, in 2024, this figure increased to 49%. Both HED instructors and K12 teachers perceive GenAI's potential to positively impact education by: Becoming a pillar of education: 90% of HED instructors & 84% of K12 teachers believe GenAI will play an increasingly important role in education in the coming years. Supporting lifelong learning: 71% of HED instructors & 65% of K12 teachers say GenAI can play a role in supporting lifelong learning. Improving student engagement: 63% of HED instructors & 62% of K12 teachers believe GenAI can improve student engagement in the learning process.

I: higher academic rates

AI is increasing within education

Horn 24 [Horn, Michael B, 5-2-2024, "AI is Officially Here, There, Everywhere, and Nowhere," Education Next, <https://www.educationnext.org/ai-is-officially-here-there-everywhere-and-nowhere/>, accessed 3-3-2025] //

District responses to AI have been all over the map, and many districts have lurches from one approach to another. Several big-city districts banned ChatGPT almost immediately after it was launched in November 2022. But months later, most had rolled back their bans and instead started to encourage the use of AI. For example, Walla Walla Public Schools in Washington State initially banned ChatGPT. Then, the district repealed the policy and trained its teachers in how to use AI tools. "[I was] a little bit red-faced, a little bit embarrassed that we had blocked [ChatGPT] in the spring," Keith Ross, the district's director of technology and information services, told a local-news outlet. "[It] really shed light that we need to not wait on this and get moving and find out how to supply the tool to the students." Recent surveys of teachers and administrators reveal similar contradictions. In an EdWeek Research Center survey conducted in late 2023, about one in five teachers said their district lacked clear policies regarding AI products, and the same share reported that students are not

allowed to use it. That same survey also found that **more than half** of teachers **believe that AI usage in school will grow next year.**

As ai increases, we see more students engaged. Allows better activity.

by **YouScience** | Feb 27, 2024 | Blog / no quals / What is student engagement and why is it important? / <https://www.youscience.com/resources/blog/student-engagement/#:~:text=Student%20engagement%20is%20essential%20for,think%20critically%2C%20and%20enjoy%20learning.>

Student engagement is essential for a successful educational experience. **When students actively engage in their learning, they are more likely to get better grades, think critically, and enjoy learning.** Findings from the 2023 Post-Graduation Readiness Report from YouScience® revealed that 65% of high school graduates had five or fewer conversations with teachers or counselors about their post-high school opportunities. Additionally, 25% of graduates reported that their schools did not connect them or their classmates with local businesses to help them understand what local careers are available to them. Other benefits of student engagement include better attendance, reduced behavioral problems, and increased retention rates. So, why is student engagement so critical? It is the centerpiece for a fulfilling and impactful education experience.

And now because of ai engagement, we see grad rates rising

By James **Barron** Sept. 20, 2023 /" I've worked for The Times since a week after I graduated from college. I spent a year in the bureau in Albany, N.Y., and two as a national correspondent in Detroit. " // How A.I. Increased the Graduation Rate at John Jay College by 32 Points Software identified at-risk students, who were given extra help. Also, New London, Conn., hasn't forgotten the traitor Benedict Arnold, 242 years later. // <https://www.nytimes.com/2023/09/20/nyregion/ai-john-jay-college.html>

Dara Byrne was so surprised by the numbers on **graduation rates** that she **triple**-checked them. **In two years,** the **graduation rate among students** at John Jay College with enough credits to get their diplomas after one more year of study **had jumped 32 percentage points, to 86 percent.** Byrne, then **the associate** provost, credits **artificial intelligence — specifically, A.I.-powered software that analyzed things like whether students' grades were slipping and whether they had signed up for courses that would give them enough credit hours to graduate. The software generated a "risk score" for every student that told academic advisers which students to concentrate on. "It can be hard to know who requires a little more attention," said Dana Prieto, one of two academic advisers at John Jay, who explained that students with risk scores that pointed to a chance of dropping out were given extra help, including one-on-one coaching.**

