

# SPOTLIGHT



— Getty

## TECH CHALLENGES FACING SCHOOLS

### EDITOR'S NOTE

As technology becomes increasingly integrated into education, school and district leaders face a myriad of challenges. In this Spotlight, learn about the importance of effective cybersecurity in schools, the most common mistakes in ed-tech, and approaches to sustainable tech leadership.

### CONTENTS

- |          |  |           |  |                   |   |
|----------|--|-----------|--|-------------------|---|
| <b>2</b> | 5 Big Ed-Tech Problems And How to Solve Them                           | <b>7</b>  | One Superintendent's Approach to Pragmatic, Sustainable Tech Leadership  | <b>11</b>         | We Just Work Our Way Around It.' CTO Challenges in a Rural District |
| <b>3</b> | Money, Data, Security: The Biggest Challenges Facing K-12 Tech Leaders | <b>9</b>  | From Data Security To Digital Literacy: The 5 Toughest Tasks For One CTO | <b>Commentary</b> |   |
| <b>5</b> | Ed-Tech Usage Levels Are Low: What Should Schools Do?                  | <b>12</b> | Four Keys to a Modern IT Approach in K-12 Schools                        |                   |   |

*Published on October 1, 2019, in Education Week's Special Report: Why Ed Tech Is Not Used and What to Do About It*

# 5 Big Ed-Tech Problems and How to Solve Them

By Kevin Bushweller

**K**evin Schwartz, the lead technology officer for learning and systems for the 84,000-student Austin, Texas, school district, a 20-year veteran of the ed-tech world, offers his thoughts on hurdling the biggest barrier to effective technology use, helping educators avoid common mistakes, pumping up usage levels for digital learning products and services, and getting tech and curriculum folks to talk to each other. This email interview was edited for brevity and clarity.

## 1. What is the biggest barrier to using educational technology effectively?

Change is hard. Especially if there is belief that the current methods are good or at least good enough. The pressure to solely work toward standardized-test outcomes is strong.

## How do you get beyond that barrier?

I think it's always a three-step process. First, people need to clearly see that change is necessary—that the “platform that they are standing on is burning,” if you will. Second, showing the vision of the good can come from the change. And finally, then helping/supporting/coaching them through the change process. Ed-tech products have the potential to truly solve issues of equity and to create much better outcomes for students. Good tools, implemented properly, are like a rising tide that lifts all boats.

## 2. What is the most common mistake educators make when using a new learning technology?

Finding a new tool that does the wrong thing more efficiently.

## How do you help them avoid such mistakes?

We have to constantly ask, “What actual problem are we trying to solve?” We

look for tools that help students ideate, create, iterate, and present their work. We avoid tools that simply automate obsolete practices.

## 3. Several studies show low usage levels for ed-tech products. Why do you think that is the case?

I think there are multiple reasons. If a tool just adds to the workload without a tangible offset, it will fail. If too little time and support is provided for the adoption, it will fail. If a product overpromises and underdelivers, it will fail. Maybe controversially, when systems are designed by technologists who see only in terms of logical systems, it will fail and fail badly. Too often, systems are designed for an “average” student and not for the absolute range of kids and their learning styles. Even worse, they can perpetuate inequities.

## What should schools do to improve those usage numbers?

When we use fewer, simpler, highly effective, and more versatile tools, we get more traction quickly and reach a tipping point of usage that provides even more momentum. The best example of this is computers, deployed one to one. Ultimately, when we let the kids select the tools they need to produce results that show their mastery, we know we are transforming in a good way. If you are at a loss for what tools to look for, a good place to start is to look at tools that work well with kids who use special education services.

## 4. What is often missing in the professional development teachers receive around educational technology?

Most often, it's due to the lack of a commitment of time. It can also be that a training approach can be punitive, but a coaching approach can be much more successful.

## How do you fill those gaps?

With teachers, we operate with the

well-founded belief that they want the best for their students. If a product can improve things for their students, teachers will give endlessly of themselves to realize it. If they don't see that connection, or have other mandates that contradict, resistance will be high. We use coaches in a nonevaluative role, who work in alignment with a clear district belief around blended and personalized learning, who connect with teachers to approach the changes necessary to adopt a new tool and teaching approach.

## 5. In many school districts, the technology and curriculum teams still operate in silos. Why has that dynamic not changed faster?

This is interesting in that it is still very much a challenge in nearly every school district. I know that in almost all cases, both technology and curriculum leaders dearly want what is best for kids, but they come to their current roles after 10, 20, or more years of seeing things from just one side. A frequent debate is often a pitched battle between the “educational value” and the “unintended consequences” of any new initiative, and rarely is the choice collaboratively reached. Implement too quickly, and technical/security/sustainability issues will dog a project. Wait too long, and opportunities are missed out of fear and excessive caution.

## What has your district done to break down those silos?

I have a college professor who loved the word “propinquity.” It basically means “nearness.” Curriculum and technology leaders need to work together in significant ways early in projects. I can think of three important ways that work well in my district. The first is that the technology leader reports directly to the superintendent. The second is that curriculum and technology leaders co-chair committees that allocate funds for learning resources. The third is having technology coaches who are former teachers embedded in the technology department. That adds crucial balance and insight. ■

Published on June 11, 2019, in Education Week's Special Report: The 5 Biggest Challenges Facing K-12 Tech Leaders

# Money, Data, Security: The Biggest Challenges Facing K-12 Tech Leaders

By Benjamin Herold

**T**he biggest challenges facing today's K-12 technology leaders are no real mystery.

School technology chiefs are worried about cybersecurity. They have limited budgets, which have to be stretched to manage a flood of new devices, software, and apps. And they're focused on how all that new technology and data can support schools' bottom line: good classroom instruction.

"In addressing the myriad issues related to managing a district's digital ecosystem, IT leaders have not lost sight of the big picture," according to the Consortium for School Networking's 2019 K-12 IT Leadership Survey Report, which outlines the priorities and hurdles reported by 335 respondents.

To better understand the big issues facing the K-12 sector's chief technology and information officers, *Education Week* spoke with officials from five school districts around the country. Here's what they told us:

## 1. Beefing up cybersecurity: "If it can't run on our network securely, there's not much reason to have it."



Joe Phillips

Joe Phillips' leap from the U.S. Army—where he served as an intelligence analyst and IT director, among other roles—to director of technology for the 16,000-student Kansas City, Mo., school district was an eye-opening experience for a number of reasons.

The biggest difference may have been in how the two institutions approached protecting and securing sensitive information.

"In the Army, cybersecurity was second nature," Phillips said. "Coming to education was a lot like going back in time."

In recent years, educational data has become a valuable black-market com-

modity. Districts around the country have fallen victim to phishing scams, hacks, ransomware attacks, and missteps by their own staff and students. The fallout has included millions of lost taxpayer dollars, tens of thousands of teachers and children who have had their personal data compromised, and an erosion of public trust.

It's no wonder, then, that the CoSN IT Leadership survey identified cybersecurity as technology chiefs' top priority. More than two-thirds of survey respondents told the group that the privacy and security of student data was more important to them now than in previous years.

