The American Education system is falling behind, something needs to change, and fast, Harvard University from 2024 reports

University 24 [Harvard University, "The scary truth about how far behind American kids have fallen", 9/20/2024, Center for Education Policy Research at Harvard University, https://cepr.harvard.edu/news/scary-truth-about-how-far-behind-american-kids-have-fallen]//nishu

Kids are behind in reading and math, **and** they're **not catching up** **Nearly all public schools in America** closed by the end of March 2020, and while some reopened that fall, others did not fully resume in-person learning until fall 2021. The switch to remote school, along with the trauma and upheaval of living through a global health emergency in which more than a million Americans died, dealt a major blow to students' learning. **Scores on** one set of **national tests**, released in September 2022, **dropped to historic lows**, reversing two decades of progress in reading and math, the New York Times reported. Still, experts were optimistic that students could make up the ground they'd lost. NWEA's MAP tests, which measure academic growth, showed a strong rebound in the 2021-22 school year, said Karyn Lewis, vice president of research and policy partnerships at NWEA. But **growth slowed** the **following year**, and now **lags behind pre-pandemic trends**. **Kids "are learning** throughout the year, **but** they are **doing so at a** slightly **sluggish pace,**" Lewis said — not enough to make up for their Covid-era losses. A team of researchers using separate data from state tests appeared to find more hopeful results earlier this year, documenting significant recovery in both reading and math between 2022 and 2023. **But after reanalyzing their data, they found that the improvements in reading were probably produced by changes in state tests, not actual improvements in student achievement, said Thomas Kane, faculty director of the Center for Education Policy Research at Harvard** and one of the leaders of the research team. In fact, though students did gain some ground in math, they showed little recovery in reading between 2022 and 2023. More recent data does not paint a rosier picture. About half of states have released test results for the 2023-24 school year, and "I **don't see** a lot of **states with** substantial **increases**" in scores, Kane said. Many factors probably contribute to students' slow recovery, experts say. Some may have missed "foundational pieces" of reading and math in 2020 and 2021, Lewis said. Learning loss can be like a "compounding debt," she explained, with skills missed in early grades causing bigger and bigger problems as kids get older. Chronic absenteeism also remains a big obstacle to learning. Twenty-six percent of students were considered chronically absent in 2022-23, up from 13 percent in 2019-2020.

AI is key, it's a fresh spark in the engine

University of Illinois Urbana-Champaign 24 [The University of Illinois Urbana-Champaign, "AI in Schools: Pros and Cons", 10/24/2024, UIUC College of Education, https://education.illinois.edu/about/news-events/news/article/2024/10/24/ai-in-schools--pros-and-cons]//nishu

We have already mentioned some of the advantages of **AI in education**—**inspir**ing **creativity**, summarizing existing materials, and so on. This section will delve deeper into the pros and cons of AI in schools, focusing on how these tools can reshape the learning environment. Here's a brief look at eight more advantages. It can be used to personalize learning. AI **can help** you **tailor** your **content to** individual **student** needs and learning styles, based on AI-driven analytics that **give you insight into student performance and learning trends**. In this way, **AI helps students be more engaged and motivated**. It can provide students with immediate feedback. AI offers students instantaneous and detailed feedback on their work, **helping them to see their strengths and weaknesses**. Such feedback enhances understanding and learning outcomes—and helps teachers to know what to focus on in future lessons. **It can be used to create and supplement content**. **Through AI-powered platforms**, you can create lessons, activities, assessments, discussion prompts, and presentations simply by providing a short prompt with keywords. It can result in more inclusive lessons. AI has powerful tools that make previously inaccessible material available to students with special needs. Tools that offer text-to-speech, visual recognition, speech recognition, and more can help teachers adapt resources so that all students have an equal learning opportunity. It can provide greater access to resources. Educators can access a wealth of AI-powered platforms to facilitate and enhance the learning that takes place in their classrooms. Just a few examples are Canva Magic Write, which helps in brainstorming, outlining, and lesson planning; Curipod, which enables teachers to quickly create interactive lessons; Eduaide, which provides teachers with more than 100 resource types to choose from to create high-quality instructional materials; and Quizzizz, which can be used to design quizzes that will create a personalized learning path based on each student's responses. It can make abstract concepts more understandable. Image-generating AI tools such as Picsart and Visme can turn complex concepts into more readily accessible content. It can be used to handle administrative tasks. You can use AI to streamline administrative tasks such as grading, scheduling, communicating with parents, and managing student records. This frees you up to do what you do best: teach. It affords you more hands-on time with students and helps to ensure that no students fall through the cracks. It can foster critical thinkers. The advent and growing use of AI in classrooms lends itself to discussions regarding critical thinking and

