

Not Even Companies Know if Their Edtech Products Work. Can Learning Science Fix That?

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By this point, calling edtech big business is probably an understatement. Conservative estimates hold that the U.S. [spent](#) \$100 billion on edtech during the last decade—with companies raising up to [\\$8 billion](#) in 2021 alone. But despite explosive growth in edtech spending, there's still very little that's known about which educational products actually work.

"The market is completely opaque," says Sierra Noakes, project director of the marketplace initiative at the nonprofit Digital Promise.

Over the last couple of years, several nonprofits including Digital Promise have tried to collect data about edtech products to provide educators a way to make smart decisions regarding tech. Without it, they're worried that the billions of dollars flowing into edtech may be creating a dysfunctional

marketplace where schools don't know the effectiveness or usefulness of the products they're buying.

Digital Promise's solution: a certification for edtech companies that was originally launched in 2020 to help educators figure out which products are implementing best research practices. The process was relaunched this year.

But in the two years since it's launched, many companies have been hesitant to put themselves through the certification process. A common response Digital Promise hears is that companies can't be both innovative and research-based. That raises "a huge red flag," Noakes says. Without research, companies are also in the dark about their product's effectiveness.

Companies just aren't incentivized to do efficacy research they don't control, according to Bart Epstein, CEO of Edtech Evidence Exchange, a nonprofit that offers tools to help schools measure edtech efficacy through its [EdTech Genome Project](#). Independent third-party research could always show that some of the most popular edtech products don't work, which would be disastrous for the companies that sell those products.

But perhaps these companies don't have to be so skittish.

According to a [new report](#) published by Digital Promise, companies are finding that integrating learning research into the design process provides useful information about the design process.

The report inspected five companies that have gone through Digital Promise's research-based design product certification process.

According to Noakes, Digital Promise has found that the companies who went through their certification process report that using learning sciences

in the design process allows their products to be more dynamic. The companies also reported that they can't really know what outcomes they expect from a product unless it's research-based, she says.

Beyond that, the report sets out some practical steps for companies to make sure they're innovating and creating effective tools. One such step: holding regular "cross-functional" team meetings to share research across an organization. "What we hear a lot with folks that go through the certification process is that one of the biggest benefits is creating in house processes for new communications channels to share research," Noakes says.

Federal Involvement

Collecting information about edtech products is a problem some people think the federal government should be handling.

"I have come to the inescapable conclusion that if the federal government does not step up, it'll never happen," Epstein, of Edtech Evidence Exchange, says.

Right now, the federal government views education as a state and local undertaking which it has chosen to stay out of as much as possible, lest it be interpreted as sticking its nose where it doesn't belong.

The lack of federal involvement in getting information has led to a "huge information vacuum" for schools in the country, Epstein says.

That leaves educators guessing as to whether the educational technology they're placing in front of kids is actually effective, and the fast-evolving sector presents a difficult problem about how to empower those educators to make smart decisions about edtech.

In the absence of federal funding for efficacy research, schools are left to fend for themselves. The fact that they're not vetting edtech well isn't surprising, Epstein says, especially since we're in the middle of the worst crisis our schools have seen in decades. But practically, this means that school purchases are often relying on marketing and other imprecise and potentially deceptive means of figuring out these complicated questions.

"If you don't have a research basis, you're grasping at straws," Noakes of Digital Promise says. "In the absence of having efficacy results at our fingertips, we need to find a more time sensitive way for education leaders and educators to have information about the quality of products."

Note: Digital Promise shares an institutional affiliation with ISTE, the parent organization of EdSurge.