In Kansas City, there's been a commitment to putting cybersecurity first in the district's five-year technology plan, Phillips said. His department is seeking funds for new firewalls, network switches, and wireless access points; new backup and recovery systems; an endpoint detection-response system that can be used to identify and investigate suspicious activity, such as potential phishing scams; and a new disaster recovery data center. By modernizing the district's infrastructure, Phillips hopes to plug the holes that malicious actors might seek to exploit.

The work isn't sexy, he said. Five years ago, it might have been a tough sell to the district's leadership and board.

But not any more.

"Putting out classroom devices is great," Phillips said. "But if it can't run on our network securely, there's not much reason to have it."

## 2. Budgeting on a shoestring: "We can get by with less funding because we have good systems in place."



Mary Wegner

Mary Wegner knows a thing or two about stretching resources in a difficult financial environment.

She's now in her 5th year as superintendent of Alaska's 1,200-student



Sitka school district, serving a remote island community that "sits on a rock at the edge of the Pacific Ocean," as the district's website puts it. During Wegner's tenure, the district's annual operating budget has declined 5 percent, to a little over \$20 million.

"Technology has taken a cut," she said. "But we've learned that we can get by with less funding, because we have good systems in place."

One example: Sitka's leadership team and teacher-chaired technology committee recently committed to focusing on technology as a support for classroom instruction, rather than an end unto itself. That, in turn, led the district to change its staffing patterns. A standalone 6th grade technology teaching position was eliminated, and Sitka schools moved instead to integrate into all classrooms the tech skills and digital literacies that used to be taught in standalone fashion. The move saved \$100,000, Wegner said.

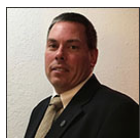
Such tough decisions are common in K-12, the CoSN IT Leadership survey suggests. School technology chiefs identified budget constraints as a major barrier for the third year in a row. One-fourth of them said they didn't have enough resources to meet school board expectations. Many said they tried to supplement their funding by seeking out grants.

That's been Wegner's approach. The money that has come in, she notes, hasn't been for technology per se. Rather, it's been for priorities like culturally responsive teaching for the Sitka district's large indigenous Tlingit population.

The lesson?

"It's not about finding money in the budget for tech as an isolated thing," she said. "It's really about helping teachers change in the classroom."

### 3. Leveraging data to drive instruction: "Instead of digital tools being used as a babysitter, we've grown a lot more focused."



Jaraun Dennis

Using ed-tech to improve teaching and learning is the Holy Grail for many K-12 technology chiefs. Often, that means getting actionable data in the hands of teachers in time for it to actually inform key decisions, such as how to group students or what needs to be re-taught.

Three-fourths of the tech leaders surveyed by CoSN, for example, said they are working to be more responsive to educators' IT needs. Nearly half said they're focused on "surfacing real-time data for educators pulling together multiple sources of information."

It's not as simple as it may sound, especially for small and rural school districts, said Jaraun Dennis, the chief technology officer for Wyoming's 3,000-student Uinta County School District #1.

"In our elementary schools alone, we have five or six different options for digital tools," Dennis said. "Imagine the gamut of data generated when you have teachers logging into all those different places, then going to another place to look at state assessments, and somewhere else for literacy assessments."

Uinta doesn't have instructional coaches to help. The district's IT staff are stretched thin. Convincing people who understand both the technical and the educational side of the work to come work for low pay in Southwest Wyoming isn't easy either.

But progress has come, Dennis said, as the district has become more intentional about how and why it's using classroom devices and instructional software in the first place. From a hazy plan to use technology to support "blended" and then "personalized" learning, Uinta has grown into a model where teachers use specific software programs to identify and fill gaps in students' learning.

"Instead of digital tools being used as a babysitter, we've grown a lot more focused," Dennis said.

### 4. Breaking down information silos: "It's hard to keep up."

Even for large, well-resourced systems like Texas's 80,000-student Katy Independent School District, getting



Jamey Hynds

actionable information in the hands of educators in a timely manner is a major challenge.

"That's the way it is with any large organization," said Jamey Hynds, the district's director of business intelligence. "Data are siloed, and people in different departments are trying to put that information together to fulfill their own needs."

A variety of efforts to make the flow of information more seamless fall under the general umbrella term of "interoperability." The CoSN leadership survey shows just how rare most are: 27 percent of respondents said their districts have fully implemented single-sign on solutions to make it easier for students and staff to access multiple software programs. Fifteen percent make regular use of data dashboards to visualize and analyze information. Just 8 percent say their digital content is fully interoperable.

Hynds has led Katy ISD's efforts to address such challenges. The district has its own data warehouse, used to store information from a wide variety of sources, including assessments, the district's student information system, and human resources and financial software. Hynds' team has developed "well over 100 dashboards," he said, including one to track legislation that could affect the district.

How do such tools improve decision-making?

When teachers or counselors are meeting with parents, they can open the district's "student viewer" to quickly see an individual child's full academic history, allowing for instructional decisions to be made on the spot.

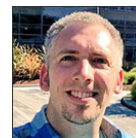
Central office staff use other dashboards and data to project new student enrollment, including where English language learners are likely to be, and plan future facilities and staffing patterns accordingly.

And Katy principals can now easily track all the student devices used on their campus, seeing how they're used and when they need to be replaced.

It's just the beginning, Hynds said.

"Think about the Internet of Things, creating information about HVAC systems and lights and letting us predict energy costs," he said. "Everything is exploding. It's hard to keep up."

### 5. Improving training and professional development: "It's a cool tool. But how is it going to impact student learning?"



Austin Houp

Perhaps the biggest issue school technology chiefs must help address isn't really IT-related at all.

It's about improving teaching and learning in the classroom.

Austin Houp, now in his second year as the director of curriculum, instruction, and technology for Missouri's 800-student Ash Grove school district, described the challenge.

"At times, some teachers have a tendency to use tech for tech's sake, with no clear pedagogy or learning objectives behind it," Houp said. "I'm able to have the conversation with them, 'Yes, it's a cool tool. But how is it going to impact student learning?'"

There's a lot of evidence that training and professional development around K-12 technology use is spotty. It's also highly inequitable: A 2017 analysis by the Education Week Research Center found that students in high-poverty schools were much less likely than their counterparts in wealthier schools to have teachers who had received training on how to effectively integrate technology into their classroom instruction. Houp outlined the contours of the challenge in Ash Grove.

For years, Houp said, any training he provided came on top of his regular duties as a social studies teacher, basketball coach, and football coach. That meant that most of his work with other teachers was focused on the basics of how to operate the iPads and Chromebooks the district had recently purchased.

In his current position, though, he's been able to branch out a bit. Now Houp works with teachers to analyze data from benchmark assessments. There are conversations about which digital curricular materials might make the biggest classroom impact. He's even working with teachers and principals to reduce student screen time, including implementing plans to forego Chromebook time and promote board games and social interaction during recess.

"The biggest impact has been a higher level of consistency in how we view technology in our district," Houp said. "All of us are on a much better page." ■





# Work Smarter, Not Harder: Level Up Helpdesk Service

## Help Desk Solutions

It's no secret that most K-12 technology departments are stretched thin, and this affects how well schools can implement and support new classroom technologies. Across the board K-12 technology leaders say they don't have enough personnel they need to support the EdTech assets they've already purchased— never mind trying to support new systems and devices.

