

Improving Ed-Tech Purchasing

Identifying the key obstacles and potential solutions for the discovery and acquisition of K-12 personalized learning tools



Digital Promise

Accelerating Innovation in Education

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education industry association

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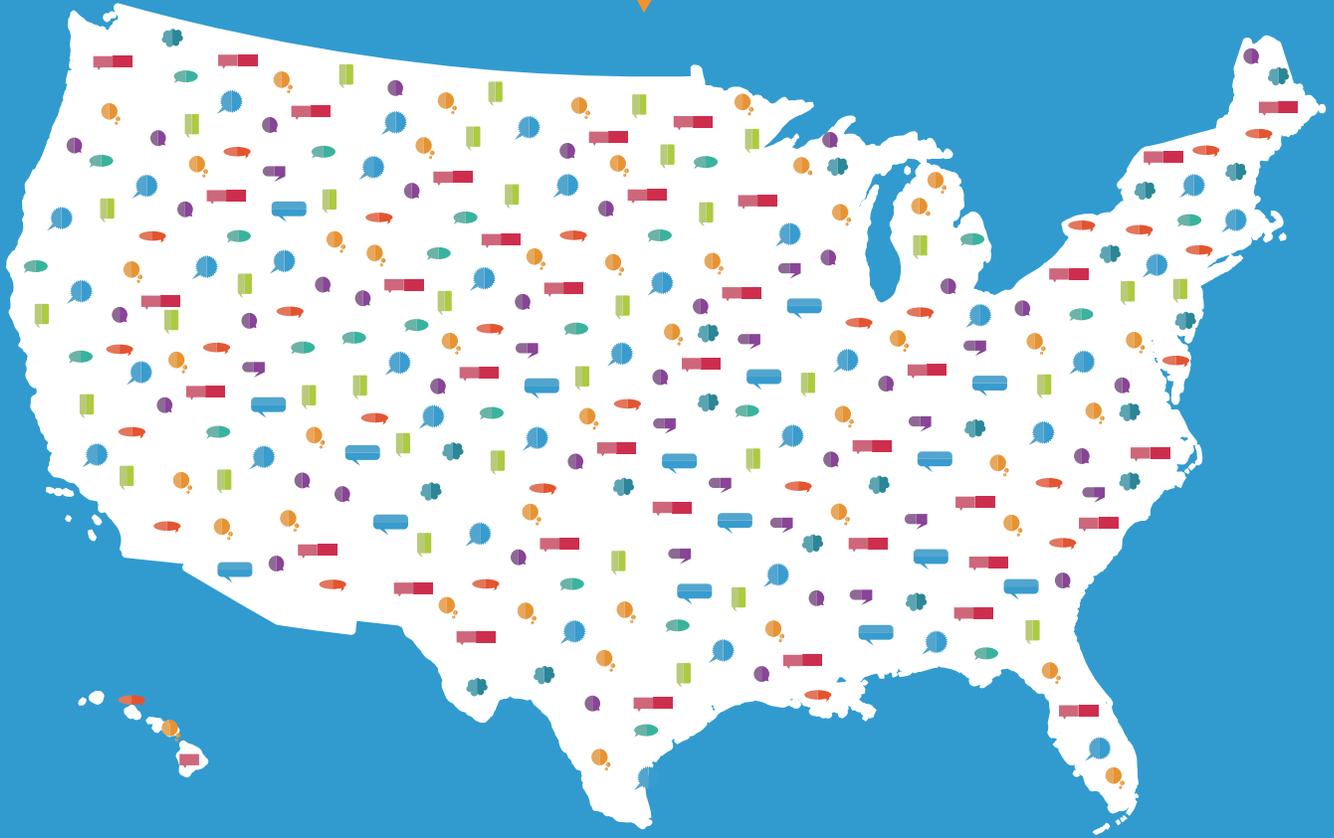
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An Overview



It may seem like a bureaucratic, back-office business practice, but procurement matters. How schools discover, acquire, and evaluate learning technology is crucial to whether students and teachers can readily access the tools that support their goals.

But there's a problem.

There are more than 14,000 school district "consumers" in the U.S., each with unique needs and procedures. And there is a growing and overwhelming number of products in the market, with a lack of trusted information about which are most effective.

Current purchasing practices were designed for print-based resources, not modern technology. The result is that at times, teachers and students don't end up with the best learning technology tools to meet their needs.