ethical considerations. **Students** are naturally intrigued by AI. The rich discussions that you **can** facilitate can help them **grow and develop as thinkers and learners.**

21st century problems require 21st century solutions, and generative AI is at the forefront of advancement. Thus, Nish and I affirm are proud to affirm.

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

Contention one is: updating our outdated education

Ai does this in 3 key ways, the first is learning efficiency

Generative AI is specifically key, it allows for better augmentation and organization

Baier from MIT 25 [Paul Baier, "Turbocharging Organizational Learning With GenAI", 1/13/2025, MITSloan, https://sloanreview.mit.edu/article/turbocharging-organizational-learning-with-genai/]//nishu

Generative AI can **radically improve** an organization's **ability to learn**. With OpenAI's introduction of ChatGPT in November 2022, for the first time in the 200-plus-year history of advanced automation, the machines talked back. Instead of having to "speak" Java or Python, people could use everyday dialogue — which is why the tool garnered more than 100 million users in its first two months of public availability.1 More profoundly, by **facilitating interaction** in human language and deftly **handling unstructured words, images, numbers, and sounds, GenAI opened up** an **entirely new way of creating**, capturing, **and transferring** organizational **knowledge**. In this article, **we**'ll argue that leaders **need to embrace generative AI as** a **new** organizational **capability**, and not just because it automates a variety of tasks economically. Combined with traditional AI, generative AI expands the scope of potential improvement in many processes and decisions and the ease with which this new knowledge can be applied. This, in turn, creates the potential for a positive compounding effect on organizational learning, with human and machine agents working in concert to create new competitive advantages.

It's proven, we see access to more resources and learning

Wiley 24 [David Wiley, "Why Generative AI Is More Effective at Increasing Access to Educational Opportunity than OER", 9/10/2024, opencontent, https://opencontent.org/blog/archives/7589]//nishu

Because it can create new resources on demand, **generative AI** can **provide access** **to dramatically more resources, on more topics, in more languages, with more examples, using more pedagogies, in more formats,** etc., than the current "create traditional OER by hand through a bespoke process" approach can. When we connect this fact back to the primary goal of the open education movement, the implication becomes clear. If: the primary goal of the open education movement is to **increase access to educational opportunities**, and the primary strategy for accomplishing this goal is to increase access to educational resources, and generative AI can provide access to dramatically more resources than the current bespoke OER authoring process can, then the optimal tactic for accomplishing the open education movement's primary goal is no longer creating and sharing traditional OER – **the optimal tactic for accomplishing** the open **education** movement's primary goal **is to use generative AI.**

The 2nd is accessibility

Gen AI is key for accessibility in learning

Siddiqui 24 [Talha Siddiqui, "Using Inclusive Learning: How Generative AI Makes E-Learning Accessible to Everyone", 11/3/2024, Adobe eLearning, https://elearning.adobe.com/2024/11/using-inclusive-learning-how-generative-ai-makes-e-learning-accessible-to-everyone/]//nishu