This is a real problem for districts. According to the latest TeamDynamix K-12 Pulse Study, roughly a third of IT leaders say they want to implement 1:1 computing in their schools, but they haven't yet accomplished this goal. As demand for more technologies in schools increases with emerging technologies like virtual and augmented reality, poised to make significant inroads into classrooms within the next few years, the IT department are finding themselves in unfamiliar territory.

**TeamDynamix**

In too many K-12 districts today, IT staff spend the bulk of their time reacting to technical problems that arise, rather than planning to prevent new problems from occurring.

Reactive IT management isn't productive and creates a stressful work environment for IT employees. Putting out fires all day diverts time and attention away from the what really matters: helping teachers and students use technology to enrich learning. While self-service Help Desks would dramatically improve resource optimization and customer satisfaction, it has still not seen widespread adoption.

Clearly, K-12 IT departments will have to work smarter and do more with less if they are going to support the increase in demands on Help Desks. School systems with more mature IT departments are already doing this, using a combination of tools and practices freeing up more resources for their Help Desk.

## Covering Ground in Alaska

Like most K-12 school systems, Alaska's Matanuska-Susitna Borough School District finds funding to be a constant struggle. The district's IT department, which consists of 32 full-time staff members, must support nearly 14,000 devices used by 18,800 students and approximately 2,200 staff in 47 schools and three additional facilities spread across a geographic area the size of West Virginia.

This task would be nearly impossible without improving the maturity of its IT management. But with the help of certain tools and processes, Senior IT Program Manager Justin Michaud and his colleagues are delivering more value to the district—while adopting a “customer-focused” mindset.

“IT maturity is about moving from a ‘break-fix mentality’ to having the IT department become a strategic partner in helping the district meet its goals and objectives,”

### JUSTIN MICHAUD

*Senior IT Program Manager for Alaska's  
Matanuska-Susitna Borough  
School District*







For instance, the district uses a self-service portal and knowledge base hosted by TeamDynamix, which allows users to resolve many of their own IT issues—such as resetting their network password.

Students and staff can search the district’s knowledge base for articles or advice pertaining to their question. “We have made it easy for end users to find what they are looking for,” says Michaud. “We’re trying to get people the help they need more expediently. Gone are the days of filling out a support ticket and waiting a week for service.”

Matanuska-Susitna has identified a “digital first responder” (DFR) in each school. These are teachers who are paid a stipend to help resolve issues that users can’t solve for themselves. If the DFR can’t fix the problem, then it gets

escalated to an IT support employee. The TeamDynamix platform helps IT staff keep track of which service requests are still open, so no request falls through the cracks. It also provides valuable metrics that help IT leaders measure their success in resolving issues, so they can set goals for continuous improvement.

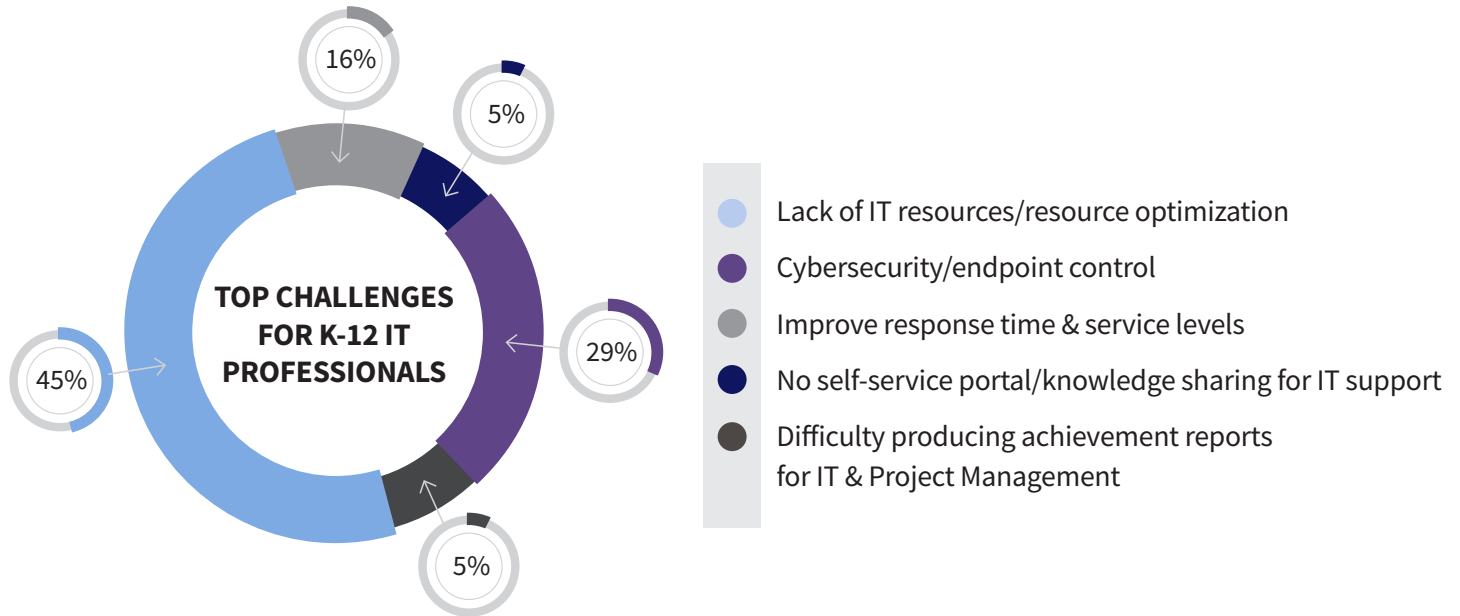
With IT maturity, a lack of resources doesn’t have bog down the Help Desk with time consuming rudimentary tasks, or to stifle the adoption of new technologies for teaching and learning. Improving IT maturity can help school districts solve these challenges by doing more with less. By using resources more efficiently, K-12 IT departments can spend less time responding to problems and more time teaching and learning.

# K-12 By the Numbers

TeamDynamix

In many K-12 districts, the number of IT staff have not increased in direct proportion to the number of devices or systems that need support.

These staffing constraints make it difficult for IT departments to meet the technology needs of staff and students. Here is where they struggle the most.



---

**59% rank their self-service capabilities as low maturity**

**68% give their portal 3 stars or fewer (out of 5)**

---

Improving IT maturity can help school districts solve these challenges by doing more with less. By using resources more efficiently, K-12 IT departments can spend less time responding to problems and more time becoming a strategic partner in teaching and learning.

**Want to Level Up  
your Helpdesk?**

**Explore how at [TeamDynamix.com](https://TeamDynamix.com)**



Published on October 1, 2019, in Education Week's Special Report: Why Ed Tech Is Not Used and What to Do About It

# Ed-Tech Usage Levels Are Low: What Should Schools Do?

By Alyson Klein

**E**valuating the usage of ed-tech products is tricky, complicated, and oftentimes confusing. But it can be done.

Consider the case of the Granite County school district in Utah. It partnered with a company called LearnPlatform to measure whether time spent on three particular pieces of software led to a bump in student achievement.