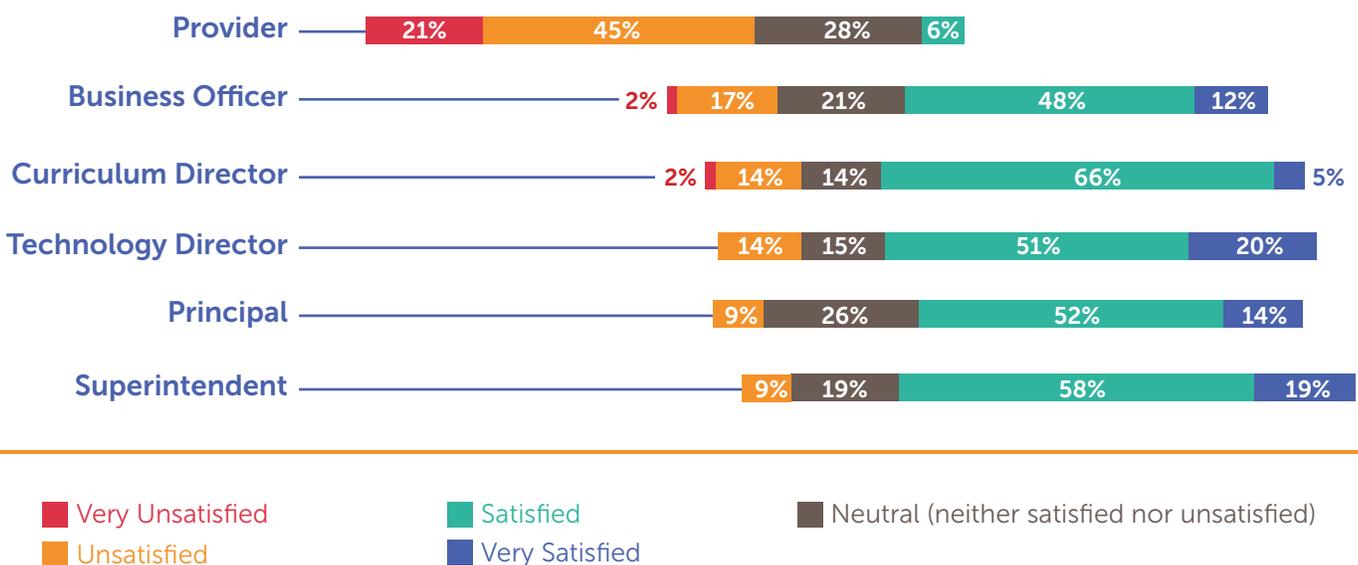
We can do more to ensure the promise of personalized learning is fulfilled.

An Overview

To address this challenge, Digital Promise and the Education Industry Association set out to identify key obstacles and potential solutions for the discovery and acquisition of K-12 personalized learning technology tools.

We found there's a gap between how school and district administrators perceive the procurement process and how providers perceive it.

Respondents' satisfaction with districts' processes for identifying, evaluating, and acquiring needed ed-tech products



An Overview



We approached a wide range of educators and providers, and asked questions like:

- 1** Who is involved in purchasing learning technology, and how are decisions made?
- 2** How satisfied are school administrators and technology developers with the process today?
- 3** What practices could make procurement work better, and what challenges are standing in the way?

What Have We Learned?