1. Personalized Learning Paths: Adaptive Content That Meets Unique User Needs – Why it is important? A common characteristic of eLearning offerings is the use of the content with a majority of users in mind. Such a format will be a setup to failure for hope and is crucial for those needing extra aid or even just possess a different 'learning backbone' and seek an alternative method. If such content does not fill in the expectation of the learner, he or she is likely to switch to lower cognitive modes of learning because they expect to learn in a more intuitive or more simple form or because they fall into the passive learners or laggards category. The Conception begins with every child is different so every child has to be catered to in a different manner. – How Generative AI Can Help: **Generative AI** enables a major game change in how content will be delivered as AI-powered static **content will** enable content to **adapt to each viewer**. Agitations such as supply shortage are going to be alleviated as supply will increasingly be in more control. **Engagement is a key factor in the education system**s and understanding which learners AI remember, and support are becoming progressively important. **For instance**, **if a student struggles with certain concepts, generative AI can automatically slow down the pace, show more examples or provide more materials reinforcing the concept allowing the learner to grasp the concept more easily** reinforcing their persistent understanding of the content. – Real-World Example: Let's suppose learners enroll in an online coding course with different prior knowledge. AI can track the advancement of each student, and unify the difficulty levels of tasks and examples with the students' levels. As for beginner students, who may be given exercises of why such concepts are needed, more advanced users might have to take coding as more challenging devising exercises, as to not preoccupy themselves with trivial tasks. The ability to learn in such a help customized way is impressive by itself on a technological level; however, the most important aspect is providing for and addressing the needs of every single learner. 2. Breaking Language Barriers: Instant Multilingual Support for Global Reach – Challenge: In eLearning, **language barriers may be a** huge **hurdle** preventing non-native speakers from accessing knowledge. Global expansion of the digital learning platform elevates the necessity for such resources to be available in several languages to a higher level than ever before. From first world

countries, students can be fretted by the difficulty of understanding certain aspects of the topics being explained in a single language, or having a miss out on some major components because of the same language barrier. – How Generative AI Solves This: The application of **generative ai removes this problem** as it translates documents at one shot rather than localizing the text/tables. This basically means rewriting a document to fit the local context rather than just changing the words, which makes sure the relevant material is delivered and **the learner** was **give**n the **best opportunity to learn regardless of his/her background**. Considering this process of localization, it allows for students from other countries to use the materials in the languages that they understand , therefor ensures that no student feels excluded by such designed learning systems. – Advantage To Users: In terms of students, this translates to getting materials that are in a language that the students are well acquainted with and fully understood encouraging competitiveness. Exclusion in learning becomes a myth thanks to the AI that provides multilingual support to language learners. – A Practical Advice for Teachers and Schools: Translating languages using AI powered plugin can enable educators and organizations to provide for multilingual versions of its contents within a very **short period of time**, which also extends the target audience of eLearning programs while ensuring that every lesson is understandable and the intent of it is retained, in whatever language the lesson is taught. 3. **Assisting Students with Disabilities:** Features that Promote Learning in Real-Time a. Audio and Visual Aid Generation for Diverse Needs: – User Requirement: eLearning is a nightmare for students with similar disabilities when it comes to being able to learn content without the right aids. Alongside the educational struggle, those learners not only 'feel' as if they lack the technology, but the entire world around them is 'silent'- entirely leaving them in the dark when it comes to knowledge and modernism. – How Generative AI Helps: In a matter of learning, **generative AI resolves issues in an instant manner** – giving audio to videos in an audio description format or attaching captions alongside. Taking a sight-impaired learner as an example, Artificial Intelligence **enhanc**es their **learning** through videos by adding in text which explains the scenes. These features always **ensure that every learner with specific and varying needs is able to interact with the content** without having visual descriptions as to what they can see. – Example in Action: For instance, take a learner who is visually impaired and needs to be able to understand the elements within their lesson- be that an infographic or something else, generative AI can formulate an instant descriptive text that would outline the main points to the learner without them struggling to process information in great depth. b. Text Simplification and Reading Aids: – Purpose: With us living in a first world society, **many of us easily forget that there are learners** who find it extremely difficult to be able to read pages upon pages of text, visually stunning forms of content or excessive expository writing- needless to say the importance this has for students **with cognitive disabilities.** – **Solution** powered by **Generative AI**: Generative AI application does allow assistance in alternative content creation. For example, the application can generate paraphrased texts, which are simpler or less complex in terms of wording. Other functionalities which are useful and also can be found in any computer are 'read-aloud' options to allow the learners to listen to the content rather than reading it. Thus, it enables learners who need help by presenting the hard materials in a much simpler way. – User Story: Now let's take a case of a learner having dyslexia, trying to interact with a complex lesson: Class dyslexia. So, for that, the learner uses AI text simplification and read-aloud programs to create the lesson class which is suitable for them.