The district found that one program had great results for English-language learners and Native American students. Another seemed to get results when students used it as often as the manufacturer suggested, but going beyond that didn't lead to better outcomes. A third was barely used at all, and the district is considering nixing it.

But most districts aren't nearly as sophisticated as Granite.

Report after report cites low usage numbers for software, a problem driven largely by districts not thinking through how an ed-tech product should be used prior to buying it and then setting realistic expectations for usage, experts say.

Complicating matters is the fact that there isn't a clear consensus on just what constitutes a "good" usage rate: Is it 25 percent, 50 percent, or 100 percent? And experts and educators are divided on whether education technology leaders should even be worried about low usage rates.

To solve this problem, experts say the best way to get the best bang for your education technology buck is to set expectations for how often a particular piece of software should be used. Then keep careful track of how close you come to your goal. If a program isn't coming close to meeting that goal, it's probably time to jettison it.

But that's easier said than done.

There's no silver bullet when it comes to evaluating which software to keep and which to ditch, said Joshua Patchak, the executive director of education technology and innovation for the Green Bay Area public school district in Wisconsin.

"If it is magic, I would love for some-



one to teach me those spells," Patchak said. "I don't know the secret to it. It's difficult, unless you have a very disciplined staff from the classroom all the way up to the top."

## 'Waste of Resources'

Most software licenses districts buy never get used, according to a November 2018 report by BrightBytes, an education data-management and -analytics platform. In fact, the study found a median of 30 percent of ed-tech licenses are never used at all.

What's more, nearly all—98 percent—of licenses aren't used intensively, meaning a student spends 10 hours or more with the product between assessments. And most teachers aren't following vendors' recommendations when it comes to "dosage"—how often and for how much time a student uses a particular program or product.

Those findings are based on a set of data from 48 school districts, 393,000 students, and 177 apps—which BrightBytes defines as browser-based online curricular and learning tools. The districts studied were of different sizes, with enrollments from more than 30,000 students to fewer than 1,000.

Similarly, a study released earlier this year by the ed-tech company Glimpse K12 that looked at \$2 billion in school spending found that, on average, 67 percent of educational software product licenses go unused.

Glimpse K12 tracked 200,000 curriculum-software licenses purchased by 275 schools during the 2017-18 school year. The analysis found educational software was the biggest source of wasted spending in K-12 districts. And it estimated that, overall, districts are losing a whopping \$2 million each on these products every year.

Those data depress Anton Inglese, the chief financial officer for Batavia Public School District 101, in a Chicago suburb.

"I think it's a waste of resources," he said. "We clamor all the time about how we don't have enough resources to meet the needs of our children, and yet if we're investing in resources and they go unused, I think that's unconscionable."

But Richard Culatta, the CEO of the International Society for Technology in Education, said looking just at how often a particular product is used is the wrong way to think about the problem.

"I actually don't like using usage as a metric," he said. "It implies that we

want everybody to use the software that we bought. What we should be thinking about is: Are the right kids and the right teachers using the right software at the right time? There's rarely a case where the answer should be 100 percent, or having more is better."

Instead of asking how often a particular piece of software is being used, Cullatta said, district officials should ask: "Is it meeting the learning need?"

### Reasons for Low Usage

One potential reason for low usage rates: District leaders in charge of buying software can't always consult with every teacher to figure out what meets his or her needs.

In many cases, "school districts have to make one-size-fits-all decisions," said Dan Carroll, the chief product officer of Clever, an education technology company that has helped track usage rates in the past. Given that reality, it "actually feels a little bit inevitable that you're not going to get 100 percent of people using your software."

Of course, in his years working with districts, Carroll, a former tech director, said he's also "seen a lot of dysfunction" where software or an application is purchased sometime over the summer and not a single teacher uses it for the entire school year, sometimes because they

don't know it even exists.

But many education technology leaders will allow teachers or principals to buy software that not everyone may be interested in because they don't want to close the door on experimentation with new applications.

"That's obviously a tricky situation when the tech evolves so fast. If you lock the door and don't let anything in, you miss opportunities," said Hal Friedlander, the founder and CEO of the nonprofit Technology for Education Consortium and a former chief technology officer for the New York City schools. "It's a tough job."

Another contributing factor that district officials point to: aging workers who might not be quick to adapt to technological advances and some who might resist using them altogether.

"We have a much older workforce than a lot of other organizations and industries," said Matthew Lentz, the chief financial officer for the Upper Moreland district, near Philadelphia. That means some educators aren't as "nimble" on "how you can adapt in a changing environment."

### What Products to Jettison

Part of the Batavia district's strategy: classifying curriculum materials into three categories, including core

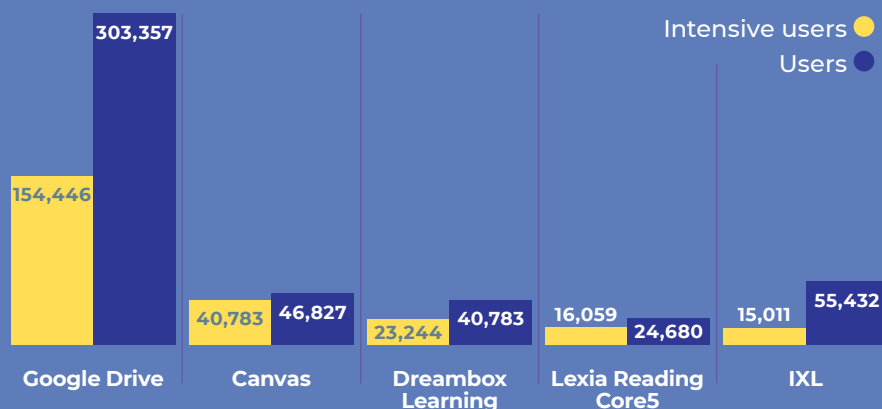
## 5 Strategies For Ed-Tech Use

Districts spend millions on educational technology products and services. But many of those products and services are not used by teachers or students as much as you might expect. Here's some advice from ed-tech experts and educators on how to pump up those usage rates:

1. Give educators meaningful opportunities to offer feedback on potential ed-tech purchases.
2. Listen carefully to educators' critiques of the ed-tech products and services currently used in the district.
3. After you buy an ed-tech product or service, establish a detailed plan for showing all educators why you purchased it and how to use it. Have a usage plan or goal in place and continually check in and measure progress against the goal.
4. If you expect the software or application to be used for a certain amount of time, or for a specific purpose, make sure that expectation matches what's actually going on in the classroom. For instance, if a teacher is only going to use a piece of software as an option in a lesson rotation and some students won't have access to it for weeks, but the vendor is recommending an hour of use per week for each student, it might not be the best fit.
5. Pilot software and structure those pilots in a way that district leaders and teachers can see what the student outcomes are likely to be, perhaps by using a control group and a treatment group. Districts should make sure that they are testing out a particular piece of software or service in an environment similar to where it will eventually be used, since some tools might work well with some types of students but not so well with others.

### Apps With Highest Number of 'Intensive' Users in K-12

"Intensive" use means a student spends 10 hours or more using the product between assessments, according to a 2018 study.