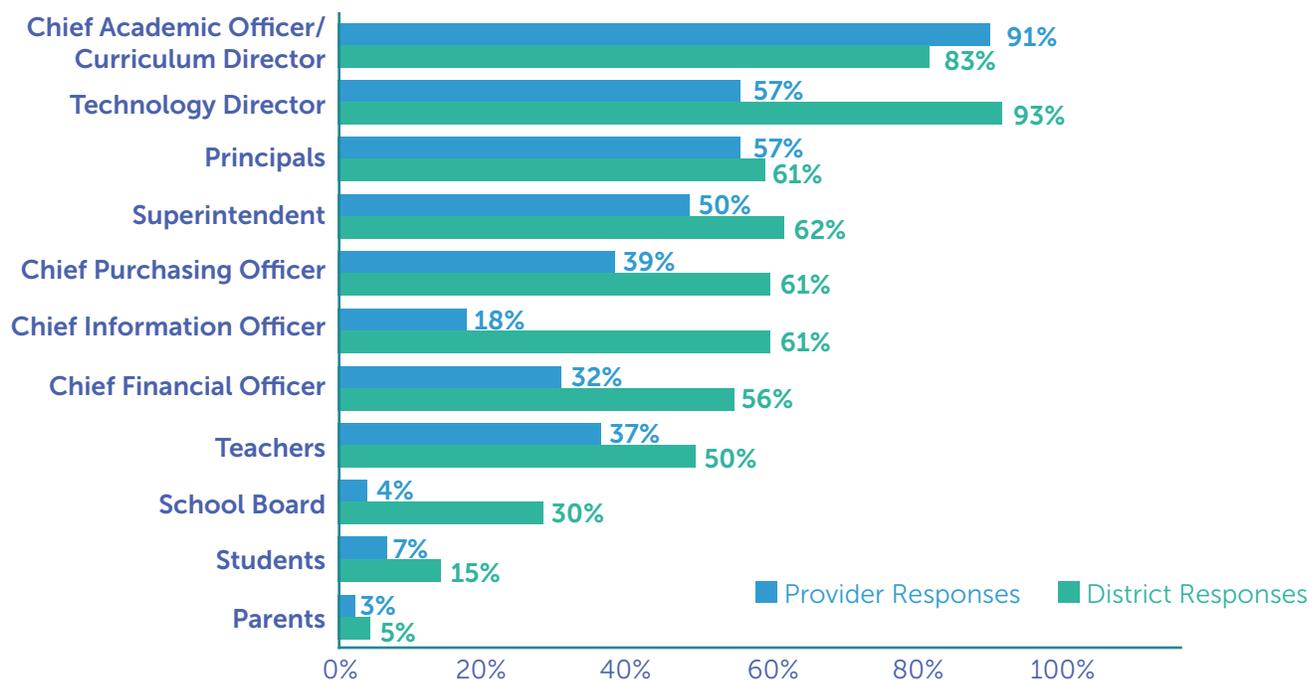
District Stakeholders

The majority of educators and administrators are satisfied with how learning technology is purchased. Among superintendents, 70 percent say procurement processes meet product acquisition needs and 77 percent say they meet instructional needs.

But there are concerns among certain stakeholders with specific parts of the process. For instance, principals are the least satisfied with how teachers are involved in decision-making. Technology directors are the least satisfied with the credibility of evidence provided by technology companies. Superintendents report funding as the key challenge to ed-tech procurement.

So while procurement might not be the top problem keeping these folks up at night, it's clear there are many practical barriers to getting the right products to the right teachers and students.

The degree of involvement of different district stakeholders



What Have We Learned?



Ed-Tech Providers

Providers are extremely frustrated with procurement. Only 4 percent of providers say today's procurement processes meet contemporary needs. They're concerned about gaining visibility in a crowded market, limited information on what teachers need and how districts do business, a fragmented procurement policy environment that is different from district to district, and lengthy timelines for purchases, among other things.

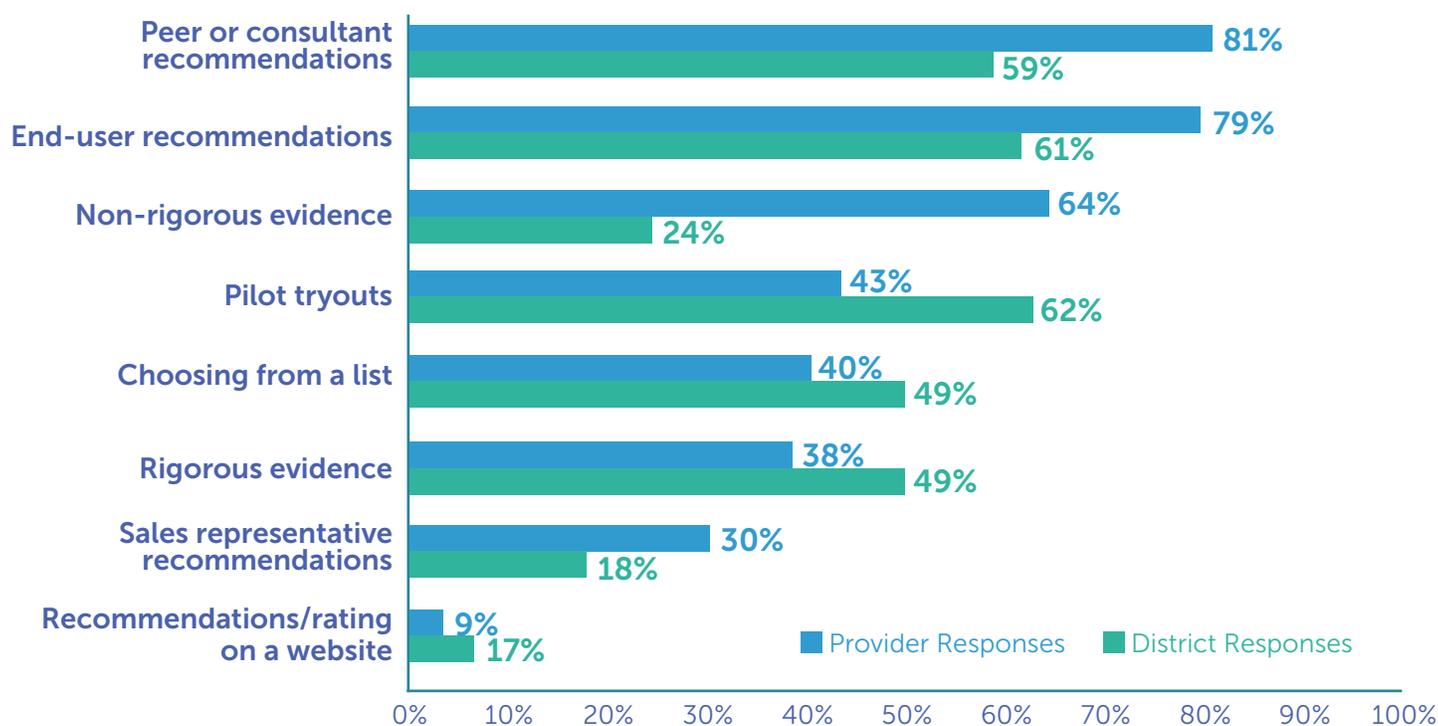
Should districts care about these companies' challenges? We think so. Nearly two-thirds of companies say product development is directly influenced by procurement rules. If ed-tech companies with innovative solutions have to choose sales and compliance over research and development, it's the learners who lose.

