

**Teaching Technology for Tomorrow: How K-12 Education Must Change in the Ongoing
Technological Revolution**

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Throughout my education, I have observed students adapt to an increasingly technological world. It started with lectures on laptops during COVID. Then, we continued typing in-person. Gradually, we stopped buying folders at back-to-school sales, setting up OneDrive instead. When I became a Finance major, someone advised me to learn how to code. Life and technology intertwine more each day, and consequently, the baseline skills you need for living, learning, and working require more effort to attain. Those without a high initial investment into education fall behind, lacking the math skills to use formulas without Excel or the reading skills to understand textbooks without AI. I used to dream of being a professor, but as I watch outcome gaps grow due to inadequate foundational education, I'm redirecting my career towards K-12 schools. As a teacher, I hope to equip students with knowledge and critical thinking skills for an AI future.

It's clear that in the modern day, you either embrace technology as a tool or fall behind in employability. Our situation reminds me of "survival of the fittest," Darwin's observation that the most prosperous animals are best adapted to their environments. Consider a polar bear that spends its life growing big muscles to hunt; if the Arctic suddenly transforms into a desert, the bear's strength would not prevent its death by heatstroke. Comparably, our pen-and-paper world is turning digital. Now, an academic who always practiced math by hand will lose a calculation job to a college student with Excel. We must master technology to survive.

Yet, the news is filled with articles about how AI is destroying critical thinking, how schools are enacting phone bans in classrooms, how pre-pandemic math and literacy levels have not recovered despite new technologies. It reads like a catch-22: if you use technology, you lose thinking ability, but if you don't use technology, you'll be out-competed by robots. I often see people divided into these two camps, fiercely defending their positions. In my opinion, the real problem is not *if* we use technology but rather *how* to help people adapt to it healthily and ethically.

Technology has a high skill floor that I think will be hard to overcome, unlike traditional career skills. If you want to be a barber, you go to cosmetology school for 6 months and start cutting hair. Technology, however, requires a lot more context than the head in front of you. When using the internet, students should know about data privacy, good/poor sources of information, AI hallucinations, social engineering scams - all of which must be taught over time. More school sounds like a natural solution, but the opportunity cost of earning income is already too high for the working class person. Instead of limiting technological education to people with more resources, I think K-12 education must compensate by sacrificing outdated topics, teaching with more efficiency, and embracing technology in its lessons.

I hope to see schools pivot to more experiential learning and use technology to counter barriers to access. A history teacher could use VR headsets to show students ancient Rome, teaching them about Pompeii, Roman numerals, and eye strain. A math teacher (hopefully me!) might instruct her class to build a hill in Minecraft, calculating volume with blocks of dirt after safely downloading the software. A science teacher could distribute a new invention, the handheld microscope-camera, letting kids explore germs beyond the classroom, uploading photos to the cloud. When we incorporate technology into school, we can promote so much creativity, thought, and joy for future students. Let's shape that world with care!

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