SOURCE: BrightBytes, "The 2018 Technology & Learning Insights Report: Towards Understanding App Effectiveness and Cost"

materials that get widespread use, supplemental materials for remediation or enrichment, and materials that might just meet an individual school, student, or teacher's needs. The latter category gets the most scrutiny, with the goal of shifting materials in it to one of the other categories.

There's no secret sauce in trying to decide what to jettison, Inglesse, the district's CFO, said. "There aren't universal criteria you can apply to every situation. You have to delve into the particulars of each situation to make decisions about whether or not these things work."

And then there's giving school leaders direct responsibility for deciding which technology will work best for their schools. In the IDEA charter network in Louisiana and Texas, principals can choose to buy software using discretionary funds. But that money doesn't have to go to technology—it could go to other priorities.

That means if a particular product isn't being used or isn't effective, principals are going to hear about it.

"They would get that feedback from their teachers and the staff," said Cody Grindle, the senior vice president of information systems at IDEA, which serves 53,000 students in 97 schools. "That's a lot easier and [more] successful than me sitting in my ivory tower saying, 'You're only using 20 percent.' We do share data around that stuff, but we're not the ones slapping the wrist."

What's more, the amount of time a student spends on a particular application may not actually say much about whether it is effective, said Karl Rectanus, the co-founder and CEO of LearnPlatform. For instance, one district that partners with LearnPlatform found its students were getting much better results by using a product once a week, then supplementing with other materials, as opposed to the five times a week recommended by the vendor.

Some products are designed to save time, so you don't necessarily want students spending huge amounts of time using them, he said. In his mind, "good usage is the usage that matches instruction and gets the best outcomes for students." ■

*Published on April 23, 2019, in Education Week's Special Report: Technology Counts 2019*

# One Superintendent's Approach to Pragmatic, Sustainable Tech Leadership

## Superintendent takes patient, practical approach to ed tech

By Benjamin Herold

In his dark suits and muted ties, with a manner more like your local pastor than a Silicon Valley CEO, Doug Brubaker doesn't exactly scream "innovation."

But in an age of deep-pocketed disruptors whose ideas about reshaping public education have mostly foundered, Brubaker's patient, people-first approach to technological change may be exactly what schools need.

"I know what it's like to be a 4th grade teacher, and the tech doesn't work, and you're up there tap dancing trying to keep that class going," said the superintendent of the 14,000-student Fort Smith, Ark., school district. "It's really important to be practical."

As part of a new special report on ed tech and innovation, *Education Week* believes such pragmatic tech leadership is worth a closer look.

One big reason: fresh signs that educators' skepticism around K-12's innovation fixation runs deeper than previously thought.

Consider, for example, a new, nationally representative survey conducted by the Education Week Research Center. Fewer than 3 in 10 of the nation's K-12 teachers believe classroom technology provides a lot of support for innovation in their classrooms, the survey found. Just 49 percent said their school or district trains them to use technology in innovative ways. And despite the billions of public dollars already spent, most teachers said ed-tech innovations have not changed their thinking on what school should look like or how to improve academic outcomes.

It would be easy to see such numbers and blame teachers for being resistant to change, said Lee Vinsel, an assistant

professor of science, technology, and society at Virginia Tech.

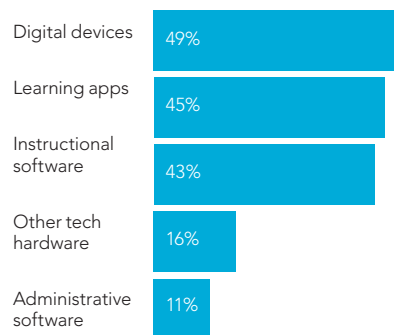
But take a wider view, he said, and you'll see that such dynamics are hardly unique to public education. Across sectors, adopting new technology is the easy part. Much more difficult is implementing those tools smartly, learning how to use them well, taking care of them over time, and evaluating whether they're actually effective.

When the former consistently happens, but the latter does not, people are bound to roll their eyes at promises that "innovation" will bring about dramatic improvements.

"You have to approach this work with real wisdom and care," Vinsel said. "When you focus too much on just buying new things, you end up with a workplace culture that is not healthy or constructive and you end up with piles of unused technology lying around."

## Classroom Practices Slow to Change

In the past three years, have you meaningfully changed the ways you use the following technologies in your classroom?



NOTE: No major change: 20%; Other: 4%.

Details do not sum to 100 percent for survey questions where respondents could select all applicable answers.

SOURCE: Education Week Research Center, 2019



**C**lassrooms weren't exactly technology graveyards when Doug Brubaker first arrived in Fort Smith, a mid-sized town on the Oklahoma border with a rapidly disappearing manufacturing economy.

But there were signs of stagnation.

Back during the Obama administration, for example, the district had used federal stimulus dollars to buy new LCD projectors for classrooms. But there was no plan to repair and refresh the devices, said Vance Gregory, the district's longtime director of technology. Seven years later, many had become unusable.

"The philosophy was, run it until it breaks," Gregory said of the district's previous leadership.

Brubaker came in with different ideas.

After starting as a classroom teacher in 1995, he'd gone on to become an assistant principal, principal, technology director, and assistant superintendent in a number of Texas districts. Though he'd helped launch robotics programs and iPad initiatives in his previous stops, former colleagues described Brubaker as more of a systems-thinker than technology geek.

That orientation quickly became evident when he took the reins in Fort Smith in January 2017.

Brubaker didn't come in with a disruptive vision or grand new plans.

Instead, he promised to build on what was already working. His first move was a listening tour of the district's more than two dozen campuses. As Brubaker served biscuits and gravy to teachers and parents, he asked what they liked—and what they didn't—about their schools.

When it came to technology, the new superintendent heard a consistent refrain.

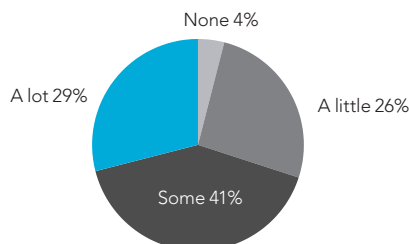
People were excited about the previous administration's move to start purchasing Chromebooks for students.

But they worried about poor training, spotty Wi-Fi access, and a funding stream that might dry up before the district's 1-to-1 program could be extended to all grades and before older devices could start being replaced.

"One of the first things Dr. Brubaker said was, 'You can't buy things without looking into the future,'" said Gregory, the technology director. "He knew we had to improve the support we were providing around those devices, and he knew we had to make them financially sustainable."

## Tepid Belief in the Power of Technology

To what extent does technology support innovation in your classroom?



Details do not sum to 100 percent for survey questions where respondents could select all applicable answers.

SOURCE: Education Week Research Center, 2019

**T**oo many district leaders forgo that kind of pragmatism in favor of headline-grabbing changes and shiny new objects, said Tom Ryan, the chief information and strategy officer of the Santa Fe, N.M., school system and a board member of the Consortium for School Networking.

But taking a patient, long-term approach to technological innovation helps changes actually stick, he said.

"What Doug is doing is demonstrating that people are more important than stuff," Ryan said. "His investment in [building] trust is paying off."