What Have We Learned?

The good news? Districts take ed-tech purchasing seriously, relying on available sources of information to find and acquire products that meet their needs. Likewise, companies are making an effort to understand district needs and develop products that address them.

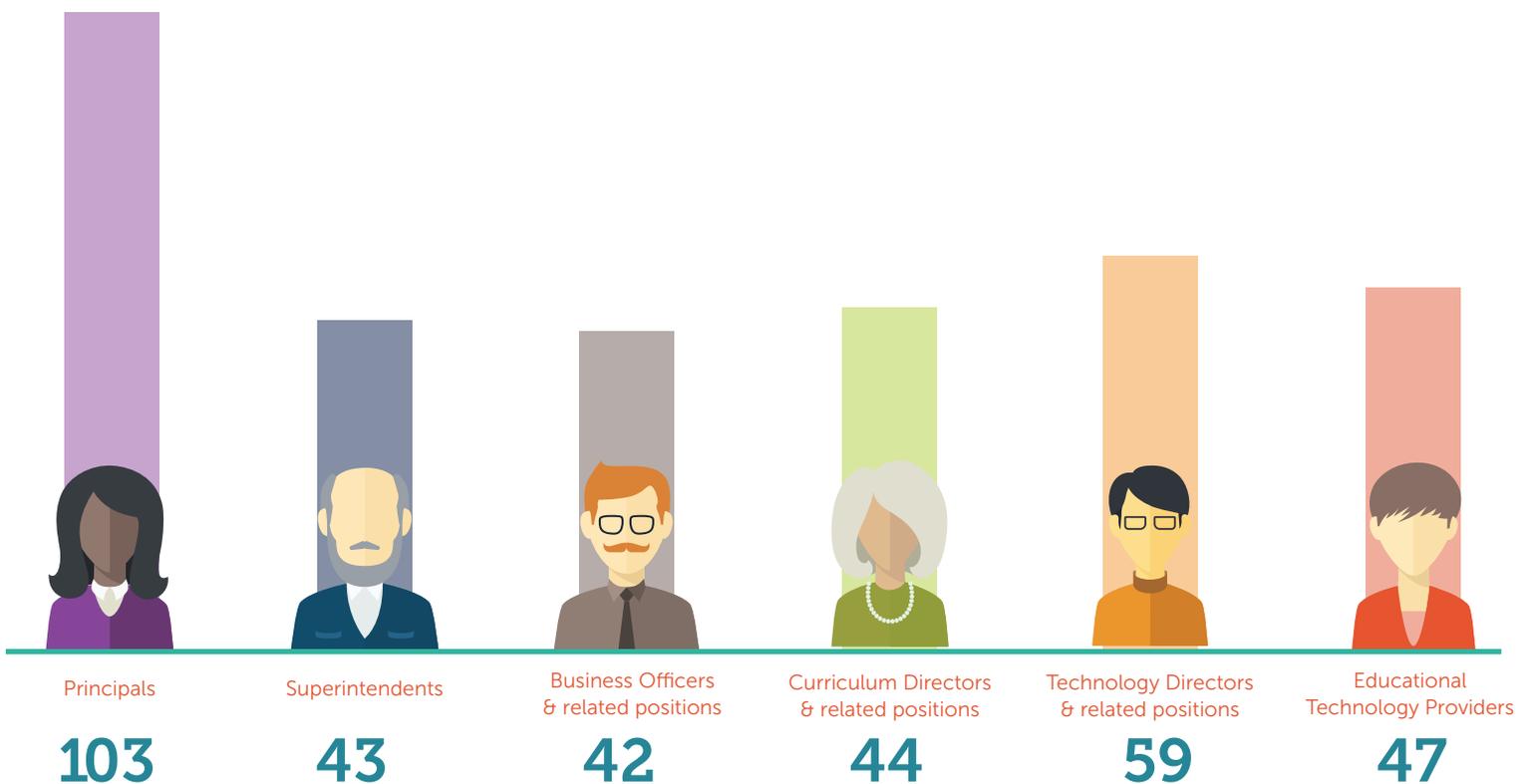
The bad news? With a growing number of products and limited trusted information about them, many districts rely on informal sources instead of data and evidence to make decisions. With no easy way to learn what districts need, many companies focus on developing relationships and building referral networks. Further, companies perceive little incentive to produce rigorous evidence.

District and provider perspectives on sources of district information



Our Method

We surveyed more than 300 education leaders and technology executives, and conducted over 50 in-depth interviews.



We partnered with the Center for Research and Reform in Education at Johns Hopkins University to design and conduct the study. This research brief is based on the results of this quantitative and qualitative data collection. Participants were recruited with the support of the American Association of School Administrators (AASA), the Consortium for School Network (CoSN), and the Software and Information Industry Association (SIIA).

