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# IT Challenges and Solutions

## EDITOR'S NOTE

The K-12 education sphere has been flooded with information technology. This Spotlight will help you make the tough choices ahead; evaluate if your data systems are secure and user friendly; discover how to increase internet access for your students; get the advice you need to help vet your district's learning acceleration tech before purchase; and gain perspective on an equitable approach to data usage.

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## Thousands of School Websites Went Down in a Cyberattack. It'll Happen Again, Experts Say

By Alyson Klein

**R**oughly 5,000 schools and colleges saw their websites go dark when a [ransomware attack](#) targeted Finalsite, a private company that provides webhosting and other communications services.

Finalsite works with 8,000 schools and colleges in more than 100 countries and is still looking into the incident. A ransomware attack is when hackers breach an organization's or an individual's computer system and then demand payment to restore the system.

But at this point, after the attack, "we have found absolutely no evidence that client data has been compromised or extracted," said Morgan Delack, a spokeswoman for Finalsite, during a press briefing held on Zoom.

The incident, which impacted some 3,000 K-12 public schools in the United States, is more than just another example of how widespread a problem cybersecurity has become. It is also a stark reminder that school districts need to be thinking about not just their own data security systems, but those of the technology and edu-

**“**The incident, which impacted some 3,000 K-12 public schools in the United States, is more than just another example of how widespread a problem cybersecurity has become.

cation companies they work with, experts say.

"One of the things that we've seen in K-12 education is [increased] targeting of schools and districts for ransomware attacks," said Amy McLaughlin, the cybersecurity director for the Consortium for School Networking, a group that represents chief technology officers in school districts. "And I think that we're also starting to see an uptick in targeting of ven-

dors who support K-12 schools and districts."

The K-12 Cybersecurity Resource Center, a research organization, found 408 publicly disclosed cyberattacks against K-12 schools or districts in 2020, an 18 percent increase over the previous year. The center is still assembling data for 2021, said Doug Levin, the group's national director.

In 2021, district level education technology leaders ranked cybersecurity as their top concern for the seventh time in a row, in a survey released by CoSN.

These days, it's not unusual for a school district to have two or three hundred technology vendors who help with everything from controlling the school bell schedule to running applications that teach kids math concepts, said Levin.

It's a challenge for district leaders just to keep track of the sheer volume of vendors, much less puzzle through questions like, "which ones are doing a good job with cybersecurity? What does that even look like? What requirements and standards should [vendors] be held to?" Levin said.

Finalsite continually monitors its networks and noticed ransomware the day the attack occurred, Delack said. The company took the "proactive" step of taking its system offline and rebuilding it again in a "clean environment," she said. That's why it took several days to get schools' sites up and running again, she explained.

As of Jan. 10, 2022, schools are able to use the "bulk" of the company's system, Delack said, and Finalsite is working to restore the remainder of its services.

Finalsite was able to figure out who hacked into its system and how they got in, Delack said. But she declined to identify the attacker or say whether the company—or its insurance provider—paid a ransom, citing the company's ongoing investigation into the incident. She was also unable to share specifics on any next steps for possible legal action.

The investigation also prevented her from immediately sharing details about what Finalsite will do differently to protect itself and its clients going forward, she said. But once the inquiry is concluded, "we do fully intend on being as open as possible with our clients and the public about what we have learned" without compromising data security, Delack said.

An official in one district who Levin spoke to was frustrated that the district initially learned its site was offline through a website called "DownDetector" and not from Finalsite itself.

Not letting districts know right away that their websites were down because of an attack

was a misstep on Finalsité's part, Delack said.

"One area that we certainly have learned from the moment the websites went down universally, we should have sent a communication and we didn't and we fully admit that that was not the right thing to do," she said.

She said the company let its clients know about the attack once officials in the organization had time to connect and get a better sense of the problem. And since then, she said, the organization has been in regular touch with its clients, including providing a template for sharing information about the attack with parents.

"While there are some that have been dissatisfied with our response, there are dozens of others who are directly emailing us and publicly sharing their satisfaction with how we've handled the issue at hand," Delack said in an email.

The incident "really highlights the importance of schools and districts knowing what the responsibilities of their vendor community are," McLaughlin said. When buying services from a vendor, school districts should be sure they understand whether the company is backing up its systems and data. And they should know the vendor's plan for

restoring service in the case of an outage.

What's more, in this particular case, school districts relying on Finalsité for webhosting needed to make sure they had a back-up communications plan, McLaughlin added. The flow of information from central offices to the public can be disrupted by a lot more than ransomware—there are floods, natural disasters, widespread power-outages, and other factors that can get in the way, too.

"Anytime you have a dependency for communications, you need to have an alternative," McLaughlin said. ■

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## School District Data Systems Are Messed Up. A New Coalition Wants to Help

By Alyson Klein

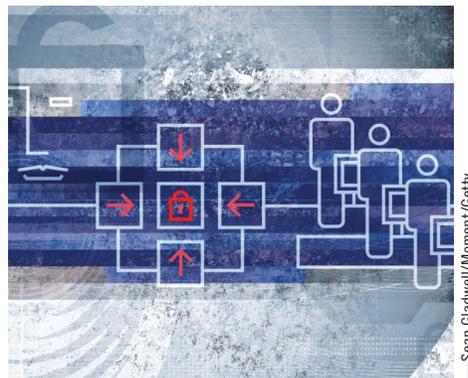
**M**assive amounts of student information is being used to help school districts and states make all sorts of decisions these days. But the systems that collect and analyze that data are often, well, a bit of a hot mess.