The two methods are being proven right now, the US ought to be next

Willige 24 [Andrea Willige, "From virtual tutors to accessible textbooks: 5 ways AI is transforming education", 5/10/2024, World Economic Forum, https://www.weforum.org/stories/2024/05/ways-ai-can-benefit-education/]//nishu

South Korea's Ministry of Education plans to introduce **AI-powered** digital **textbooks** in primary and secondary schools starting in 2025. It's a bid to **address educational inequality** as well as the reliance on private education and the country's highly competitive education culture. AI will be deployed to create personalized learning opportunities so pupils can learn at their own pace. The programme will start by offering mathematics, English and informatics, and eventually encompass the entire roster of subjects. The Ministry has emphasized taking a collaborative approach between human teachers and AI assistance. In a panel session on the use of AI in education at the Forum's recent Special Meeting on Global Collaboration, Growth and Energy for Development, Gaspard Twagirayezu, Rwanda's Minister of

Education, also underscored the value of personalized learning: “AI has the potential to assess the ability of individual students and then be able to customize content for them to learn.” Creating an equitable educational environment is also at the heart of an initiative by the Ministry of Education **in the** United Arab Emirates (**UAE**). The project, set to launch later this year, aims to **boost students’ academic performance and enhance critical thinking skills** through **AI-powered personalized learning.** An AI tutor will tailor lessons to individual students’ needs and learning styles, proffering the level of support they require. It will also manage students’ continuous assessment, give targeted feedback and provide the right resources a learner needs to develop. Real-time analytics enable teachers to deploy adaptive, personalized strategies. By automating certain teaching tasks, the project aims to enable teachers to focus more on strategic and interactive elements of the learning journey. A pilot project has already vindicated the approach by demonstrating a 10% increase in learning outcomes. AI can also improve educational outcomes in areas such as accessibility. **Globally, there are 240 million children with disabilities**. A large majority of them do not have accessible learning materials, technologies or educational support, the Forum’s report says. **UNICEF is now leveraging AI to overcome this**, creating digital textbooks that cater for diverse learners. The textbooks make content adaptable to individual students’ needs by offering functionality such as sign-language videos, interactivity, audio descriptions and text-to-speech conversion. Students will be able to download the materials and use them offline. This will be a vital advantage in countries with large digital divides, as Deemah Al Yahya, Secretary-General of the Digital Cooperation Organization, stressed at the Special Meeting: “We have 2.7% of the population unconnected. They're not even on the grid, they don’t have basic connectivity or internet.” An educational technology start-up **in** Mali, **West Africa** aims to upskill young people in a setting with limited formal employment prospects. More than 80% of employment in Africa is informal. Kabakoo Academies uses social media content and local partnerships to reach young people in urban and semi-urban West Africa. Kabakoo focuses on experiential learning with a real-life network of students and mentors. However, its app makes an **AI-based virtual mentor** available **24/7, offering guidance, resources and advice** as needed. It also provides personalized feedback on learners’ assignments. Among the successes reported by students is a 44% increase in income six months after completing the programme. With **Brazil** underperforming in the OECD’s latest PISA performance rankings, the Letrus programme aims to **boost literacy levels across middle and high schools with** the help of **AI**. The programme specifically targets the divergent performance of low- and high-income students. Letrus focuses on personalized learning through AI, offering real-time feedback for students and progress data to educators and school managers. Teachers benefit from tailored content and practical recommendations for individual students and at class level. The initiative has shown significant success in improving student performance in writing exams in the state of Espirito Santo, with Letrus being chosen as the official literacy development programme for all of its high schools. **The World Economic Forum**’s Shaping the Future of Learning 2024 report **concludes** that integrating **AI in**to **education** has great potential for **improv**ing **student**’s **learning** experiences and **outcomes**. It also points to the need for scaling AI literacy to prepare learners at all levels for future job markets. However, the Forum also acknowledges the potential risks of AI, especially if it is rolled out too quickly and without the right governance and guardrails in place.