C2) Heart Disease

Women are more likely to be misdiagnosed for heart disease

Zia **Sherrell** Dr. Payal **Kohli**, M.D., FACC **21** Zia Sherrell is a health copywriter and digital health journalist with over a decade of experience covering diverse topics from public health to medical cannabis, nutrition, and biomedical science. Her

mission is to empower and educate people by bringing health matters to life with engaging, evidence-based writing. Dr. Payal Kohli is an ABMS board certified noninvasive cardiologist specializing in advanced echocardiography, nuclear cardiology, and women's heart disease. Dr. Kohli has also served as a section editor for Journal of the American College of Cardiology (JACC) and assistant editor for JACC Imaging. February 22, 2021 "What are the symptoms of heart disease in women?," Medical News Today, <https://www.medicalnewstoday.com/articles/heart-disease-in-women#healthcare-disparities>

Overall, the speed and **quality of healthcare for females with heart disease is lower than** that of **males** in the U.S. According to the National Heart, Lung, and Blood Institute (NHLBI) Trusted Source, **females** are **more likely to experience delays** in getting an EKG when they visit the hospital for symptoms that could indicate heart disease in comparison with males. Doctors are also less likely to perform diagnostic tests for CAD in females, while young females are more likely to receive an incorrect diagnosis following a cardiac event. This can result in misdiagnosis and people leaving the hospital without treatment. **Females also face barriers when they** do **receive** a **diagnosis**. Compared with males, they are: **45% less likely to receive statins 35% less likely to receive beta blockers 28% more likely to visit the emergency room (ER) more than twice in a year less likely to receive treatment from a heart specialist** less likely to receive a pacemaker or defibrillator less likely to receive procedures, such as percutaneous coronary intervention or a coronary bypass This impacts health outcomes for females, leading to increased risk of mortality.

This is because of poor education on gender differences

Leonard Briggers 21 Jayne is a qualified counselor and psychotherapist, and she holds a diploma in nutritional therapy. At present, she is completing a master's degree in counselling and psychotherapy. She is passionate about the influence of diet and lifestyle on mental health and well-being. Through her work in both private and not-for-profit settings, she hopes to empower others to take charge of their lives and improve their physical and mental health. Dr. Alana Biggers is an ABMS board certified internal medicine physician. She is an assistant professor at the University of Illinois at Chicago College of Medicine, where she specializes in internal medicine. June 17, 2021, "Gender bias in medical diagnosis," Medical News Today, <https://www.medicalnewstoday.com/articles/gender-bias-in-medical-diagnosis>

There are sex-based differences in how the **symptoms of heart disease** present in males and females. **However, a lack of education on these differences** can **lead to doctors ignoring or misdiagnosing** heart disease. Doctors are more likely to regard the symptoms that affect females as "atypical" compared with the symptoms that often affect males. They are also less likely to refer females for diagnostic tests and treatment. The **same is true of heart attacks. Females are** less likely to experience "classic" heart attack symptoms, and are **less likely to receive treatment.** The American Heart Association (AHA) Trusted Source says this is because doctors use a diagnostic criteria that is geared towards males. Marginalizing the symptoms that females experience puts them at risk.

AI is becoming increasingly more prevalent in the medical field

Nathan Eddy 24 Nathan Eddy works as an independent filmmaker and journalist based in Berlin, specializing in architecture, business technology and healthcare IT. He is a graduate of Northwestern University's Medill School of Journalism. 4-4-2024, "Medical Schools Train the Next Generation of Clinicians to Better Understand AI," Education Next, <https://healthtechmagazine.net/article/2024/04/medical-schools-train-next-generation-clinicians-better-understand-ai>

Educators are integrating AI and ML into curricula **to train medical students** to practice medicine in the real world, says Dr. Bernard Chang, dean for medical education at Harvard Medical School, which is creating an AI in medicine doctorate track. “We know AI is going to transform how healthcare is delivered. It already is doing that,” he says. “I don’t believe that AI will replace human physicians, but those who use AI will be so much more capable than those who don’t.”