Data systems are often splintered, meaning that educators are stuck spending hours putting together information from discordant systems or manually reentering information. What's more, now that student data is often stored in the cloud, privacy and security are paramount concerns. Cyberattacks against school districts are on the rise across the country.

Enter the International Society for Technology in Education (ISTE), the Council of Chief State School Officers, and the Council of the Great City Schools. The three organizations have tapped three state education agencies—in California, Massachusetts, and Nebraska—and 20 large school districts to join an effort to help make data systems more user-friendly, seamless, and secure.

The three-year partnership will help districts and states improve their systems' interoperability, meaning make it easier for disparate systems to communicate with one another. The goal will be to create a set of tools and processes that any state or district can turn to when looking to tackle incompatible systems and/or secure their data.

"We know that having access to the right



— Sean Gladwell/Moment/Getty

“As a result of the pandemic, the role of data and technology infrastructure across the country has shifted.”

### KENNETH THOMPSON

Chief information officer, San Antonio Independent School District

data and right information is really powerful for educators to make those really informed decisions to support student learning,” said Mindy Frisbee, the senior director of learning partnerships at ISTE, in an interview.

The partnership will give states and districts a chance to take a hard look at what data systems they already have and modernize their systems, in part to improve interoperability, Frisbee said. Districts and states will also get help in examining their procurement practices.

The aim is, in part, to support positive decision making around the adoption of educational technology tools, Frisbee said.

District officials say the pandemic has put a spotlight on how important it is for data to be comprehensive and accessible.

“As a result of the pandemic, the role of data and technology infrastructure across the country has shifted,” said Kenneth Thompson, the chief information officer for the San Antonio Independent School District, one of the 20 participating districts, in a statement. “Data systems have always been foundational, but there’s a better understanding now of just how much it matters for technology not only to function but to be properly integrated.”

Meanwhile, state officials say the project could help educators reclaim valuable time.

“Our continued work on Nebraska’s interoperability plan will reduce the financial and human capacity burden on districts, which is more important now than ever,” said Dean Folkers, chief information officer at the Nebraska Department of Education, said in a statement. “Interoperability can be a highly technical and complicated subject, but at its core this work is about ensuring that teachers and parents have the information at their fingertips to support all students.” ■



# Improve District Wide System Integration and Automation

The rush to support remote learning and a remote workforce during the pandemic has no doubt left school district IT departments with the task of trying to wrangle and organize all the new applications and integrations now in use throughout their schools, not to mention tracking and updating all the assets lent out to students and faculty. The manual process of tracking everything down can drain IT resources, costing valuable time and money. That's why many districts are looking to invest in an enterprise integration and automation platform called iPaaS.

## What is Enterprise Integration and Automation?

iPaaS (integration platform as a service) enables organizations to leverage data across their tech ecosystem. A cloud-based integration platform, iPaaS can easily integrate with any system using pre-built connectors housed in a connector library. These connectors can coordinate data integration across the full array of applications in use. Users can easily create new connectors without needing deep technical knowledge and can automate both simple and complex processes using the connectors and a drag and drop workflow builder.

For school districts, this means you can bring together all the tech stacks currently in use throughout every school and connect them to a single platform to manage all the data that flow in and out of each application. In addition, you can connect all the assets in use throughout the district and automate processes like push notifications and system or security updates.

When connected to your self-service portal, you can build a workflow to automate processes like password resets and email requests once someone submits a form. This can free up IT staff to focus on other, more complex project.

## How K-12 Districts can Leverage iPaaS to Reduce Resource Drain

Aside from improving IT efficiency and saving resources, integration and automation tools like iPaaS bring other benefits as well:

- 1. Student success, engagement and retention:** By using iPaaS you can connect all of the systems in use by students, faculty and parents (PowerSchool, Ellucian, Workday, your ITSM platform, and more) and create a cohesive user experience that allows district admins and teachers to get a full view of student data. By having this data pulled into a single source, you'll be able to make dashboard and reports to see trends and make better, more informed decisions. A better student experience results in higher retention and graduation rates – making a direct impact on the funding a district receives.



- 2. Streamlining operations:** Between the admin building and all of the schools in a district, there are likely operational activities that span various applications and legacy systems. Whether it's hiring new bus drivers or teachers; or issuing laptops and other electronics to students for remote learning – these often manual processes can take time and lead to a bumpy experience. With iPaaS you can automate these processes to provide a smooth experience that saves time and effort.
- 3. Hiring and retaining staff:** Districts everywhere are facing labor shortages. An integration and automation platform can help districts streamline their recruiting and hiring operations. By delivering a great recruiting and hiring experience to candidates you can build a reputation for attracting top talent and retaining the staff you have, all while reducing the cost needed to manage the processes.
- 4. Improved security and compliance:** Extensive use of APIs has left organizations, including school districts, open to security risks, while bespoke scripts are often uncontrolled and undocumented. With a centralized integration platform, access points and workflows are controlled in a single platform.
- 5. Cost effective integration:** By implementing iPaaS, districts can supercharge their teams with a library of pre-built connectors to systems that are used every day. All of this connectivity provides the backbone to support digital transformation.