Indeed, six months after becoming superintendent, Brubaker began rolling out a new, community-driven strategic-planning process. It culminated last year with Fort Smith voters approving their first tax hike to support public schools in more than three decades.

Included in the new millage proposal: \$825,000 a year in recurring, reliable funding to expand the Chromebook initiative and make sure the devices can be refreshed every four years.

To get there, the district first asked a team of teachers, parents, principals, students, and community and business leaders to imagine what schools should look like in five years. Then, they outlined what it would take to turn that vision into a reality.

The group's initial wish list included 65 items and a \$658 million price tag.

Still, Craig Pair, a 57-year-old Fort Smith resident who works as a control-systems integrator, designing and operating the automated equipment used in

local factories, said he clapped his hands when he saw the list.

The reason: It included budgeted line items for technology support.

"In my line of work, everyone knows that you buy an electric motor, that's only one-tenth of the cost of that motor's life cycle," Pair said. "But in schools, they don't usually understand that keeping it up and running is the hard part."

Still, Brubaker and the Fort Smith school board knew that local voters would never go for such a pricey plan.

So a citizens' committee, including Pair, was formed to winnow the list down.

A number of the splashier technology expenditures—reimagining school libraries, buying new document cameras, moving from phones to a voice-over-internet system—were shelved. Other recurring expenses, such as staff salaries, were also stripped out of the proposal.

But the final proposal—pared down to 15 items and \$121 million—still included money to make sure the Chromebook initiative could be sustained.

It passed last May with 62 percent of the vote.

"I think it's a good thing," parent Michelle Crane told local TV news station KFSS then. "Things are going to get old and tear apart and fall down. So you've got to keep up with it."

**A**t CoSN's annual conference earlier this month, a team from the Fort Smith school system outlined its efforts and offered lessons on how to successfully build community and teacher support for such a maintenance-oriented approach to education technology.

"The people around here run businesses of their own. They're careful managers of their own resources. They know what it is to struggle," said Zena Featherston Marshall, the district's executive director of communications and community partnerships. "I think the [Chromebook refresh plan] resonated because people saw it as really practical."

And the process isn't done, the superintendent stressed. Over the past year, Brubaker has been working to find other ways to support the technology-related elements of the strategic plan that the millage proposal won't fund.

None of the steps he's taking is particularly groundbreaking. The district saved about \$300,000 by doing an inventory of its software licenses and canceling the ones it was no longer using. Brubaker

is reorganizing the technology department and starting a student-internship program to free up more resources for technical support. He's revamping Fort Smith's technology training, so teachers can find different levels of help depending on their existing comfort level with the tools at their disposal.

But April Coats, who teaches a technology-heavy class in which students get to pursue projects of their own design,

said the changes are already making a big difference.

Instead of running decade-old graphic-design software, for example, her students this year are able to use the latest version of Adobe's Creative Suite.

"They're not going to be completely shell-shocked when they get to college," Coats said.

Does such work count as "innovation?"

It certainly doesn't seem to be the at-

tention-getting kind. Only two people—including one reporter—showed up for the Fort Smith leadership team's talk at the CoSN conference.

But Doug Brubaker didn't seem to mind.

"I believe in listening first," he said afterward. "Sometimes, you end up going further if you moderate your pace a little bit and make sure you're really bringing people along with you." ■

*Published on June 11, 2019, in Education Week's Special Report: The 5 Biggest Challenges Facing K-12 Tech Leaders*

# From Data Security to Digital Literacy: The 5 Toughest Tasks for One CTO

By Alyson Klein

**R**ob Dickson, the executive director for information-management services for the Omaha public schools in Nebraska, has spent this school year fending off dozens of cyberattacks, managing a shift to cloud computing, and worrying about both teachers, who've come to technology late in life, and students, who can't seem to get off social media.

Like it was for many ed-tech leaders across the country, the 2018-19 school year was a challenging one for Dickson, and the year ahead could be even more so. Looking back, Dickson, who has been in Omaha for five years and is headed to Wichita, Kansas, next school year, says there were five especially big challenges he faced this year, and tackling them provides important lessons learned for other school district technology leaders. Here's a look at those five:

## 1. Building Digital Literacy Among Teachers and Students

### What's the biggest digital-literacy challenge for staff members?

"We have the largest workforce gap that we've ever had. People don't retire like they used to," Dickson said. "You've got generations of folks that are coming into technology at such a late cycle in life, and due to that, there's a skills gap."

Dickson has three daughters, one is

still in high school and two have graduated, and he feels their exposure to technology in school has been very inconsistent, depending largely on the expertise and interests of their teachers. "I look at their experience with technology and I don't want that to be circumstantial anymore," he said. "I want them all to have the same chances to be able to utilize technology and to expand their learning with technology."

### What about the biggest digital-literacy challenges for students?

There's a real range there. "Some kids live in poverty, and their experience with devices may be just a cellphone, and they may not have internet access at home. As a district, we try to make sure that we level the playing field," he said. What's more, Omaha's students—and just about everyone else their age—spend an "exorbitant amount of time on social media." He wonders what effect that has on them and on society.

**Omaha's solution:** Leaning in on "digital citizenship." In fact, the district has a full-time staffer devoted to digital citizenship, who helps schools implement a curriculum designed by Common Sense Media, a nonprofit that advocates better use of digital media in schools. The goal: help students learn about cyberbullying, what's appropriate to post online and what's not, and even how much screen time is good for you. Over the past five years, 80 of the district's 96 schools and



programs have been recognized by Common Sense for their work in this area.

The district has given out more than 30,000 devices over the past two years and has plans to allocate another 26,000 next year. But schools have to embrace the Common Sense curriculum before they can begin using the new devices.

"We make sure we lead out with that prior to devices being accessible to kids," Dickson said. "That's how we've kinda dangled that carrot to drive the change to happen."

## 2. Data Security: A Constant Concern

### That's a huge topic. What specifically are you worried about?

It's just a constant concern for a district like Omaha, Dickson said. "This year, we've had more targeted attacks

than we've ever had," he pointed out. "Every month, there's a good 40 or 50 types of attacks that we get from phishing attempts to malware. But since I've been in the district, we haven't had any type of outbreak."

**Part of the solution:** Consistent vigilance. Omaha uses a cloud app (Cloud App Security) from Microsoft. And Dickson and his team do monthly security checks. A third party comes in once a year and does a security assessment.

"It's really about having consistency of reviewing. It's a question of what processes do we have, how do we change those processes, and how do we move forward," Dickson said. "We're constantly adopting things," including programs to allow for more collaboration in the classroom. But with any collaborative program, like a new online curriculum, "you have to take a look at what the weakness are."

**One example:** Omaha just adopted a digital curriculum and worked to make sure that it automatically "rostered" each class with the teachers and students that are listed in the district's student-information system.

That makes life more efficient for teachers, who don't have to spend time adding their entire class list to the system. But it's also great from a security standpoint, Dickson said, because the system will automatically update if a teacher or student leaves.