Education is key to better jobs

Bureau of Labor Statistics 20 [US Bureau of Labor Statistics, "Learn more, earn more: Education leads to higher wages, lower unemployment", 5/2020, US Bureau of Labor Statistics, https://www.bls.gov/careeroutlook/2020/data-on-display/education-pays.htm]//nishu

If you’re wondering whether it pays to stay in school, take a look at data from the U.S. Bureau of Labor Statistics (BLS): As workers’ educational attainment rises, their unemployment rates decrease and earnings increase. Median weekly earnings and unemployment rate by education attainment, 2019 Bar chart with 2 data series. The chart has 1 X axis displaying categories. The chart has 1 Y axis displaying values. Data ranges from 592 to 1883. End of interactive chart. View Chart Data As the chart shows, workers age 25 and over who have **less education** than a high school diploma had the **highest unemployment rate** (5.4 percent) and **lowest** median weekly **earnings** ($592) in 2019 among those at all education levels. Workers with graduate degrees had the lowest unemployment rates and highest earnings. These data come from the BLS Current Population Survey, a monthly survey that collects information about the labor force, including age, employment status, and other characteristics. Each level of **education** you complete may **help you develop more skills**, **give you access to higher paying occupation**s, and signal that you’re able to follow through on important tasks, such as planning ahead and meeting deadlines, that employers value. Other factors affecting employment and earnings include geographic location, experience, and hours worked. BLS data and information can help you understand some of these factors. For example, the Occupational Outlook Handbook provides information on wages, typical education requirements, and the projected job outlook for hundreds of occupations.

Ensuring education and creating jobs is key for solving poverty

Misra 17 [Jagriti Misra, "The Relationship Between Jobs and Poverty", 9/24/2017, The Borgen Project, https://borgenproject.org/jobs-and-poverty/]//nishu

The proportion of the world's population living in extreme poverty has decreased significantly since 2012, with 767 million people, or 10.7 percent of the population, now living below the international poverty line, which is $1.90 per person per day. Despite the global financial crisis of 2008-2009, the world poverty rate has steadily declined over the past decade. **To have any hope of escaping poverty**, income from **stable work is essential**. **According to** Annette Dixon, **World Bank** South Asia Region Vice President, **jobs are necessary to push people out of poverty**. A flourishing private sector can help with job creation, while investments in education, healthcare and social protection can ensure that people are credentialed appropriately for those jobs. Investing in women's education is also imperative if countries are to pull themselves out of poverty. In fact, a woman's earning potential increases by 20 percent with every year of schooling she receives. A recent study conducted by the World Bank on factors affecting poverty found a **strong correlation between better jobs and poverty reduction.** The study, which was conducted in Cambodia, Mongolia, Philippines, Thailand, Timor-Leste and Vietnam, found that a steady income was the largest contributor to poverty reduction. With the exception of the Philippines, incomes from **jobs** explained 40 percent of the observable reduction in poverty. On the other hand, in Timor-Leste, the loss of labor income between 2001 and 2007, during a period of civil conflicts, explained almost all of the increase in poverty. The type of labor income plays an important role when discussing better jobs and poverty reduction initiatives. While work in agriculture was a major driver of poverty reduction in the 1980s and 1990s, more recently this has been replaced by wage incomes. Wage incomes **explain 50 percent of poverty reduction** in countries like Vietnam, the Philippines and Cambodia. In this respect, a flourishing private sector and employment-related training can help bridge the gap between skilled labor and targeted jobs. The bottom line is that ending poverty and boosting shared prosperity hinge on creating better labor market conditions for the poor. In other words, steady income through better jobs and poverty reduction go hand in hand. Job creation, higher productivity and growth in real wages at the bottom of the distribution are the main mechanisms to achieve sustained poverty reduction.

Solving poverty with better education in America is key, it kills

Carbonaro 23 [Giulia Carbonaro, "Poverty Is Killing Nearly 200,000 Americans a Year", 6/22/2023, Newsweek, https://www.newsweek.com/poverty-killing-nearly-200000-americans-year-1806002]//nishu