AI is also demonstrating a lack of sexual biases in medical education

Shoja 24 Dr. Shoja’s expertise as a clinical anatomist incorporating translational clinical research is founded on his rare double specialization in the fields of clinical anatomy and medicine. His extensive research has produced numerous cutting edge findings including the discovery of the laterality of central respiratory control, the introduction of a new surgical approach for reinnervation of the paralyzed phrenic nerve in patients with high cervical spinal cord injury, the introduction of a new classification for the branching pattern of the renal artery, introduction of a novel laboratory model for neurosurgical training that simulates intraventricular endoscopic surgery, and the discovery of a new syndrome composed of hereditary gelsolin amyloidosis and retinitis pigmentosa and named “Ardalan-Shoja-Kiuru syndrome” after him and his research team. Dr. Shoja has published more than 500 research articles in internationally renowned biomedical journals including Clinical Anatomy, Critical Reviews in Toxicology, Bioscience, Life Sciences, Journal of Neurosurgery, International Journal of Cardiology, and Neurosurgery to name a few. Currently, his h-index is 50. His research findings have been cited more than 10,000 times by independent scientists in the scientific community worldwide. , 2024 Feb 19 What Goes In, Must Come Out: Generative Artificial Intelligence Does Not Present Algorithmic Bias Across Race and Gender in Medical Residency Specialties NCBI <https://pmc.ncbi.nlm.nih.gov/articles/PMC10951939/>

What Goes In, Must Come Out: **Generative Artificial Intelligence Does Not Present Algorithmic Bias Across Race and Gender in Medical Residency Specialties** Artificial Intelligence (AI) has made significant inroads into various domains, including medicine, raising concerns about algorithmic bias. This study investigates the presence of biases in generative AI programs, with a specific focus on gender and racial representations across 19 medical residency specialties. Methodology This comparative study utilized DALL-E2 to generate faces representing 19 distinct residency training specialties, as identified by the Association of American Medical Colleges (AAMC), which were then compared to the AAMC’s residency specialty breakdown with respect to race and gender. Results Our **findings reveal** an alignment between **OpenAI’s DALL-E2’s** predictions and the current demographic landscape of medical residents, suggesting an **absence of algorithmic bias in this AI model.**

And improving the information on signs of heart disease between genders

Carter 22 Ricky Carter from Department of Quantitative Health Sciences (R.E.C.), Mayo Clinic, Jacksonville, FL. 17 February 2022, Cardiovascular Disease Screening in Women: Leveraging Artificial Intelligence and Digital Tools AHA, <https://www.ahajournals.org/doi/full/10.1161/CIRCRESAHA.121.319876>

Tractable approaches to facilitating **more comprehensive CVD risk assessment in women** are **now offered by** the ongoing accumulation of readily available health data combined with the rapid development of machine learning (ML) and specifically **AI** tools for analyzing these data. In fact, the breadth and depth of data and analytical tools can facilitate approaches for primordial, primary and secondary prevention of CVD in women. When integrated with evolving personal health data capture systems, in addition to established electronic health record (EHR) systems, AI can be well positioned to synthesize and analyze the intrinsically complex and rapidly expanding quantities of interrelated data. For primordial

