



The internet is sowing mass confusion. We must rethink how we teach kids every subject.

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OPINION

Sam Wineburg, Opinion contributor Published 5:00 a.m. ET Feb. 12, 2019 | Updated 8:46 a.m. ET Feb. 12, 2019

A digitally credulous citizenry is a threat to democracy. We need the equivalent of the human genome project to bring education into the digital age.

In 2016, months before the presidential election, my research team surveyed nearly 8,000 students from middle school through college on their ability to judge material from the internet. We concluded that students' ability to navigate online information could be captured in one word: bleak. We released our findings two weeks after Donald Trump's election and were immediately swept up in the media maelstrom.

Our most reported finding was that 82 percent of middle school students couldn't tell the difference between an ad and a news story. But putting it that way isn't really fair to kids: While dozens of outlets reported this nugget, none mentioned an industry study that showed 59 percent of adults couldn't tell the difference, either.

We are all in the same boat. That boat is taking on water.

In the wake of mass confusion caused by the internet and social media, there have been calls for a renewed commitment to teaching civics and instructing students in the foundations of democracy. But if we think this challenge is only about civics, we're deluding ourselves. Bringing education into the 21st century demands that we rethink how we teach every subject in the curriculum.



We're still teaching history using only print texts even as kids are being historicized online by Holocaust deniers and Lost-Causers. We're teaching science in an era when online anti-vaxxers gain traction by using scientific language to deceive and intimidate. We're teaching students to solve math equations while remaining oblivious to the fact that they're being bamboozled by cunning infographics that mask rising temperatures by playing fast and loose with the X and Y axes.

Massive education response needed

We will fail the challenge posed by the digital revolution if we think there's a cheap way out of this mess. A new course in media literacy or a half-day presentation by the librarian is a Band-Aid. Ushering education into the digital age will demand the educational equivalent of the human genome project: a decade-long effort that cost billions of dollars, engaged thousands of scientists, and relied on international cooperation with teams from the United States, the United Kingdom, France, Germany and other nations.

The first step is to get an accurate fix on where students are at. We can't confuse kids' ease in operating digital devices with the sophistication needed to evaluate the information those devices yield. We'll need a host of innovative assessments that can be administered online and that take advantage of artificial intelligence and natural language processing for scoring.

Next, we'll need massive curriculum development and experimentation to help kids succeed on these assessments. We will need to develop new approaches to professional development for teachers, who sometimes are as confused as their students. And we'll

have to overhaul teacher education, so that new teachers feel prepared when they tell kids to open their Chromebooks.

Digital threat is a national defense issue

Most of all, we'll need public education in the deepest sense — the education of the public — in our libraries, our community centers and our places of worship — to reach parents and grandparents so we can help them help their children become informed citizens.

In October 1957, a whirling orbital ball known as Sputnik roused Americans from their slumber and set into motion a rethinking of our educational system. I don't see the equivalent of the National Defense Education Act coming out of Washington anytime soon. But the threat to democracy by a digitally credulous citizenry is nothing less than an issue of national defense.

Treating it as anything but guarantees a further erosion of democratic society.

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