The land of the free is suffering from a "self-inflicted" injustice when it comes to poverty, experts say, as the rich are getting richer while **thousands living without sufficient means die every year in the United States**, as a recent study shows. The issue, according to an exclusive poll conducted by Redfield & Wilton Strategies on behalf of Newsweek, worries a majority of Americans. **Research by the University of California, Riverside (UCR)** published earlier this year **in the Journal of the American Medical Association found** that **the death of 183,000 Americans** aged 15 years old and above in 2019—**a year** before the explosion of the pandemic were to make mortality rates in the country much, much worse—could be **attributed to poverty,** defined as those with incomes lower than 50 percent of the U.S. median. In 2019, the median household income was $69,560. In the same year, about 34 million Americans—10.5 percent of the country's population—were estimated by the U.S. Census Bureau to be living in poverty. Poverty remains a huge issue in the U.S., much more so than in other countries with similar levels of distributed wealth, and it is a cause of concern for a majority of Americans, as shown by the Newsweek/Redfield & Wilton Strategies poll. The poll, conducted among a sample of 1,500 eligible voters in the U.S. on May 31, found that some 53

percent of **Americans are** "very" **concerned about the level of poverty in the country**. Among Democrats—identified as people who voted for Joe Biden in 2020—the number went up to 58 percent, while among Republicans—identified as people who voted for Donald Trump in 2020—48 percent said they were "very" concerned about poverty in the U.S. Some 21 percent of Americans responding to the poll don't earn enough money from their primary job to pay bills or maintain their family's standard of living, while 52 percent are working multiple jobs to tackle the daily cost of living. More women (24 percent) than men (18 percent) said they didn't earn enough money to pay the bills, while more men (57 percent) than women (49 percent) said they were doing more than one job. The age cohort with the biggest percentage of people doing more than one job was 35-44, with 77 percent of respondents working multiple gigs.

Third is the Teacher Shortage:

There is a massive teacher shortage. We need solutions.

Nguyen, T. D., **Lam**, C. B., **& Bruno**, P. Tuan D. Nguyen is an associate professor of Education at Kansas State University. (20**24**). What do we know about the extent of teacher shortages nationwide? A Systematic examination of reports of U.S. teacher shortages. AERA Open, 10. Accessed February 23, 2025 from https://doi.org/10.1177/23328584241276512//SJLH

There are several important takeaways from these analyses. First, we provide a plausible and approximate lower bound of the extent of teacher shortages nationwide.5 **By our count, at least 39,700 teaching positions are vacant nationwide. If we extrapolate the vacancy rate (i.e., on a per-student basis) to states where we were unable to find data, the national vacancy count is closer to 57,600.** In the same vein, we obtain a very similar estimate when we use the number of underqualified positions and the known vacancy number for each state to extrapolate vacancy count for the fourteen states that do not have vacancy data and accounting for the number of teachers and students in the state. **Under this approach, we estimate there are approximately 58,300 vacant positions across the U.S.**6 **Using the Civil Rights data and reports of underqualification, we estimate there are 288,000 positions filled by underqualified teachers.** Stated otherwise, some back-of-the-envelope math implies that teaching vacancies amount to 1.80 percent of positions nationwide. That is arguably not a high vacancy rate, especially in light of widespread concerns about teacher shortages. **However, by the same math, approximately an additional 9.00 percent of positions are held by underqualified teachers.** This latter figure is at least plausibly suggestive of more widespread teacher supply problems. Still, as we note above, teachers' observable qualifications need to be interpreted cautiously given their weak relationship to effectiveness. Moreover, concerns about teacher shortages may themselves motivate policy changes that bring more underqualified teachers into the profession (e.g., to expand the teacher supply). Additional research on the relation between teacher qualifications and the teacher supply would be valuable. While vacancies are often discussed in the news, teacher underqualification is more pervasive than previously recognized, and we urge future research to examine this issue much more closely.

Our results also underscore the crucial point that "teacher shortages" defined in these ways vary substantially across regions and states and that it is important to consider the extent of the severity of the shortages through multiple perspectives. In particular, there is a strong need to account for the size of the student population or, relatedly, the size of the teacher labor market. For example, the vacancy rate per 10,000 students is more than 38 times as high in Mississippi as it is in Nebraska. Even this likely understates the extent of the variation since we do not have evidence about within-state variation between metropolitan areas, districts, schools, and teaching roles. Thus, efforts to characterize a "national teacher supply" or "nationwide teacher shortage" are likely to obscure considerable nuances and may confuse discussions about policy solutions.