prevention, **AI could expand the use of currently available personal health and web-based applications by incorporating data from multiple sensors** (eg, activity trackers, digital scales, EHRs, and fitness apps) to predict women who are at risk for developing CVD risk factors such as hypertension, obesity, and hypercholesterolemia. For primary prevention, digital tools can be used to screen women for known but undiagnosed CVD risk factors such as hypertension, as well as evaluate blood pressure control following intervention. In addition, AI-based algorithms can integrate existing clinical or imaging²⁰ data for more accurate risk prediction and aid clinical decision support tools for appropriate early interventions. For secondary prevention, **AI algorithms can similarly identify women who already carry a diagnosis of overt CVD** but may benefit from more intensive guideline-directed medical therapy or facilitate remote cardiac rehabilitation²¹ using digital technology. Leveraging AI for CVD Screening in Women ML Potential and Purpose Effectively leveraging AI to improve health outcomes, for women as well as for men, requires an understanding of the potential and purpose of ML algorithms. The quote “All models are wrong, but some are useful,” by George Box, is often used to introduce the concept of statistical modeling to learners.²² What has been known for over a century is that statistical models provide a nonunique solution of relating a set of variables to an outcome of interest. The choice of variables, the units of the variables, and the functional form can all influence the model’s fit to the data. Historically, statistical models were written by the analyst guided on knowledge of the clinical domain and statistics. ML does not remove these elements from the modeling but rather creates a larger search space for an optimal model by leveraging robust computing capabilities. In a way, ML is allowing for systematic examination of complex relationships using the speed of computers. Deep learning extends many common regression techniques by building a network of complex data extraction and data summarization mathematical operations to provide mechanisms to identify subtle patterns in the data. One particular type of ML, AI combines these techniques in a way to provide statistical tools that allow for computational tasks that previously required human perception to address. These tasks, sometimes described as human easy–computer hard, are as common as humans using facial and voice recognition to uniquely identify a person. Programming those tasks to be robust into a computer, however, is a challenge.

Misdiagnoses are a serious issue

Lix Szabo 24 [Horn, Michael B, Jan. 15, 2024, “Medical mistakes are more likely in women and minorities NBC, <https://www.nbcnews.com/health/health-news/medical-mistakes-are-likely-women-minorities-rcna133726>

In a study published Jan. 8 in JAMA Internal Medicine, researchers found that nearly **1 in 4 hospital patients who died or were transferred to intensive care had experienced a diagnostic error.** Nearly **18% of misdiagnosed patients were harmed or died.** In all, an estimated 795,000 patients a year die or are permanently disabled because of misdiagnosis, according to a study published in July in the BMJ Quality & Safety periodical. Some patients are at higher risk than others. Women and racial and ethnic minorities are 20% to 30% more likely than white men to experience a misdiagnosis, said Dr. David Newman-Toker, a professor of neurology at Johns Hopkins School of Medicine and the lead author of the BMJ study. “That’s significant and inexcusable,” he said.

So is Heart Disease

CBC 24 [Horn, Michael B, 5-2-2024, “AI is Officially Here, There, Everywhere, and Nowhere,” Education Next, <https://www.cdc.gov/heart-disease/about/women-and-heart-disease.html>

Over 60 million women (44%) in the United States are living **with some form of heart disease.**¹ Heart disease is the leading cause of death for women in the United States and can affect women at any age. In 2021, it was **responsible for the deaths of 310,661 women—or about 1 in every 5 female deaths.**² Only about half (56%) of US women recognize that heart disease is their number 1 killer.³

Thus we affirm

Rebuttle

C1

Turn: Generative AI increases critical thinking **Sardi 25**

Sardi, Juli, et al. "How Generative AI Influences Students' Self-Regulated Learning and Critical Thinking Skills? A Systematic Review." International Journal of Engineering Pedagogy (IJEP), vol. 15, no. 1, International Society for Engineering Education (IGIP), Kassel University Press, Jan. 2025, pp. 94–108, <https://doi.org/10.3991/ijep.v15i1.53379>. Accessed 23 Mar. 2025.