To learn more about iPaaS and the positive impact it can have on your school district check out this eBook: *What is iPaaS and How Does It Accelerate Digital Transformation*

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# How to Expand Home Internet Connectivity for K-12 Students Over the Long Haul

By Mark Lieberman

**W**hen the Palm Beach County schools in Florida made the unprecedented switch to remote learning, an urgent problem came to the surface: Many thousands of their K-12 students lacked an internet connection at home.

The district, which covers a 2,300-square-mile area, approached the problem by combining technological capabilities with longstanding relationships and a shared enthusiasm for addressing equity gaps. The district's tech team used geographic information system (GIS) mapping to guide its planning for the project, and then partnered with mayors and local government officials and workers to carry out the massive broadband expansion effort which has been underway for months. The county is spending \$16 million from CARES Act to fuel the effort, which aims to get 50,000 students connected at home.



Donna Goldstein

Education Week spoke to Donna Goldstein, who has served as the district's IT solutions manager for nearly two decades, about the project's progress and the lessons other districts could take from it.

## How did the idea for this project come about?

The digital divide is something that everybody in education has been dealing with for quite some time. Having to quickly turn on a dime and go to distance learning just exacerbated the situation.

In March of 2020, our chief of performance asked me to get some data that we could use to identify different aspects of distance learning, like how many kids were logging in to the portal to access the curriculum. We sent out a survey asking parents if they had internet access [at home]. We got a response from a number of



Courtesy of Donna Goldstein

This "heat map" generated by GIS technology uses progressively darker colors to illustrate the areas of Palm Beach County with the highest concentrations of families who lack home internet access.

folks, and we know that's only a percentage of folks that don't have the internet.

## How did GIS software help you get started?

The benefit of the GIS software is the robust ability to do spatial analysis with the demographic data. A team of folks from the school district worked very closely with the county IT and GIS folks.

I identified all of the students that are on free and reduced-price meals, which happens to be a very high percentage in Palm Beach County. You wouldn't think so. You think of it as a very wealthy area. That's just the island of Palm Beach. There are a lot of poverty pockets here. Palm Beach County has a very large urban corridor, then there's sugar cane fields, then in the west there's three cities on the lower spectrum of the economic range.

I created what's called a point density map to identify concentrations of where students on free and reduced-price meals lived. That's the base layer. On top of that, I brought in all kinds of other data. I looked at where the county has revitalization programs going on, which also identifies some areas that also might be blighted.

If we didn't have this software and we weren't able to use the spatial capabilities to be able to analyze this data, we would be nowhere

near where we are in the process. If all we had was tabular data, I can't even determine how far back we would be. We would have probably lost the year. The ability to take the demographics and the data that you have and identify it using spatial tools to where these areas are geographically allow you to target those areas and implement your plan.

## What advice would you give other districts that want to pull off a similar initiative?

I worked at the county for 12 years, I've been in the school district almost 20. I still meet with the GIS folks at the county every month. We have very strong relationships. For me, relationships really matter. People aren't just interested in this project, they're passionate about it. It's the reason why we all work for the government, to benefit our communities.

## What were the biggest challenges you faced?

There's always miscellaneous issues with data that you have to normalize or try to scrub it. From the implementation perspective, I'd say being able to get the permits to put the utility poles in. We have one issue where we have to build infrastructure on an easement or a right of way, so we have to contact the HOA [homeowners' association] to get permission to do that.

We had some issues out in the Glades region where it was difficult to lay the fiber where we have some canals. With some of the homeowner associations, there was some resistance to putting poles up on people's property. They've been doing a lot of community outreach in that respect to let people know what's going on, so you're not waking up and looking out your door and seeing somebody digging a hole. When we did come across issues where there was resistance to having a pole put on a particular property, the county looked at moving the pole somewhere else.

Right now, we've got an issue with West Palm Beach because West Palm Beach has an actual policy which doesn't allow wooden poles. We're working with the city to see if they can have some type of waiver to amend that policy. I'm sure that we'll find a resolution to this.

## Where does the project stand now?

They've got most of the Glades—13,000 residents there—set up with the poles and all of the equipment. We're getting ready to do a pilot over there. Poles have been placed in a

number of cities. We should be ready for families getting connected. One of the nonprofits that we've been working with hired a director to coordinate and oversee some of the communication with the families. They're going to hire navigators to go into the homes and help families get set up.

### What comes next?

We're still using the GIS analysis. Whenever we go do the presentation, I do the GIS analysis for that particular city so I can make a map to show all these households that would be affected. We have a dashboard using the ArcGIS software, web-based tool; as the poles are going from proposed to being placed, it's shifting the alignment of things as we go along. That is kept up to date. All of the stakeholders that are involved have access to that website dashboard. We're basically using it as a systems tool so we can keep track of what's going on where in what city.

It isn't just the cities. We're also going to be putting some of these poles and mesh systems in the unincorporated county. The dark red and

red counties are the primary focus, but the ultimate goal is to be able to cover the orange areas. That's probably about over 80 percent of all of the students. As we move along in the phases, we move out from the most-condensed areas out to where it's a little less condensed.

### What will be the long-term impact of this project?

From my perspective, as an educator, the biggest benefit of this project is [closing the digital divide](#) in this county, or at least attempting to. It can change a person's whole life. It's an issue we have been grappling with for decades. If we have an opportunity to start closing that gap, that's huge.

