Market Signals for Research-Based Innovations

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Shortly after congressional authorization, and tasked with the mission of accelerating innovation in education, Digital Promise convened leaders from some of the most innovative districts in the United States to identify common barriers and create and share new ideas and methods in education. We heard that districts needed solutions to support decisions around education technology (edtech) selection and procurement.

After seven years of conducting and sharing research, supporting growth in districts' research capacity, and becoming experts on the edtech landscape, Digital Promise understands that education leaders and educators need support discovering and selecting edtech products that attend to authentic educator and learner needs. To meet that demand, Digital Promise is launching a Product Certifications Pilot, aimed at disrupting the way edtech is chosen by developing the market signal for products that are grounded in learning sciences research.

Our Learning



2012

The League of Innovative Schools surfaced challenges around edtech selection and procurement.



2013

Digital Promise partnered with IDEO to explore ways to further develop the edtech market in K-12 districts, through evolving the edtech procurement processes. This study recommended a need for greater collaboration across vendors/ districts, within districts, and across districts. One promising method districts were using to inform their decisions was piloting.



2014

Digital Promise partnered with Johns Hopkins University to study 9 school districts while they conducted pilots using various edtech tools. We focused on learning about the processes they were using and understanding how to share those best practices with others to increase evidence-based decision-making.



2015

Digital Promise partnered with Carnegie Mellon University to conduct 3 pilots of learning tools while using feedback loops to iterate and improve on products. Simultaneously, we coordinated 6 pilots of middle school math tools and 3 pilots geared toward summer learning loss. As we conducted more pilots, we refined and documented the ideal pilot process.



2016

Digital Promise launched the Edtech Pilot Framework to share our synthesized 8-step pilot process, along with over 150 free, open-source tools and resources. Digital Promise and Teachers College at Columbia University led the Research-Based Products Campaign to incentivize the field to use research in product design and development. Digital Promise also published "Using Research in Ed Tech" to offer product teams guidance around research use in R&D.



2017

Digital Promise partnered with 2 districts to pilot 2 edtech products intended to support English Learners. Through this work, Digital Promise learned that few products are designed for marginalized learner populations. Our report shared best practices for edtech design to attend to diverse learner needs as well as pilot findings.



2018

Digital Promise invited educators to join our third professional learning cohort, representing 13 districts piloting 13 unique edtech products and innovative programs. Throughout the 3 PLCs, every participant reported an increased understanding of the edtech pilot process and agreed that evidence is important to decision-making. In addition, we published "Use Research Like A Champion" to share best practices for building districts' research capacity, particularly around piloting.



2019

Districts continue to share that edtech selection is challenging. Through a listening tour with more than 50 stakeholders, Digital Promise sought diverse perspectives to understand how to ease product discovery and selection for education leaders. We aim to develop a solution that will help consumers identify high-quality edtech tools designed using research that attend to educators' and learners' authentic needs.



Today's Landscape

This spring, we spoke with more than 50 stakeholders across the country, representing district and school leaders, educators, classroom-based coaches, staff from education nonprofits and procurement platforms, and edtech product teams. From these conversations, we heard about three pervasive challenges stakeholders face in the current edtech industry:



The limited information available about edtech products is hard to find and rarely trustworthy, timely, or relevant. The lack of reliable and accessible information about how products were designed, what products intend to accomplish, and how much the product will cost creates significant barriers when trying to choose edtech that meets educators' and students' needs.

"The process of selection takes several months because there isn't a lot of research out there. I [want a] trustworthy source to do the vetting legwork [for me]."

School Leader

"Unless it's third party, people do not believe [the results]. If you write a white paper for your company, it means nothing to educators and administrators. Of course you found your product is effective."

"A lot of times a product will make claims like students can do things three times faster and five times better. It would be nice to have valid research partners to verify these outcomes."

Product Developer

District Leader



Education leaders, educators, and investors do not have established common language or indicators to assess the quality of edtech products. Without common methods to compare products in the edtech industry, these stakeholders struggle to make evidence-based decisions about the quality and value of edtech products.

"Edtech is a completely opaque marketplace. With common standards, there would be a real opportunity to create this notion of smart demand."

Education Nonprofit Leader

"Educated consumers allow for better quality products."

Product Developer

"Standards in edtech

"Standards would help those of us being bombarded with products to give us a sense of who to talk to and who we shouldn't waste our time on."

District Leader

District Leader



Edtech vendors lack incentive to design for unique learner needs. Instead, many education leaders and product developers shared a concern that vendors' focus on profits pushes many in the field to develop the broadest edtech tool on the market, designed for a mythical average learner, that appeals to the most possible buyers. These design decisions miss critical opportunities to leverage rich learning sciences research to truly personalize learning experiences.

"They are trying so desperately to outdo each other that their rationale is to create a monolithic thing that is far superior to anything else on the market. As purchasers, that's not what we're interested in."

District Leader

"Companies are so quick to get a product out to meet what's current in education that they fail to develop the quality and depth they need."

District Leader

"There is definitely something wrong, something broken with the edtech industry. People who really should care about research are turning a blind eye to the lack of research."

Product Developer



A Solution on the Horizon

Without trusted, third-party verification of product features that matter to consumers, edtech developers have not been incentivized to be truly innovative and design for authentic needs. As one product developer shared, "In the past, we've been penalized for being honest about what we've seen in our product compared to others who boast exaggerated, unvalidated ideas." Through efforts led by ISTE, Project Unicorn, and other education nonprofits, standards and signals have begun to emerge to empower consumers to demand more from edtech.

Let's Demand Research-Based Products

Today, we know more than ever about how people learn through advances in learning sciences research. We also know, through research, that people learn differently. By incorporating learning sciences research findings in the design and development of edtech products, developers can create powerful learning experiences for the full spectrum of learners.

Education technology driven by learning sciences research has the potential to provide pathways to equitable, high-quality learning opportunities and experiences for every learner. If developers design edtech products using research, they can meet this potential in several ways: attending to the most difficult content to teach and learn; creating opportunities for differentiation; and providing guidance to support seamless implementation. Without established standards or clear signals, as we heard through our listening tour, it's challenging to demand product developers better attend to authentic learner needs through the incorporation of research.

Digital Promise is excited to tackle this challenge through cross-sector collaborations with education leaders, including those in our League of Innovative Schools network, edtech product partners, and partner nonprofits working in the field. This fall, we will pilot our first product certification, Learning Sciences Research-Based Design, to enable education leaders, educators, and product investors to access meaningful signals to quickly determine whether a product was designed and developed with learning sciences research.

How to Engage

Sign the Research-Based Product Promise to join our campaign to promote high-quality edtech products that support the full spectrum of learners. By signing the Research-Based Product Promise, you will signal to the field that you and/or your organization are committed to developing, purchasing, and/or using learning tools that incorporate research in their design and development.