The study focuses on software that teachers and students use for instruction rather than hardware or professional development services. This project was funded by the Bill & Melinda Gates Foundation.

Core Findings & Recommendations

Assessing Instructional Needs

The first step to deciding which learning technologies to purchase is identifying teaching and learning needs. Once needs are identified, product searches can focus on the right set of tools in the market, and districts have a clear starting point for measuring success.

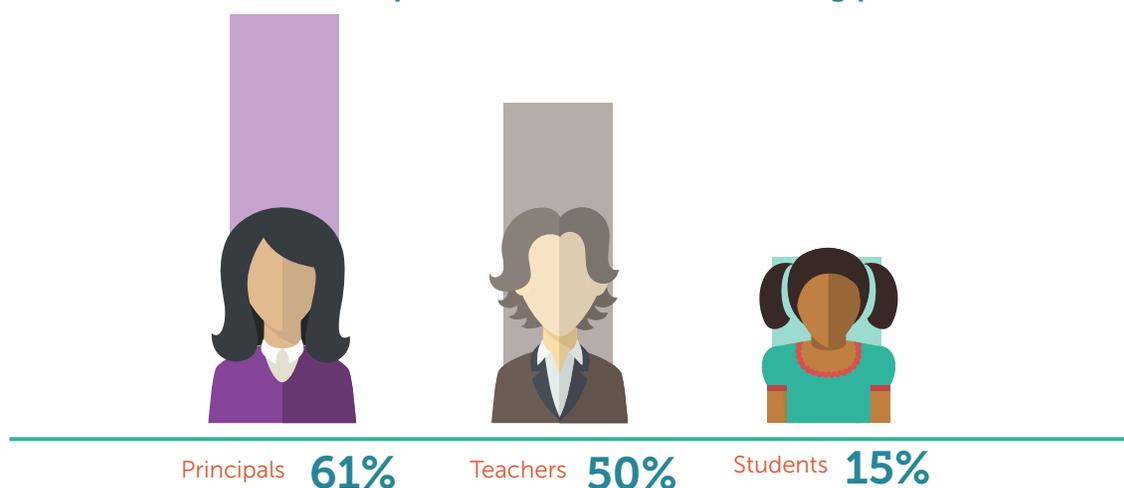
Most district respondents report that ed-tech products are purchased based on a needs assessment. Only 5 percent of superintendents and 9 percent of curriculum directors are unsatisfied with their ability to buy products that meet identified instructional needs.

Yet interviews show most of these needs assessments are informal, turning up broad challenges. Formal needs assessments – surveys, review teams, rating scales, or fine-grained data analysis – are rare.

One contributing factor may be the limited involvement of those close to teaching and learning – principals, teachers, and students – in the process. These important stakeholders are much less involved in the ed-tech procurement process than CTOs, curriculum directors, and other district staff, according to respondents.

While most district stakeholders, including 70 percent of superintendents, are satisfied with end-user involvement in procurement, surveyed providers are more concerned. Only 32 percent are satisfied.

Students, teachers, and principals are perceived to have limited involvement in procurement decision-making process



Core Findings & Recommendations

Assessing Instructional Needs

Additionally, it is difficult for technology providers to help districts address their instructional needs because they often do not know what they are.

Two out of five providers say they're satisfied with their understanding of districts' instructional needs and preferred pedagogies.

As one provider puts it, it is "hard to identify which schools/districts are a good fit for us." Another remarks, "It's not as if the districts are really broadcasting what they are looking for, and sometimes they don't know what they're looking for until they see it."

Our Recommendations

1

Schools and districts should conduct formal instructional needs assessments to more clearly define challenges and increase the chance that acquired products will address high-priority needs.

2

Create and publish guidelines to help schools and districts conduct instructional needs assessments and evaluate instructional design elements of products they're considering.

3

Schools and districts should publicize their instructional needs and goals so providers can better match them.

4

Technology providers should consider instructional needs when developing and marketing their products.

Core Findings & Recommendations

Discovering Products in the Market

With the growing number of learning technology products available on the market, district stakeholders describe product discovery as “overwhelming.” Respondents report they “can’t keep up” and “don’t have time” to respond to vendor inquiries.

One curriculum director reports: “One of our biggest challenges [is] to sift and filter through the variety of products that [are] out there and not waste our time and waste our energy and waste our resources on products that [are] not going to meet our need.”