It's critical because of the situation that we're all in. Even when we have kids back in the classroom full-time, for a student to be able to have access to the internet enhances their ability to learn on many levels. Being able to get to some of the applications that we have at the district for curriculum to use for research, to learn about things that they're interested in, rather than just trying to look up

stuff on your phone. Providing students with the tools that they need is the first step in being able to at least give them a better chance at increasing their academic standing.

For the families, they can do telemedicine, they can look for jobs, they can take online classes, they can do all kinds of things that they can't do now. It's not like we're implementing this and then when students go back to school full-time it gets taken away. It becomes something that is now part of their household. ■

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## EdWeek Update

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The graphic shows a smartphone displaying the EdWeek Update app interface. The app header reads "EdWeek Update" and features a photo of a man in a suit. Below the photo, the text reads "Building a Community for Black Male Teachers" and "Black male teachers experienced an inspiring learning experience in South Carolina schools." A "SIGN UP" button is visible at the bottom of the phone screen.

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## Accelerating Learning: Tech Advice to Make It Happen

By Alyson Klein

**S**chools around the country have a big task ahead of them: Making sure that students are ready to dive into the next grade, after a school year in which instruction for many kids was spotty, at best.

For a lot of schools, that means embracing “acceleration” or ensuring students can access content for the grade they are in, even if they haven't mastered every concept in the previous grade. Figuring out what material to hit, for how long, is a tricky pedagogical tightrope, and one that technology companies are eager to help educators navigate.

But it can be a big challenge to find software that truly addresses acceleration—reviewing information from a previous grade only to the extent necessary to support learning new, grade-level subject matter—as opposed to remediation, which typically means relearning content from a previous grade in greater depth.

That's because a lot of education technolo-



gy isn't designed for acceleration, said Bailey Cato Czupryk, a vice-president at TNT, an organization focused on teacher quality.

“I think a lot of systems provide for remediation-based programs that stick kids on content that is well below their grade level and keeps them there for a really long time. On purpose. By design,” she said. “That will not accelerate learning.”

To make matters worse, it is often Black and Latino students and kids from low-income families who get stuck with these reme-

diation programs that do not allow them to advance academically, she said.

One problem for districts trying to purchase software that will truly help students accelerate: Amid fears of learning loss during the pandemic, “acceleration” is rapidly becoming a hot buzzword that companies are using to reposition their products and services even if they are not necessarily effective for accelerating learning.

“Remember when the common core came out, a lot of publishers were like, there's a sticker on top of our same old textbook, [saying ‘it is aligned to the new standards’], we promise, please buy it,” Czupryk said. “Acceleration has the potential to become the ‘sticker’ [word] of 2021 through 2025, even though in reality the program [advertised] is no different than it was in 2019 or 2020.”

One way to grasp the difference between acceleration and remediation: Think of the “previously on” segments that play before new episodes of your favorite television drama. Those quick catch-ups help you under-

stand enough about the characters and plot of the show to be able to follow the upcoming episode. But a viewer wouldn't get nearly as much of the backstory as they would if they, say, binge-watched the past few seasons.

In a similar way, acceleration gives students the background information they'll need to access a particular grade-level concept, as opposed to trying to catch them up on all of the information they may have missed the previous year. That way, students will stay on grade level, reviewing only the concepts that are most important to learning what comes next.

To help ensure students stay on track, states and districts received about \$122 billion in federal relief funds, at least 90 percent of which will go directly to districts. About a fifth of that money is supposed to be directed toward "learning recovery" programs. That means there will be plenty of resources for acceleration, but districts need to be choosy about how they spend the money, Czupryk said.

So how can districts make sure that what they are getting are programs that embrace true acceleration? One tip from Czupryk: Don't ask vendors directly if the program offers acceleration. (They will likely say it does, even if that's not accurate, she said.) Instead, educators should find out what happens in a particular platform when a child demonstrates that they are working below grade level.

If the vendor says something like, "we fill in every single hole," their program likely provides remediation, not acceleration, she said.

But if the answer is more like, "we prioritize the content that a kid would need to know to [understand] particular concepts or particular skills, and we spend time on that," the program is more likely to include acceleration, Czupryk said.

Another tip: Ask education companies what percentage of time a particular program spends on grade-level content. If it's not much, there probably isn't a ton of acceleration going on, Czupryk said.

### Embracing intensive tutoring

The Tennessee Department of Education has a multi-pronged approach to accelerating learning in which technology will play a key role. The Volunteer State is going big on intensive tutoring, offering every high schooler a live tutor for both math and writing. Kids in kindergarten through 8th grade will work with tutoring software, geared toward acceleration.

The state hasn't yet selected tutoring software for elementary and middle school kids. But Tennessee has a long wish list. The pro-

## Vetting Technology With a Focus on Acceleration

Asking vendors the right questions will help ensure programs have capability to accelerate learning.

**What percentage of time does a particular program spend on grade-level content?**

Look for a program that only reviews previous grade content as a step toward accessing grade-level content.

**What happens when a child demonstrates they are working below grade level?**

An essential feature is a uniform and comprehensive screening tool that will gauge a student's comprehension and move them forward as they are ready.

**Is training of teachers part of the program?**

To be successful, a program should maintain interaction between teachers and students and not simply put students in front of technology.

Image: Marianna Ivanenko/iStock

SOURCE: Education Week reporting

gram or programs must be able to tailor an approach to individual student needs. "We are not looking for something that is generic or one-size-fits-all," said Penny Schwinn, the state's education commissioner.