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Generative artificial intelligence (AI), particularly tools such as ChatGPT, is transforming education by enhancing self-regulated learning (SRL) and critical thinking skills, two essential competencies in the digital era. This study systematically analyzes the impact of generative AI on these skills using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework to identify, evaluate, and synthesize relevant studies. **Document searches were conducted in Scopus, Web of Science, and ScienceDirect, focusing on publications from 2022 to 2024, when ChatGPT was first widely adopted. Of the 3,214 documents identified, 557 met the initial screening criteria, and 38 studies were selected for detailed analysis. The findings reveal that 71.4% of studies reported AI's positive role in SRL, mainly through personalized learning, metacognitive support, and adaptive feedback. Likewise, 62.5% of studies reported its significant role in critical thinking, supporting the process of analysis, evaluation, and reflection.** However, researchers cautioned against an overreliance on technology, which one said could take away some students' ability to think for themselves. Such findings indicate that educational institutions need to change their ways and include generative AI in a model that focuses on areas that foster learner independence. This approach will assist teachers and decision-makers in harnessing the distinctive kitsch of AI technology by creating new learning spaces that are creative and future-oriented.

Berg 23

van den Berg, G., & du Plessis, E. (2023). ChatGPT and Generative AI: Possibilities for Its Contribution to Lesson Planning, Critical Thinking and Openness in Teacher Education. Education Sciences, 13(10), 998. <https://doi.org/10.3390/educsci13100998>

[Geesje van den Berg: a Professor and C-rated National Research Foundation researcher in the Department of Curriculum and Instructional Studies, University of South Africa (UNISA)] // IK

Generative AI tools such as ChatGPT **should be seen as tools that can assist** the teacher **in improving the quality of education in schools and not as a threat** to teacher training, teacher education and schools. In this regard, Saunders [3] argues that **users may also find ChatGPT to be extremely helpful when creating scenarios for real-world case-study-based assessments, especially if teachers and student teachers use ChatGPT to create individual scenarios to which their assessments will respond, such as critically evaluating lesson plans.** According to Phillips [9], “[t]he job of the educator is to hold the hand of the student as they go through the process of learning and to remind them of what the integrity of the learning process requires. It’s not about getting the answer, it’s about the process of learning. And the student’s job is to learn how to learn—not just what to learn, but also how to learn”. **Students might thus use examples from lesson plans on ChatGPT to distinguish between what is versus what ought to be. This can help enhance critical thinking. Although authors such as Kasneci et al. [2] caution against the over-reliance on these tools,** which can negatively impact their critical thinking and problem-solving skills, **they agree that activities involving them for critique and evaluation promote not only critical thinking but also creativity and problem-solving skills.**

Education without AI already discourages critical thinking

David 18 [David, Joe, (Joe David is the author of numerous articles and six books. Two are: The Fire Within (about the failures of public education), Teacher of the Year (a satire of an educator)) 1-11-2018, “How the American Education System Suppresses Critical Thinking,” Observer, <https://observer.com/2018/01/american-education-system-suppresses-critical-thinking/>, accessed 3-7-2025] // CW

In an article entitled, “Undoing the Dis-Education of Millennials,” the author, Adam MacLeod, an associate professor at Faulkner University’s Jones School of Law, summarized his observation of his students. “**For** several years now my **students** have been mostly Millennials.

Contrary to stereotype, I have found that **the vast majority** of them **want to learn.** But true to stereotype, **I increasingly find that most of them cannot think,** don’t know very much, and are enslaved to their appetites and feelings. Their minds are held hostage in a prison fashioned by elite culture and their undergraduate professors.”

It saddens me to agree with Professor MacLeod. It is very rare to find a student with a fresh point of view, derived from clear thinking, secured in place by sound knowledge. Too many of them utter popular catchphrases that lack in-depth understanding of the subject. Their minds float around in orbit on some stratospheric level, which is only casually connected to reality. **Educators have carefully achieved this**

by systematically stripping students of their adventurous appetite for knowledge and loading them down with fake **information.** The good **students**, those striving for high-level professional careers, often **end up** like those in

Professor MacLeod’s class—**with limited knowledge and weak reasoning skills.** Since both are needed for survival in the business world, any attempt to smother a student’s fire within for knowledge (as I identify it in my book of the same name) is, in my opinion, the act of an evil person out to cripple autonomous man.