### How do you balance strong data security with making sure teachers can innovate?

There's a formal process for that, Dickson said. The district built an "app approval" tool three years ago. Using materials provided by Common Sense, the district takes a look at privacy protections, legal issues, and more. Once the district's tech committee makes a decision about a particular app or program, it will post it on a dashboard so all teachers in Omaha know which apps have the greenlight and which don't.

## 3. Journey to the Cloud

### Can you tell me a bit about how cloud computing is used in your district and how that's helped or created unintended consequences?

Right now, Omaha is moving its entire district data center to Microsoft's Azure Cloud Computing platform, Dickson said. There are some big pluses, including eas-



... That teacher owns the learning for those students. But if I can give the teacher insights into what's happening, that's perfect."

ier disaster recovery, backing up data, and the flexibility of not having to buy new hardware, which can be a five-year investment for a district, he said. The district only pays for the storage it uses, and the privacy protections are stronger than on-site.

Still, it requires an organizational shift.

"It's a challenge because it's a different way of managing," Dickson said. "Before, you might have had three or four people managing different resources in a data center, and this is like one person or two people managing an entire cloud infrastructure. So it's a change in roles and how people work."

### How do you see cloud adoption evolving in the future, and what are the upsides and downsides of it?

"I think it's only going to happen more and more," Dickson said. "Districts from a budgetary standpoint need to be efficient, but they also need to be nimble. I don't see our adoption of programs lessening. I see it only happening more and more as devices become more cost-effective and we deploy them in places that are needed to be able to support learning for students."

### Any downsides to cloud computing?

It's something that can be easy to get into but tough to get out of, Dickson said. "If you want to change to a different cloud provider or bring it back on the premises, sometimes there's a large or significant charge for that." But security is less of a worry. "Cloud security has started to mature as districts migrate their data and solutions there," Dickson said.

## 4. Using Analytics to Improve Student Outcomes

### Where is Omaha in the use of analytics to make instructional decisions?

It's a big and growing part of the district's strategy, Dickson said. "We use them for coaching teachers, for student assessments, even for attendance of staff and students, so every kind of facet that you can think of. I only see that growing," he said. "Now, it's just making sure we're putting data where you need to see it at the time you need to see it and understanding what data a principal needs to see, what data a teacher needs to see, even what data a student needs to see."

### What's your take on the use of machine learning or algorithms to analyze data?

"If it can present insights for a teacher, that's great," Dickson said. "I still want the teacher to make the decisions. Cause really, that teacher owns the learning for those students. But if I can give the teacher insights into what's happening, that's perfect."

## 5. Being the 'How' for Business and Learning

### What exactly do you mean by being the "how"?

Technology is integral to everything, but Dickson and his staff have limited bandwidth and expertise.

"Any time you're doing any type of implementation of anything in the district anymore, it involves technology. The challenge that we have as a department is that you don't want to own every project just because technology is being used," Dickson said. "It becomes challenging because we don't grow in staff much and we end up taking on large projects. Anytime you become the how for everything, it's just not sustainable."

### What are you doing to address that?

"It comes down to project management. It's identifying those business leaders of that particular project and providing that professional development to really empower them to own it," Dickson said.

### Can you give me an example of what you're talking about?

Omaha is adapting a school safety solution right now. "From a technology standpoint, I can tell you everything we can do. But I need the safety person to own what we should do. If the project was driven by what we can do, then I don't know that we'd be meeting the needs of safety." ■



Published on January 2, 2020, in Education Week's Digital Education Blog

# 'We Just Work Our Way Around It.' CTO Challenges in a Rural District

By Alyson Klein

**R**emote school districts have some unique challenges, especially when it comes to technology. That's something that Damon Hargraves, the director of federal programs for the Kodiak Island Borough School District, located on an island off the coast of Alaska, knows all too well. The district has about 2,200 students spread among four villages.

Internet connectivity and recruiting staff are big challenges. And so is trying to coordinate and learn from neighboring districts. "We're hundreds of miles away from the next school district. It's difficult for us to take leads from our neighbors or get help from our neighbors," Hargraves said.

But the district has been able to find creative ways to put technology to good use, including to create a welding certification program that relies heavily on distance learning.

*Education Week* chatted with Hargraves to talk about his work. What follows is an edited transcript.

## Tell me about the challenges of just getting online.

"We work with less," Hargraves emphasized. Many districts strive to offer connections of 25 megabits per second. But in Kodiak, a lot of schools are operating on just 6 or 8 megabits per second, meaning that only one classroom at a time could stream video in some schools, he said. "We just have to juggle" he said, to make sure the classes that need to be connected at a certain time are indeed, connected.

## Do most students in your district have internet connectivity at home? How does that affect teachers' ability to assign certain kinds of homework?

Students who live in the district's main hub, the city of Kodiak, tend to have internet at home, even if it's just on their phones, Hargraves said. That's



Photos courtesy of Damon Hargraves

thanks in part to the fiber optics infrastructure on the island. At Kodiak High School, "it's very easy for a teacher to give a homework assignment, say, 'read this article in the New York Times' and the student could access that and it's no big deal," Hargraves said. "In our rural schools, you couldn't give that same assignment because many of our kids don't have internet at home and the cellphone coverage is very, very slow and spotty at best."

## Does that lack of connectivity impede teaching and learning?

It can. "It's really a question of opportunity. We've taught without bandwidth and without technology for a long time. What it really means is it limits your options. As a teacher, you want to do this really, really cool thing. You're hearing about others who are doing this really, really cool thing through PBS kids or the Smithsonian website. And kids just can't access that content at home. We just work our way around it."

## What are you doing to prepare students for the workforce?

Hargraves is proud of the district's 'distance welding' class. "This course is a good example of how we've been able to overcome some of limitations," he said. It's been hard to find skilled welders—let alone welding teachers to offer the course in small sites, where only ten kids may be interested in the program. So the district has put out a broad net, Hargraves said. "What we have done is we've been able to hire people from the community to come in to school even if they don't have welding expertise, if they're interested in learning right alongside the kids and if they can help us ensure safety at the local site,"

Then a distance-welding teacher in the community's largest hub, Kodiak City, can work with them on getting the skills they need to get different welding certifications. "So the model is work with local people in the village sites, have the expertise here in Kodiak City. Then, once or twice a year, we fly the

kids into Kodiak High School and they are able to take their welding certificate test and get certified in different kinds of welding, Hargraves said.

And students with a welding certification will qualify for plenty of jobs in Kodiak. "It's something that's needed here. We have all of our boats. We have a massive fishing industry," Hargraves said.

The district also has an auto-shop and has plans to start offering cosmetology certifications.

### How do you entice people to work in such a remote area?

The district looks for employees who "have an adventurous spirit. Kodiak is really an awesome place if you're into the outdoors," Hargraves said. Job fairs are not always a good source of potential staff. Instead, it's better to connect directly with universities when looking for teachers.

And "to recruit tech folk, we've really gone out of our way to grow our own," Hargraves said. "One hundred percent

of the people in our tech department are from Kodiak." (That's five employees). The district tries to pique students' interest in tech by offering IT-related clubs in high schools.