The programs must also offer interim checkpoints or assessments, be engaging for students, and provide reports for teachers and parents. Students must be able to access them at home, on demand.

Plus, they must be directly connected to the materials students are using with their teacher. "We've found that acceleration doesn't happen" if there's a mismatch between a program and what students are actually dealing with in the classroom, Schwinn said.

Tennessee is also facilitating groups of districts—sometimes as many as 100—to collaborate on instructional problems, including how to accelerate learning in specific subjects, like early literacy. The districts are even filming lessons to share with others in the state, complete with explanations of why the lessons are structured the way they are. Those lessons will also be broadcast on local PBS affiliates so that students (and

parents) can access them from home.

"We know the whole country is going to see some declines in performance this year because of the disruptions," Schwinn said. "But I think our goal is to say that, by the end of this recovery period, we will be better off. And I do deeply believe that."

Tennessee isn't the only state looking to use tech to accelerate learning. Nebraska has offered all its 200-plus districts the chance to use Zearn, an online math program geared toward acceleration that gets high marks from TNTP. Nearly half opted in, said Cory Epler, the state's chief academic officer.

### Zeroing in on essential content

Some districts—including Omaha Public Schools, the state's largest—are using Zearn as their main instructional tool in summer school. On the other end of the spectrum, though, some districts are just distributing information about the program, along with a login, to parents who may want their children to get some extra math practice before school starts again.

When selecting a program for acceleration—rather than remediation—it makes sense to ask the ed-tech provider how “essential content” (the most important concepts students need to know) is determined, Epler said.

Districts should also find out what the teacher’s role is in implementing a particular program, he said. “Worry if [their answer is] like, ‘You don’t need a teacher! Just put them on a computer,’” Epler said. He thinks that translates to, “‘Alright you’re behind a grade level so we’re just putting you on this computer so you can get this credit.’ I don’t think that approach is what we’re necessarily after.”

Other good features to look for: a uniform and comprehensive screening tool to gauge students’ skill levels. That provides, “a coherent,

systemwide approach to assessing students’ immediate needs,” said Todd Davis, the chief academic officer for the Aldine school district, which serves portions of Houston and the surrounding Harris County.

Davis also recommends making sure the program’s strategy for moving students forward academically reflects the district’s curriculum.

Even if school districts pick a great program, no technology is going to give a student all of the acceleration help they’ll need.

“There’s something around creating a sense of belonging within a classroom culture,” Czupryk said. “I think the best tech platforms can contribute to that, but I think there is a need for some human interaction in ways that tech platforms do not offer.”

The upside: If districts select high-quality programs and train teachers to use them, they could have a system for quickly ramping up a student’s background knowledge that could remain in place when the pandemic is just a distant memory.

Acceleration “really does get at this idea of being most efficient with the time we have with our students,” Epler said, adding, “I think this notion of acceleration is important because I don’t know that remediation is working, to be honest with you.”

That’s especially true for “some students who are underserved. Most of them don’t get grade level content to begin with,” he said. “We’re having this conversation because of COVID, but it’s something that has always existed.” ■

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## Don’t Buy ‘Stupid Stuff!’ Essential Advice For Technology Purchasing

By Mark Lieberman

**M**any school districts spent the early days of the pandemic in a frenzied effort to purchase enough laptops, tablets, and Wi-Fi hotspots for every student to use at home. Now that the dust is settling, a new question is emerging for district leaders: What are we going to do when we run out of money to pay for maintaining and replacing these devices?

Districts that have seen their supply of technology swell are beginning to confront the often-overlooked realities of investing in digital tools. Devices naturally wear out and become outdated over time. Some might get lost, damaged, or broken while they’re in the hands of students. Others served a purpose during extended building shutdowns caused by the COVID-19 pandemic but may be less useful when in-person learning returns in full force.

Budgets and finance are likely to evolve considerably in the coming years as well. School districts are developing and executing plans to spend varying amounts of stimulus aid delivered by the federal government in three rounds since March 2020. Many are using those funds to cover technology expenses—

even as they worry about the possibility that it will be hard to maintain that spending when those dollars run out in 2024.

Diane Doersch, director of technology for the Verizon Innovative Learning Schools program at Digital Promise, said her nonprofit advocacy organization and others like it are

working to help districts avoid that “funding cliff” phenomenon, which proved disastrous for many districts as they spent federal stimulus funds from the Great Recession of 2008.

“We just don’t want them to make poor decisions or buy stupid stuff,” she said.

The good news is that some districts were

### Tips for Staying on Top of Technology

- For each device, keep track of which funds were used to purchase it, and when.
- Find out from teachers and instructional staff which devices are most heavily used.



- Stagger the replacement of devices to spread out costs evenly over four to six years.
- Remember to account for long-term costs like replacing batteries, remote controls, power cords, etc.

Icons: Getty

SOURCE: Education Week

already in the process of getting a handle on long-term technology financing before the pandemic. Now they have to double down and get more intentional.

The Evanston Township High School district, which consists of a single 3,700-student high school outside Chicago, began rolling out digital devices to students in 2014, and has had a 1-to-1 device program since 2018.

David Chan, the district’s director of instructional technology, plans to implement a “refresh cycle” for all of its devices, including the ones teachers use.