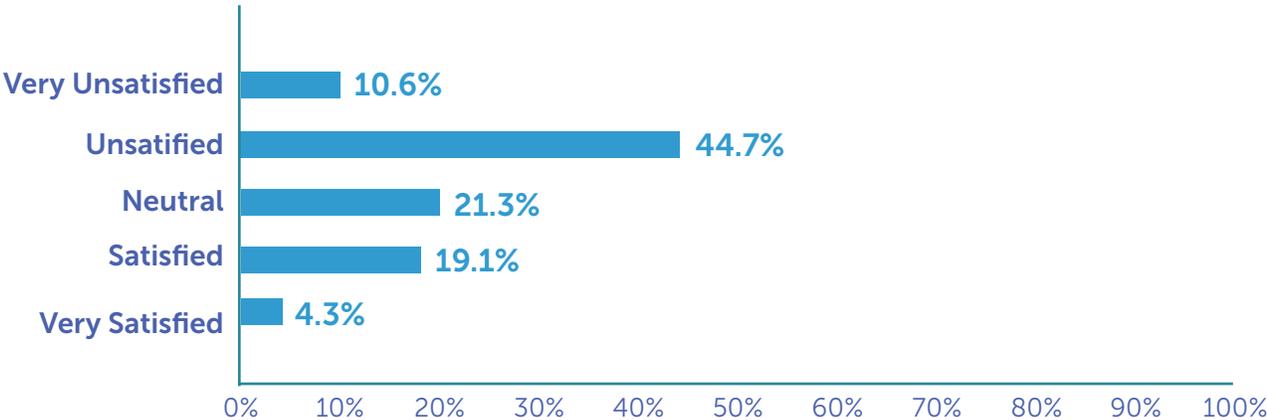
Websites that provide product information are mostly unknown or viewed as not having rigorous or helpful information. Only 17 percent of district respondents said they regularly rely on website information and ratings for procurement.

In addition to acknowledging the challenges districts face in a crowded market, companies express considerable frustration with gaining visibility amid the ever-growing number of products.

“If there’s a good vendor out there doing wonderful things, it’s hard to find that vendor.”

-Assistant Superintendent

Most providers unsatisfied with ability to gain visibility in a school district



Core Findings & Recommendations

Discovering Products in the Market

Responses from stakeholder interviews suggest third parties can play a role in lessening the discovery burden. As one superintendent reported, “the acceleration of products on the market right now is out of control and unmanageable for any district to do it by themselves.” One provider offered a similar insight: “Frankly, I feel like there needs to be some third party that’s sort of an intermediary between them and us. Because the way it currently stands, it just seems completely impractical for them to manage interacting with all of us.”

Of course, most districts will not have the resources or wherewithal to pay an external consultant for hands-on service managing vendor relationships, and digital platforms and brokers are not yet a widespread reality in the ed-tech market. Simplifying the discovery process to help all educators and school administrators find products that meet their needs seems critical.

Our Recommendations

- 1** Increase RFIs (Requests for Information) to let providers know about district product needs and to discover relevant information about options in the market.
- 2** Develop an online “Ed-tech Product Information Exchange” for districts to learn about products, and for companies to learn about districts’ instructional needs and purchasing policies.
- 3** Create and share guidelines to help schools and districts learn what products are available, including the potential role for external advisers.

Core Findings & Recommendations

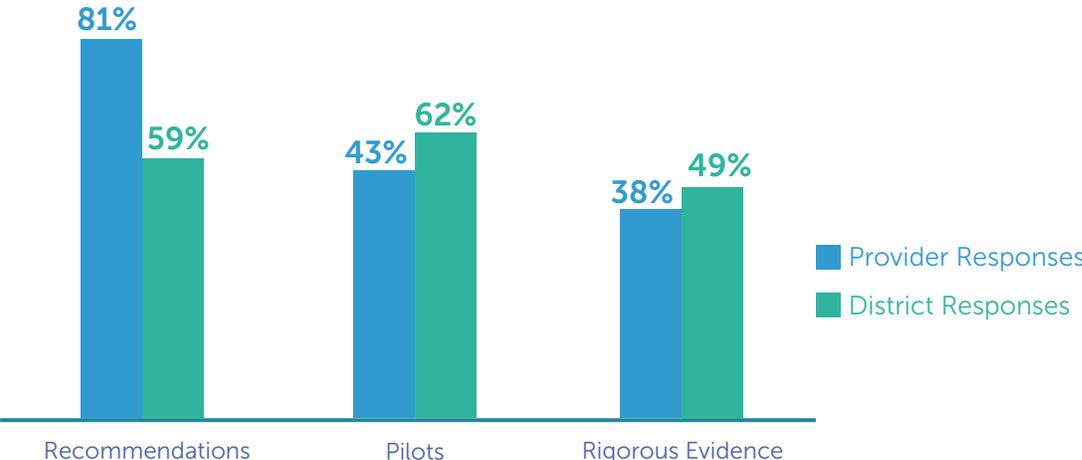
Evaluating Products for Best Fit

District respondents say it is best to make purchasing decisions about learning technology based on rigorous evidence of effectiveness. Our findings suggest there is limited evidence for them to consider.

Trusted third-party evidence about a product’s effectiveness can be costly to develop and is therefore largely unavailable. If providers conduct evidence studies themselves or if they pay for it, it is often untrusted. Technology directors, the most involved stakeholders in the procurement process, are the least likely to trust evidence from providers; only 29 percent report satisfaction with the credibility of evidence from providers. One technology director commented, “People in sales will tell you anything so that you will buy their product. I know that sounds harsh, but it’s the truth.”