And Hargraves and his team are willing to hire employees who have potential but might need additional training. "That's really been the key. My advice to another [rural] district would be 'invest in your IT department, through training,'" he said. "Those people who are in investing in your community, build them up." ■

## COMMENTARY

*Published on October 2, 2018, in Education Week's Education Futures: Emerging Trends in K-12 Blog*

# Four Keys to a Modern IT Approach in K-12 Schools

By Andrew Graf

**T**he majority of school district IT departments are short on time and resources, and this makes it hard to implement technology effectively. In a recent survey of K-12 IT leaders, 45 percent said they don't have enough IT employees to support their existing technologies well, never mind trying to add new devices and systems.

This problem has serious implications for student success. As education becomes more personalized and data-driven, teachers and administrators are increasingly reliant on technology to help them diagnose students' precise learning needs and deliver highly targeted instruction to fill these knowledge gaps.

If school district IT departments are going to support the demand for new technologies successfully, they will have to learn how to do more with less. Fortunately, IT staff can work more intelligently and use their existing resources more effectively by becoming more proactive in their approach.

Here are four ways that school district IT departments can adopt a more mature and modern approach that will allow them to be more successful, despite having limited resources.

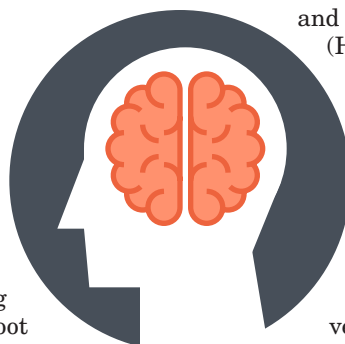
### Resolve problems, not just incidents.

In too many K-12 districts today, IT staff are spending most of their time reacting to technical issues that arise, rather than focusing on preventing new issues from occurring. Taking the time to analyze the root cause of an incident and trying to fix it, so you don't have those kinds of problems any more, can reverse this situation and pay big dividends over time.

IT leaders should carefully analyze the nature of their service requests and look for key trends and patterns that reveal underlying problems.

For instance, if you are receiving a large number of service requests to fix a broken projector, maybe it's time to replace your entire fleet of projectors with new, more reliable units.

It can be challenging to adopt a long-term, big-picture view when you feel like you're buried in immediate service requests, but there is training available to help IT leaders in making this shift. For instance, I would highly recommend ITIL certification,



and the Help Desk Institute (HDI) has some tremendous resources to assist with problem management as well.

### Manage change more effectively.

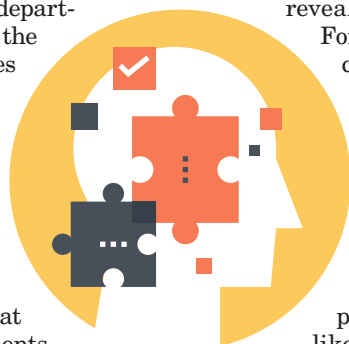
About 80 percent of unplanned downtime is inadvertently caused by IT staff themselves, according to the

IT Process Institute. For instance, a technician might be trying to update a switch, but it accidentally brings the entire network down. The firefighting that ensues consumes valuable IT resources, and it might have been avoided through better change management.

Best practices in change management call for IT leaders to think through the potential impact of making a change, then plan an effective pathway that will cause the least amount of disruption. Following these practices can reduce the likelihood of unforeseen consequences that eat up limited staff time.

### Build an IT knowledge base.

With knowledge-centered support, organizations create a knowledge base of articles explaining IT procedures, solutions to problems, answers to frequently asked questions, and so on. A knowledge base serves as a useful resource for IT



staff as they seek to resolve issues, and it also reduces the amount of time needed to train new IT staff.

IT employees create this content as a by-product of answering questions and resolving problems for users. In this way, documenting their responses to IT issues becomes an organic part of a school system's business process.

Developing a knowledge base takes time, and it requires discipline to adhere to the process. But this investment can pay off in a big way. Organizations with knowledge-centered support see a 30 to 50 percent increase in the number of IT service requests that are resolved during initial contact.



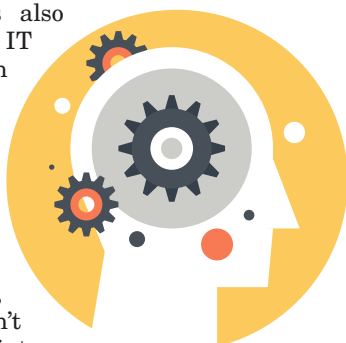
### Add a self-service portal.

Once you've built a sizeable knowledge base, you can leverage this content to help students and staff resolve their own IT issues. This is a key opportunity to reduce your service workload.

Many IT departments end up answering the same questions over and over again, which is very time-consuming—and a waste of staff labor. Having users consult a self-service portal before contacting IT with their questions can reduce inbound service requests by up to 70 percent. And yet, in the survey we commissioned, three out of five respondents ranked their self-service abilities at the low end of the IT maturity scale.

Self-service resolution is also less expensive than having IT staff fix technology issues. An HDI analysis revealed that the average labor cost of a service call is \$22, while self-service costs just \$2 per incident.

When school systems take a more proactive approach to IT management, a scarcity of resources doesn't have to stand in the way of integrating and supporting new learning technologies. By optimizing their use of resources, IT departments can spend less time on the tasks they're doing now, which frees them up to take on new challenges. ■



*Andrew Graf is the Chief Product Strategist for TeamDynamix, a provider of IT service management and project portfolio management software for education and government enterprises.*

Copyright ©2020 by Editorial Projects in Education, Inc. All rights reserved. No part of this publication shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic or otherwise, without the written permission of the copyright holder.

Readers may make up to 5 print copies of this publication at no cost for personal, non-commercial use, provided that each includes a full citation of the source.

For additional print or electronic copies of a Spotlight or to buy in bulk, visit [www.edweek.org/info/about/reprints.html](http://www.edweek.org/info/about/reprints.html)

Published by Editorial Projects in Education, Inc.  
6935 Arlington Road, Suite 100  
Bethesda, MD, 20814  
Phone: (301) 280-3100  
[www.edweek.org](http://www.edweek.org)



# EDUCATION WEEK SPOTLIGHT

**Get the information and perspective you need on the education issues you care about most with Education Week Spotlights**

The Achievement Gap • Algebra • Assessment • Autism • Bullying • Charter School Leadership • Classroom Management • Common Standards • **Data-Driven Decisionmaking** • Differentiated Instruction • Dropout Prevention • E-Learning • ELL Assessment and Teaching • ELLs in the Classroom • Flu and Schools • Getting The Most From Your IT Budget • Gifted Education • Homework • **Implementing Common Standards** • Inclusion and Assistive Technology • Math Instruction • Middle and High School Literacy • Motivation • No Child Left Behind • Pay for Performance • **Principals** • Parental Involvement • Race to the Top • Reading Instruction • Reinventing Professional Development • Response to Intervention • School Uniforms and Dress Codes • Special Education • STEM in Schools • **Teacher Evaluation** • Teacher Tips for the New Year • Technology in the Classroom • Tips for New Teachers



**VIEW THE COMPLETE COLLECTION OF EDUCATION WEEK SPOTLIGHTS**  
**[www.edweek.org/go/spotlights](http://www.edweek.org/go/spotlights)**