Each laptop will need to be replaced every four or five years, and the district needs to stagger those replacements so that annual costs don’t periodically balloon.

In the past, Chan’s team informally tried to stagger technology replacements, but didn’t commit to an intentional strategy. “Going forward, we will be spread out so we are not buying 300 teachers a laptop every four years,” he said.

Other districts have started anticipating the major costs that will arrive when the devices they bought reach the end of their lifespan. Administrators at the Baldwin schools in New York are establishing a reserve fund, like a savings account, that the district can tap into when technology costs swell past the typical budgeted amount.

“Most people can’t just go into their bank account and pay for a car,” said Shari Camhi, the district’s superintendent. “If you want to pay for it, you save up a little bit at a time.”

That approach also accounts for the possibility of further disruptions to the status quo.

In the wake of the pandemic, schools are trying to get more nimble when it comes to learning models and instructional approaches. But technology evolves fast, best practices can quickly become outdated, and the threat of another unexpected game-changer like COVID-19 can’t be ignored.

Long-term planning is more important than ever, said James Robinson, assistant superintendent for business and administrative services for the Baldwin district. “There’s only one thing predictable about the future and that is that it will be unpredictable,” he said.

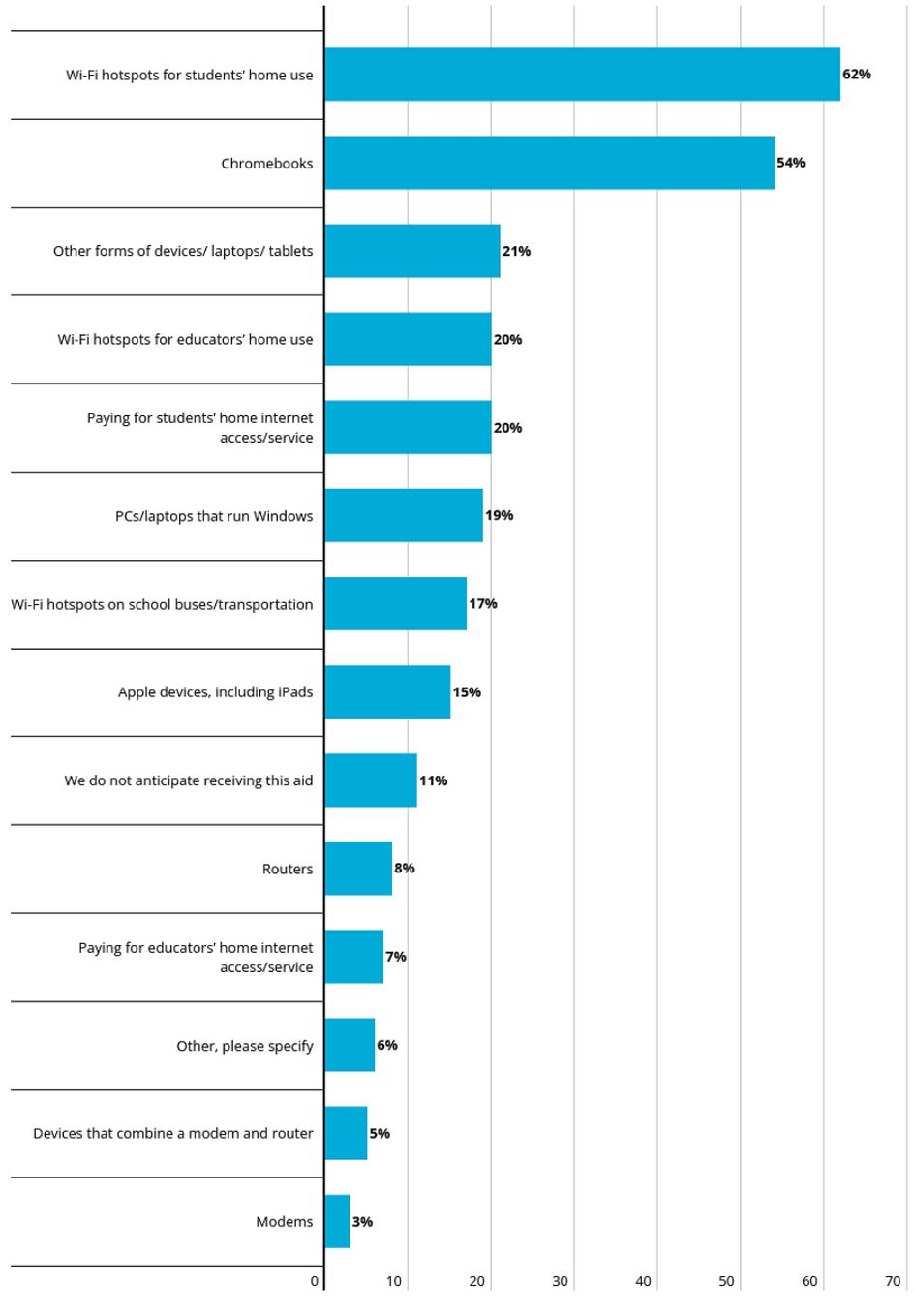
Here are four key questions district leaders should be asking as they think about planning financially for the future of technology.

### How long will devices last?

The average lifespan of a laptop or tablet tends to be between three and six years. Each

## Tech Funding Priorities

President Biden and Congress recently approved a new \$7 billion fund to support improved internet connectivity away from school. In which of the following areas do you anticipate your district would spend that money? Select all that apply.