While we present what we believe is the most comprehensive nationwide evidence to date about the scope of teacher shortages, perhaps another important takeaway from our analyses is how limited the data are. Our work is thus in line with other work pointing to the need to

improve educational data systems so that educational inequities can be studied and addressed (e.g., Asson et al., 2023). Perhaps most concretely, we demonstrate that the lack of federal infrastructure for data on the teacher labor market (Bleiberg & Kraft, 2023) cannot be made up for by compiling analogous data at the state level. In contrast, other recent work has shown that when a state chooses to invest in the collection and publication of detailed, timely school staff shortage data, those data can be used both for productive analyses by researchers (Bruno, 2023) and for strategic intervention by policymakers (Smylie, 2023). Yet such data systems are rare. Indeed, there are many states for which we are unable to find credible estimates of the extent of teacher shortages at all. This includes fourteen states for which we are unable to find any estimate of vacant positions, and these states collectively represent approximately 30.47 percent of the roughly 50 million public school students in the country.

AI can solve burnout, leading more teachers to stay.

Bradley 24' Finds, T. Tony Bradley is a reporter who covers the cybersecurity industry and the cross-section of technology and entertainment. (2024, September 19). AI's role in saving teachers time and revolutionizing education. Forbes. Retrieved February 8, 2025 from https://www.forbes.com/sites/tonybradley/2024/09/18/ais-role-in-saving-teachers-time-and-revolutionizing-education//SJLH

The teaching profession is in crisis. Burnout rates among educators are soaring, with K-12 teachers being some of the most overburdened professionals in the U.S. today. What many don't realize is that much of this burnout stems from the hidden workload teachers face.

This situation is compounded by the fact that the average teacher uses over 140 different digital tools throughout the school year. Juggling this fragmented ecosystem of apps and platforms adds to the stress, leaving educators with little time for what really matters: engaging with students.

But there's hope on the horizon. Artificial intelligence is emerging as a powerful ally for educators, capable of automating many of these time-consuming tasks and freeing up hours each week. In particular, tools like Brisk Teaching's AI-powered Chrome extension and its new student-facing feature, Brisk Boost, are reshaping the education landscape.

Burnout among teachers has reached alarming levels. According to a recent Gallup poll, K-12 teachers are experiencing the highest rates of burnout among all professions in the United States. This isn't just about classroom management; the true burden comes from the hidden workload that many outside the profession are unaware of.

Grading assignments, preparing lesson plans, managing student feedback, emailing parents, and attending professional development meetings all pile up behind the scenes. Teachers often spend more time on these tasks than they do teaching in the classroom. The result? High levels of stress and an increasing number of teachers leaving the profession.

Across various industries, AI has already proven its ability to automate repetitive and time-consuming tasks, boosting productivity and efficiency. The same potential exists in education, where AI can take over the labor-intensive tasks that weigh teachers down.

Yet, the solution isn't as simple as just throwing new tools into the mix. Teachers already navigate a sea of educational apps, platforms, and tools each year. If AI is going to make a meaningful impact, it must integrate seamlessly into the tools teachers are already using, without adding additional complexity or creating a steeper learning curve.

This is where Brisk Teaching comes in. Brisk Teaching is an AI Edtech startup that just announced its seed round, led by Owl Ventures, which brings their total funding to $6.9 million dollars.

Brisk Teaching's AI-powered Chrome extension is not another tool teachers have to manage—it's a solution that works within their existing platforms to automate tasks they're already doing. It speeds up routine activities like grading, lesson planning, and even creating new content from the materials teachers already use.

For example, Brisk Teaching's tools can turn a news article, YouTube video, or Google Slides presentation into a dynamic, interactive learning experience with just a few clicks. Teachers can also automate feedback on student writing, drastically reducing the time spent on grading essays. The result is a system that saves teachers up to 20 hours of work each week, freeing up time for what matters most: personalized engagement with students.

But Brisk Teaching isn't just about helping teachers—it's about empowering students too. The newly launched Brisk Boost feature allows students to use AI in safe, controlled activities that are linked directly to their lesson objectives. By functioning as a personal tutor, Brisk Boost adapts to each student's unique needs, offering real-time feedback, interactive quizzes, and brainstorming support. All of this helps students stay engaged while giving teachers valuable insights into how well their students are grasping the material.