In the absence of trusted evidence of product success, it appears districts rely heavily on peer recommendations and “pilots” within the district. And, based on interviews, those pilots are often informal, essentially “tryouts.” Districts do not report using structured, data-driven approaches with clear and inclusive decision-making processes within pilots. Respondents view guidelines for conducting rigorous pilots that are not burdensome for teachers as helpful.

Districts rely more on pilots and peer recommendations than rigorous evidence



Core Findings & Recommendations

Evaluating Products for Best Fit

On the other side of the market, some providers don't believe districts know how to make sense of external evidence, even when it is available. One provider in our study reports, "our internal efficacy rigor is rarely an asset because few districts know how to assess or differentiate vendor efficacy claims."

Another technology company executive suggests a solution to the lack of trust would be a neutral broker or matchmaker: "Somebody needs to play an intermediary role that is trusted on both sides... both the educators making decisions and providers coming up with solutions for problems."

Our Recommendations

- 1 Technology companies large and small should commit to designing and developing their products based on available research into learning science and instructional design and publish their approach.
- 2 Create guidelines for districts to help evaluate evidence about products, leverage peer recommendations, and conduct well-structured pilots that increase rigor and inform purchase decisions without reducing instructional time.
- 3 Create guidelines for providers on how to gather and share credible information about their products, either on their own or with trusted third-parties.
- 4 Companies should consider investing in third-party evaluations that can verify claims of effectiveness.

Core Findings & Recommendations

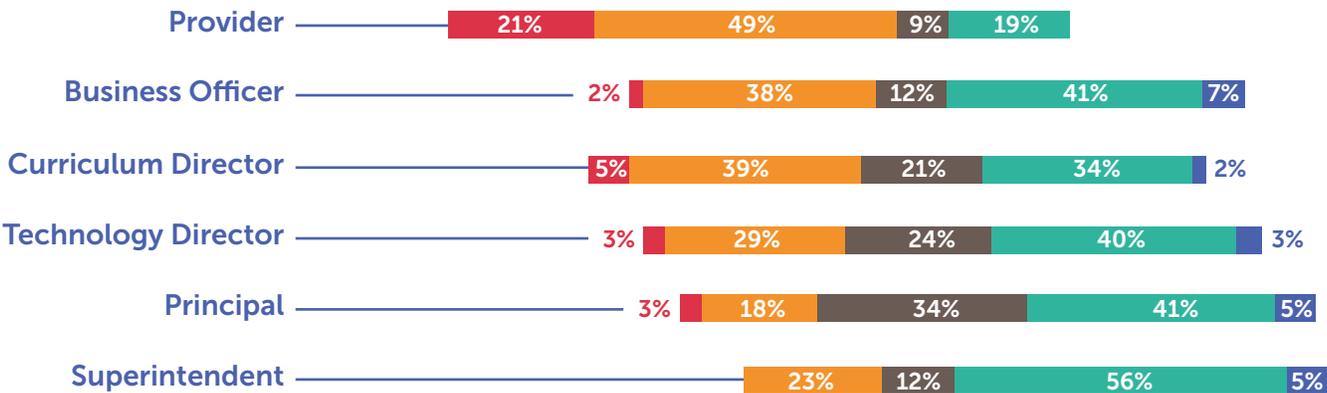
Acquiring Products

Overall, most district respondents are satisfied with their purchasing practices. They use a mix of competitive and noncompetitive processes to purchase products and, though they acknowledge the effort required, most district respondents view requests for proposals (RFPs) as helpful.

Providers are most frustrated with how districts acquire learning technology. Only 13 percent of provider respondents are satisfied with state and local laws that govern ed-tech procurement, and just 11 percent are satisfied with information provided by the district regarding buying cycles and purchasing policies.

Among providers, 6 percent are satisfied with their access to district decision-makers, and just one in five is satisfied with the timeline to complete procurement processes. And while 41 percent of providers are satisfied with their access to conduct pilots in schools, just 23 percent are satisfied with the opportunity for broader implementation once pilots are completed.

The level of satisfaction for providers and district participants about “The time required to complete procurement processes and bring products to end-users”



Very Unsatisfied Satisfied Neutral (neither satisfied nor unsatisfied)
Unsatisfied Very Satisfied

Core Findings & Recommendations

Acquiring Products

With this backdrop of frustrations, only 4 percent of companies agree that today's ed-tech procurement processes meet contemporary needs for product acquisitions, with nearly two-thirds of providers reporting that the processes directly influence their own product development.

Districts are more positive but still hold concerns. For example, just 36 percent of curriculum directors report satisfaction with time spent on procurement.

While district officials say they want teacher input for purchasing decisions, only principals desire decentralized purchasing. Just 28 percent of superintendents agree with giving greater authority to individual schools and educators.