C2

Answer: AI is getting significantly cheaper

Dana **Levine** Feb 13, 2025 Is AI Getting Cheaper or More Expensive? Medium / DVM Cornell University 2004
PhD North Carolina State University 2013

<https://dana11235.medium.com/is-ai-getting-cheaper-or-more-expensive-80ad0a8635e4>. Accessed 2 Mar. 2025. IL

I recently read Sam Altman's blog post on AGI, and came out somewhat confused. His first two observations are: The intelligence of an AI model roughly equals the log of the resources used to train and run it. **The cost to use a given level of AI falls about 10x every 12 months...**

C3

Answer: A new generative AI called Deep Seek uses a lot less energy.

Marshall, Christa. "'Game changer'? What 'DeepSeek' AI means for electricity." E&ENews by POLITICO, January 29, 20**25**, <https://www.eenews.net/articles/game-changer-what-deepseek-ai-means-for-electricity/>. Accessed February 14, 2025.

DeepSeek, which is owned by the Chinese stock trading firm High-Flyer, upended the tech world after releasing an app that rose to the top of the download charts of the Apple store. **It appeared to have similar functionality as OpenAI's ChatGPT chatbot**, which can do things like write poetry when queried. **DeepSeek** says its **model uses roughly 10 to 40 times less energy than similar U.S. AI technology — a reduction that** seemingly **would** sharply **cut the need for energy-gobbling data centers**. A Nature paper this month also reported that DeepSeek required about 11 times less computing resources than a similar one from Meta. That indicates "it may be an order of magnitude more efficient," said Jenkins.

Answer: Education is essential to prevent climate change.

"Education is key to addressing climate change." **United Nations**, July 14, 20**20**, <https://www.un.org/en/climatechange/climate-solutions/education-key-addressing-climate-change>. Accessed February 14, 2025.

Education is a critical agent in addressing the issue of climate change. The UN Framework Convention on Climate Change (UNFCCC) assigns responsibility to Parties of the Convention to undertake educational and public awareness campaigns on climate change, and to ensure public participation in programmes and information access on the issue. **Education can encourage people to change their attitudes and behavior; it also helps them to make informed decisions.** In the classroom, **young people can be taught the impact of global warming and learn how to adapt to climate change. Education empowers all people, but especially motivates the young to take action.** Knowing the facts helps eliminate the fear of an issue which is frequently colored by doom and gloom in the public arena. In this context, UNICEF has tapped into the minds and imaginations of children around the world to capture what it means to be a child growing up in the age of rapid climate change.

Answer: Specifically, AI can help with climate change literacy.

Atkins, Carmen, Gina Girgente, Manoochehr Shirzaei, & Junghwan Kim. "Generative AI tools can enhance climate literacy but must be checked for biases and inaccuracies." Communications Earth & Environment, April 30, 20**24**, <https://www.nature.com/articles/s43247-024-01392-w>. Accessed February 14, 2025.

In the face of climate change, climate literacy is becoming increasingly important. With wide access to generative AI tools, such as OpenAI's ChatGPT, we explore the potential of AI platforms for ordinary citizens asking climate literacy questions. Here, we focus on a global scale and collect responses from ChatGPT (GPT-3.5 and GPT-4) on climate change-related hazard prompts over multiple iterations by utilizing the OpenAI's API and comparing the results with credible hazard risk indices. We find a general sense of agreement in comparisons and consistency in ChatGPT over the iterations. GPT-4 displayed fewer errors than GPT-3.5. Generative AI tools may be used in climate literacy, a timely topic of importance, but must be scrutinized for potential biases and inaccuracies moving forward and considered in a social context. Future work should identify and disseminate best practices for optimal use across various generative AI Tools.

C4

All analytics, just called out their evidence