Real-World Impact: Success and Adoption

The impact of Brisk Teaching's solution has been swift and significant. Since launching just over a year ago, the company has grown rapidly, with over 500,000 teachers—one in ten in the U.S.—now using the AI-powered Chrome extension. These tools have already saved educators over 10 million hours globally, proving that AI can make a meaningful difference in the classroom.

Educators who have adopted Brisk's solutions report not only time savings but also improved student outcomes. For example, by automating repetitive tasks, teachers have more time to focus on individual student needs and can offer more personalized instruction. At the same time, Brisk Boost has helped engage students with content in new and interactive ways, leading to greater participation and comprehension.

"Brisk Teaching is an incredible AI tool. It serves as a blueprint for instant student feedback - which you can edit on the spot," explained Chrissy Macso, a middle school English teacher at Old Trail School in Ohio. "If this would have come out years ago, more teachers would likely be feeling way less burnout. You can tell this is a product made by teachers for teachers. They thought of everything. If you're a teacher and haven't tried this tool, do it."

The Future of AI in Education

As the adoption of AI in education continues to grow, we're witnessing a shift in attitudes. What was once viewed with skepticism—particularly when tools like ChatGPT first hit the scene—is now being embraced by teachers as a way to enhance both their own productivity and the learning experience of their students.

Arman Jaffer, CEO of Brisk Teaching, shared, "We talk to teachers and school administrators every day to understand what's top of mind for them. It's been interesting to see how attitudes have changed rapidly about generative AI. Many we talk to have shifted from 'Ban it,' to 'How can teachers use this?' to 'How can schools use AI to engage students and teach them the skills of the future?'"

This shift is a testament to the value AI brings in creating more personalized learning experiences. Tools like Brisk Boost, which adapt to each student's needs, represent the future of differentiated learning. Rather than treating all students the same, AI allows teachers to tailor their instruction to better suit the unique learning styles and abilities of their students.

Empowering Educators for the Future

The benefits of AI in education go far beyond simple time savings. By automating the most tedious and time-consuming tasks, AI is empowering teachers to focus on what truly matters—engaging with students and fostering a better learning environment. Solutions like Brisk Teaching's AI-powered Chrome extension and Brisk Boost are not only helping to alleviate teacher burnout but also paving the way for a more sustainable and effective future for education.

It is clear that AI is not just a passing trend—it's a transformative technology that will shape the future of education for years to come. Teachers, administrators, and policymakers should embrace AI tools that integrate seamlessly with existing systems, saving time and enhancing the learning experience. With AI as an ally, educators can finally find the balance they've been seeking between managing administrative tasks and delivering quality education to their students.

The Impact is Lost Money and Education

Teacher shortages have enormous negative effects.

García 19 Find's E. Emma García was an education analyst for the Economic Policy Institute. The teacher shortage is real, large and growing, and worse than we thought: The first report in 'The Perfect Storm in the Teacher Labor Market' series. (2019). Economic Policy Institute. Accessed February 23 from https://www.epi.org/publication/the-teacher-shortage-is-real-large-and-growing-and-worse-than-we-thought-the-first-report-in-the-perfect-storm-in-the-teacher-labor-market-series//SJLH

The teacher shortage has serious consequences. A lack of sufficient, qualified teachers threatens students' ability to learn (Darling-Hammond 1999; Ladd and Sorensen 2016). Instability in a school's teacher workforce (i.e., high turnover and/or high attrition) negatively affects student achievement and diminishes teacher effectiveness and quality (Ronfeldt, Loeb, and Wyckoff 2013; Jackson and

Bruegmann 2009; Kraft and Papay 2014; Sorensen and Ladd 2018). And high teacher turnover consumes economic resources (i.e., through costs of recruiting and training new teachers) that could be better deployed elsewhere. Filling a vacancy costs $21,000 on average (Carver-Thomas and Darling-Hammond 2017; Learning Policy Institute 2017) and Carroll (2007) estimated that the total annual cost of turnover was $7.3 billion per year, a cost that would exceed $8 billion at present.2 The teacher shortage also makes it more difficult to build a solid reputation for teaching and to professionalize it, further perpetuating the shortage.

Not only would we save a boatload of money with GenAi, we would also enhance the education of our students.