SOURCE: EdWeek Research Center survey of district leaders, May/June 2021.



# Using a Self-Service Portal to Reduce Drain, Improve Service

The last two years have accelerated the need for K-12 schools to mature their IT support and service teams. While the needs have increased, the funding and resources have done the opposite, leaving K-12 IT leaders with a gap in service delivery technology. With districts across the country grappling with funding cuts, employee shortages and the ongoing pandemic, many district IT departments are tasked with finding creative ways to support the demands of both virtual learning and in-person instruction. One of the most cost-effective and easiest ways to support faculty, staff, parents and students is to ensure your district has a robust self-service portal for IT requests.

**What is a self-service portal?** A self-service portal is an online repository of knowledge articles where anyone can go to seek information and make requests – from IT requests to requests for meetings and supplies, it’s all on a single, easy-to-use platform. Self-service is one of the easiest, most effective ways an IT department can maximize limited resource availability.

Alaska’s Matanuska-Susitna Borough School District has found success using a self-service portal and knowledge base hosted by TeamDynamix, that allows users to resolve many of their own IT issues—such as resetting their network password.

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.

“If we’re not meeting our service level targets, it jumps out at us now,” Michaud said. Having the ability to measure success has helped the district’s IT department reduce how long it takes to respond to IT problems.

“We have made it easy for end users to find what they are looking for. 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.”

- Justin Michaud, Senior IT Program Manager, Alaska Matanuska-Susitna Borough School District

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,” said Justin Michaud, senior IT program manager for the district. “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.”





## What Makes a Stellar Self-Service Portal?

To start, your district should have a website where students, teachers, parents, staff and administrations can go to and find their own answers to commonly asked IT questions – things like “how do I change my password?” or “how can I access my child’s report card?” In addition, the site should have an easy to find button to make requests or get assistance if needed.

“Many IT departments end up answering the same questions over and over again,” says Andrew Graf, chief product strategist for TeamDynamix. This is very time-consuming—and it’s 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%, a review of TeamDynamix customer data suggests.

Having users consult a self-service portal before contacting IT with their questions can reduce inbound service requests by up to 70%, a review of TeamDynamix customer data suggests.

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 Michaud said. Besides freeing up IT staff to focus on other priorities, “self-service empowers users. It gives them tools to do their jobs more effectively.”

## Here are the traits of a good self-service portal:

- It’s easy to navigate.
- It has highly indexed content.
- It has quick links to the most commonly read content.
- It uses clear language.
- You have the ability to edit and enhance the content as needed.
- It’s mobile friendly.
- It’s accessible and WCAG 2.0 AA compliant.
- It offers content permissions for more sensitive information.

## Preventing Burn Out and Resource Drain

Did you know using a self-service portal is less expensive than having IT staff resolve tech-related issues? An analysis from the Help Desk Institute shows that the average labor cost of a service call is \$22; for self-service resolution, it’s just \$2.

Through self-service, students, parents, teachers, and staff are treated to a much higher level of customer service—and therefore customer satisfaction—in three ways. First, they’re able to find answers to common questions/problems quickly and easily. Second, your help desk staff will be able to focus their attention on the tougher cases that come in. And finally, your IT resources (budget and personnel) can be freed up to deliver new services and technologies that align with the emerging trends in EdTech.

To learn more about how TeamDynamix can help you support a stellar self-service portal and reduce IT drain visit:

<https://www.teamdynamix.com/it-service-management-itsm/>

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brand and model might have a slightly different outlook, which means districts that have a mix of devices from different companies need to be extra diligent about tracking the age of their devices.

Experts also recommend thinking about possible extenuating costs of devices as part of the overall investment before it happens—the kind of long-term planning that was easy to skip when schools needed devices urgently during the pandemic.

Some students might return laptops or tablets but forget to include the power cord. Cameras that teachers use for livestreaming instruction often come with remote controls that can easily get lost. Some technology tools run on batteries, which eventually must be replaced.

Doersch recommends districts get very granular with asset management. In her previous role as a technology chief for a district in Wisconsin, “we included the brand and the year it was purchased, and also what funds purchased it.” That helped the district stay ahead of funding sources that were set to run out, and gave the district a detailed database to examine which point of their life cycles devices had reached.

Some districts may decide to stick with all the devices they bought during the pandemic, or even buy new ones if remote learning continues to persist.

Matthew Lentz, chief financial officer and board secretary for the Upper Moreland district in Pennsylvania, said only 2 percent or 3 percent of families there want to continue with remote learning in the 2021-2022 school year. He wants to get the most bang for his buck with the huge supply of devices at the district’s disposal—in part by encouraging students to think of the devices as essential learning tools.

“We’re saying to teachers, ‘The Chromebook is a textbook. It should be going home every night and getting charged,’” Lentz said.

### Should we charge students a fee for devices they eventually get to keep?

Some districts with a history of devices coming back damaged have turned to an unexpected revenue source: students.

In Evanston, students pay \$50 per year to rent a Chromebook from the district. That money helps the district offset the overall Chromebook costs, which range from \$200 to \$300 per device. Two in every five students in the district are eligible for free and reduced-price

meals; they get the devices for free.

The goal is to remind students that they can extend the lifespan of their devices by treating them like school property, even at home. Their reward is getting to keep them when they graduate.

“If they treat it well enough, it can be a secondary laptop when they go to college,” Chan said.