Finally, despite significant public attention toward the issue, just 37 percent of technology directors say data privacy and security concerns make purchasing of learning technology more difficult than other products.

Our Recommendations

- 1 Design RFPs to focus more on specific instructional needs and less on product features.
- 2 Make state and local purchasing policies more transparent and accessible.
- 3 Create guidelines for collaborative purchasing, including piggyback contracts.
- 4 Conduct research on pay-for-success approaches for the ed-tech market.

Additional Findings & Recommendations

Comparisons Between Larger and Smaller Districts

Question:

How does ed-tech procurement differ across smaller and larger districts?

Answer:

In general, small and large districts report similar perspectives on ed-tech procurement, though smaller districts appear to have an easier time with the process overall.

1

Smaller districts tend to be more satisfied with communication within the district, report greater reliance on end-users for purchase decisions, and have quicker turnaround for product acquisition.

2

Larger districts appear to struggle more with ed-tech procurement, expressing more concern with time to complete purchases and less satisfaction with communication among stakeholders in the district. However, these districts may be better positioned to conduct more rigorous pilot tryouts and otherwise vet prospective products because of their additional staff and in-house expertise.

“We’re a small district, so we have to collaborate on everything... If somebody has an issue, we’re right down the road, so it’s much easier to hear concerns [than in a larger district].”

-Superintendent

Additional Findings & Recommendations

Comparisons Between Larger and Smaller Providers

Question:

How does ed-tech procurement differ across smaller and larger ed-tech providers?

Answer:

We compared 47 firms across 55 items, and there were a few differences between large and small providers.

1

Smaller firms find principals more involved in procurement processes and say that districts are more reliant on end-user recommendations.

2

While both groups are equally frustrated with the time that the purchasing process requires, smaller firms were more likely to say that procurement inefficiencies translate to increased product costs.

3

Smaller firms felt more strongly that the current ed-tech procurement process does not meet contemporary needs for product acquisitions.

"If you're a startup, getting a district to buy something that's untested and unproven - forget it."

-Provider

"Having the big players involved makes it a lot easier, because I know it's going to be there, I know it's a big company behind it."

-Technology Director

Additional Findings & Recommendations

Allotment of Funding

In open-ended responses and interviews, funding is one of the top procurement challenges that districts report. In addition to the cost of products, district respondents are concerned about reductions in general as well as technology-specific budgets. Superintendents are most likely to emphasize funding challenges, but they are voiced by all groups.

And while budgeting and finance were not the explicit focus of this study, one notable finding is that many districts view learning technologies as items to be purchased with a separate, supplemental budget, rather than as part of a larger budget for core curriculum and instruction.



“Because of the volume and because most school districts are operating with less staff than they had before the Great Recession, we don’t have time to spend meeting with vendors that don’t fill a need and that we don’t have any funding for.”

-Curriculum Director

Conclusion



6 Important Takeaways

Conclusion



Know What You Need

Many schools do not have a formal process for assessing what classrooms actually need and, in turn, can't specify what product attributes and services will best meet their goals. It's important for schools to be more structured and precise in assessing instructional needs.



Discover What's Out There

Purchasing learning technology is not like purchasing textbooks. In a market flooded with evolving products across content areas and application types, it's hard for providers to stand out and for schools to learn what's available. We need more sources for trusted information about products and their effectiveness.



Involve the End Users

Because there are so many variables in how teachers interact with and use learning technology, their input should be included in purchasing decisions. In many districts, however, it is not. The people most directly affected by the tools that are purchased should have a more central role in selecting and testing them.

Conclusion



Level the Playing Field

Technology providers cite time delays, unclear district processes and policies, and a lack of clarity around instructional needs as barriers. It's even more difficult for newer providers who struggle to get discovered. In a buyer's market, we need mechanisms to reward products that fit classroom needs, are informed by current educational research, and produce results for students.



Focus on Evidence

Many school leaders say evidence of a product's effectiveness is key to making purchasing decisions. But many providers say they can't afford the kinds of proof, like randomized control trials, that schools want. And even when they do, districts often don't trust the evidence or understand its context. Faster, cheaper alternatives for proving effectiveness, like formal pilots, case studies, and small comparison-group designs, will help bridge these gaps.



Design Better Pilots

Pilots are one way for districts and providers to collaborate in field-testing products before broader adoption. Many schools use pilots but they are often informal. With a structure that generates evidence around product efficacy and leads to a data-driven "go" or "no-go" purchase decision, pilots can be useful locally and for other districts considering similar products.

Conclusion

This research supports a lot of what we have observed about the challenges in purchasing learning technology tools, and uncovers new and interesting areas of focus.

While barriers clearly exist between schools and providers, this research also shows that a more productive and efficient procurement process starts with focusing on both districts' and developers' needs.



We're looking forward to helping chart that path. We are seeking feedback on these findings and potential partners to continue this work.

Together, informed school districts and innovative developers can collaborate to get the best learning technologies to the teachers and students who will benefit from their use.

Thank you.



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