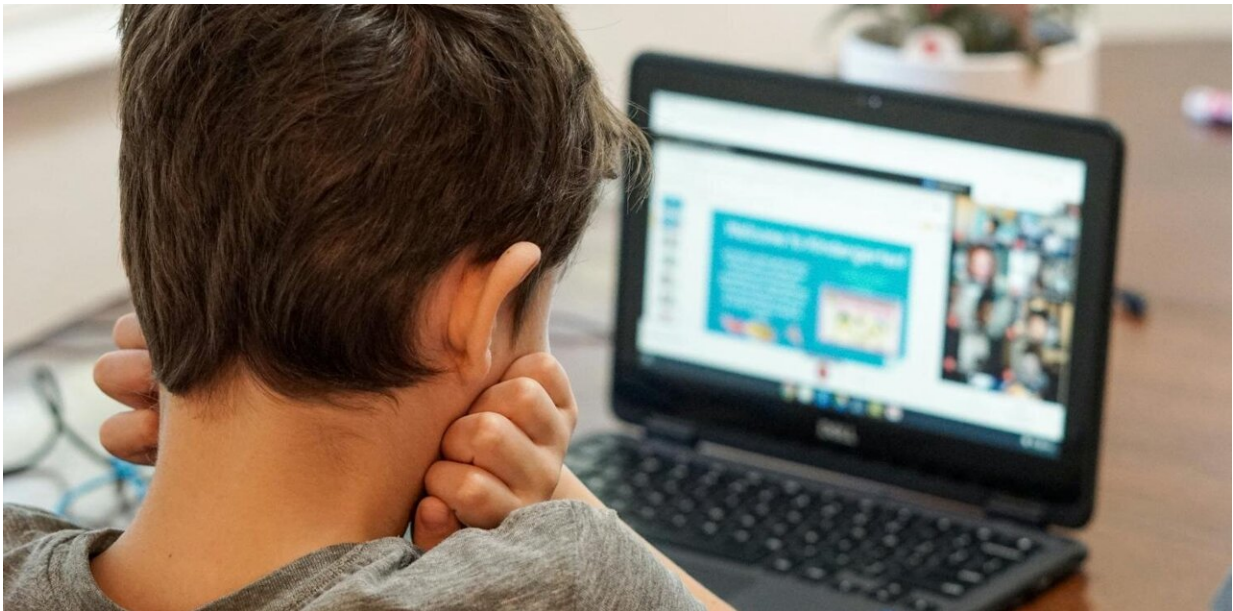


Q&A: Researchers warn of danger, call for pause in bringing AI to schools

March 22 2024, by Daniel Strain



Credit: University of Colorado at Boulder

In K-12 schools across the country, a new gold rush of sorts is underway: Classrooms nationwide are racing to bring the latest artificial intelligence tools, such as platforms powered by the chat bot ChatGPT, into the classroom.

Alex Molnar, a director of the National Education Policy Center (NEPC) at CU Boulder, sees a danger in this hurry to introduce AI to

schools. These platforms, he said, use opaque and usually proprietary algorithms—making their inner workings mysterious to educators, parents and students alike.

"What you have is a pocketful of promises that AI will deliver as promised," said Molnar, a research professor in the School of Education. "The problem is there is currently no way to independently evaluate the claims being made."

In a new report, Molnar and his colleagues highlight the potential pitfalls of AI in education and [call for an indefinite "pause"](#) in integrating AI into K-12 learning. Co-authors included Ben Williamson of the University of Edinburgh in the United Kingdom and Faith Boninger, assistant research professor of education at CU Boulder.

Molnar gives his take on why AI is a risky gamble for education—and what concerned parents and others can do to get involved.

Does new technology pose risks to K-12 education?

There have been all kinds of issues associated with the use of [digital platforms](#) in schools, even before the widespread adoption of artificial intelligence.

Student data are often not properly protected. For example, there have been all kinds of leaks from third-party vendors, and there's no law or effective policy that holds them accountable. You also have an awful lot of beta testing going on in schools. Marketing claims sound good, but digital platforms often don't produce the promised results and are riddled with [technical issues](#).

Digital technologies have made it difficult or impossible to answer fundamental questions, such as: Who's deciding the curriculum content

that gets built into these platforms? Who's reviewing their work?

Could AI make those issues worse?

All of the issues related to digital technologies tend to be amplified by artificial intelligence.

So-called AI uses algorithms and massive amounts of computing power to produce results based on countless calculations of probabilities. For example, what is the probability that the next word in a sequence will be 'juice'? These calculations do not produce 'truth' or even, necessarily, accuracy. They produce probabilistic output.

Currently, the construction and operation of AI algorithms is largely outside of [public view](#) and without any public accountability.

Nevertheless, school people are being pushed, both by marketers and government entities, to be seen to be in the forefront of this alleged digital revolution—turning more and more school processes over to technologists with little or no knowledge of pedagogy or school curriculum.

A lot of people call AI tools a 'black box.' What does that mean?

To use an old-world explanation, imagine if you said, "I'd like to see my child's geography textbook." You might say, "I have some issues here." You could talk to somebody about it, somebody who could possibly explain those issues. But with AI, you can't do that.

You can't go in and say, for example, "How did the scoring on this work?" The answer would be, "Well, we don't know." "How do we know that this content is accurate?" "Well, we don't know that, either."

Is the concern, then, that AI might make decisions in place of educators or parents?

You can use AI to assist you in determining if a child cheated. You use it to determine whether or not a child should be in this program or that program. You can use AI to decide all kinds of things about a child, and the child is locked in with little or no recourse.

Parents can complain all they want. They still can't get the information about the basis for a decision made by AI because the principal doesn't have it. The teacher doesn't have it. The superintendent doesn't have it. It's hidden behind a proprietary curtain by a private vendor.

You advocate for a 'pause' in the use of AI in schools. What would that look like?

The solution would be for state legislatures to, by statute, say, in essence: Public schools in this state may not adopt artificial intelligence programs unless and until those programs are certified by this governmental entity—they'd have to create the entity. It has reviewed these programs. It has said they are safe for use, and it defines what the appropriate uses of the program are and for whom.

In other words, nothing goes in the schools until we have the statutory and [regulatory framework](#) and institutional capacity in place to independently assess AI platforms that are proposed for [school](#) use.

What can parents, or anyone else, who are concerned about this issue do?

Demand that your representatives take these issues seriously—first of

all, to legislate a pause in the adoption of AI in schools. Period. Then they can ask their representatives to create a state entity that is designed to regulate the use of AI in schools.

This is a political problem. This is not a technical problem.

We have a long history of tech companies failing to follow their own rules, which are themselves laughably inadequate. For anybody who's seriously trying to figure out how to responsibly use AI in education, if they're not talking political action, they're not really talking. The technologists won't save us.

More information: 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. nepc.colorado.edu/publication/ai

Provided by University of Colorado at Boulder

Citation: Q&A: Researchers warn of danger, call for pause in bringing AI to schools (2024, March 22) retrieved 8 May 2024 from <https://phys.org/news/2024-03-qa-danger-ai-schools.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--