Not everyone is comfortable with charging students for technology. Leslie Wilson, a public sector consultant who founded the One-to-One Institute, thinks districts ought to look for inefficiencies in their budgets before resorting to asking students to chip in.

“If I have seven copy machines in a high school, what’s that costing me a year? If I can reduce that to x number of machines, I can reallocate those hundreds of thousands of dollars towards technology,” she said.

In some states, K-12 schools are legally prohibited from imposing certain kinds of fees on students. Minnesota, for instance, bans fees for “instructional materials and supplies.”

Lentz’s district is still debating whether to restore a technology fee it used to charge years ago. “We’re really taking our time to vet the concept of that fee through the lens of diversity, equity, and inclusion,” he said. “We don’t want it to be exclusionary.”

### Do we need to hire more people?

Districts will get more out of the devices they’ve purchased if they have people on staff who can help teachers and students learn how to use them effectively. Not all districts are equipped with adequate staffing for those kinds of efforts, Doersch said.

“Chances are the fleet of technology has doubled or tripled or quadrupled since when students were in school last,” she said. “The personnel may not have grown like that.”

More than half of district tech leaders surveyed in 2021 by the Consortium for School Networking said their districts lack sufficient staffing to provide instructional support for technology and to integrate technology into the classroom.

Aside from the inevitable troubleshooting, those employees can be useful for gauging the value of technology. In Chan’s district, the tech team talks frequently with teachers to find out how they’re liking a new technology tool, if anything has been confusing, and whether it’s worth continuing to use. During hybrid learning, teachers offered *Published July 20, 2021*

feedback on new cameras that followed them around the classroom while they taught.

“We don’t want to force it down teachers’ throats,” Chan said.

Even districts that got a windfall of federal stimulus relief will likely struggle to fill these gaps, as the salary funds are guaranteed to run out in a few years without a stable replacement source.

### What do we want all of this technology to accomplish?

During virtual learning, the answer to this question was clear: Students needed a working device and an internet connection to interact with teachers and their peers, access assignments and assessments, and participate in live instruction.

Once the public health threat passes, schools will need to figure out the role technology plays in their instructional approach.

Before the pandemic, Shari Camhi from the Baldwin district purposely avoided achieving 1-to-1 status because she didn’t think the value of those devices would outweigh the cost. “You’re making the assumption everybody is ready for that and is going to use it the way it’s meant to be used,” she said.

She has been excited to see teachers and students collaborating simultaneously in shared Microsoft Office 365 documents. Fifth-graders were able to easily connect with older students to start building relationships they’d have in middle school. Guest speakers can drop in from anywhere in the world.

“If our kids can communicate with an environmentalist organization in California, why would I want to lose that ability?” she said.

The best way to plan for the cost of technology is to envision its function as part of the broader school ecosystem, Lentz said. He’s learned lessons from the days of buying smartboards for all of the district’s teachers, only to find that many just left them sitting on the wall without ever turning them on.

Now, district leaders are trying to envision ahead of time what a technology tool will do for the classroom experience, alongside planning for building improvements and even furniture.

“It’s really becoming this global long-term plan,” Lentz said. ■

### ▶ Your Downloadable Guide

[How to Make the Best Tech Decisions for Schools](#)



Kristen Giuliano, a 7th grade social studies teacher at Dodd Middle School in Cheshire, Conn., assists Jane Wood, 11, during a hybrid class session in September 2020.

—Dave Zajac/Record-Journal via AP

## ‘Is This Going to Piss People Off?’ How to Make Tough Tech Decisions

By Alyson Klein

**E**ducators make countless decisions every day that can have an outsized impact on students’ learning and well-being. Amid a global pandemic, that pressure has only been compounded.

That’s especially true when it comes to technology, which was activated like never before to help millions of students learn from home safely from March 2020 through the 2020-2021 school year. Now, district and school leaders and teachers are preparing for the 2021-2022 school year, when nearly all students will return for in-person instruction.

Transition carries with it a whole new set of complicated decisions: How do educators determine which technologies that were effective for remote and hybrid instruction should be integrated for full-time in-person instruction? And which ones should be ditched? How can principals help teachers make the best use of the new tech skills they picked up delivering remote and hybrid learning? How do teachers decide which tech tools will be best for students when nearly everyone is back in physical classrooms?

Education technology leaders are “feeling quite overwhelmed with how much is on their

plate,” said Keith Krueger, the CEO of the Consortium for School Networking. They are being asked to do a host of new things, including supporting families and students learning from home.

Many school districts purchased devices to help students learn from home. “They’re unlikely to be able to get [many of] those back or even know what shape they’re in,” said Krueger. “It’s not like the traditional end of school where they collected everything and had two months to get them cleaned and updated.”

What’s more, it is unclear whether there will be a resurgence of the pandemic, particularly in areas with low vaccination rates.

Here’s a look at how chief technology officers, principals, and teachers are tackling those difficult decisions:

### Chief technology officers: ‘What are the options?’

Most chief technology officers are coming off rapidly shifting from full-time online learning to hybrid instruction, and then back to more typical in-person learning. Each of those steps has required dozens of decisions, which tech leaders say they handled in part by carefully defining district needs and getting

as much feedback as possible on the front end from staff and students.

Marlo Gaddis, the chief technology officer for the 161,000-student Wake County Public Schools in North Carolina, said she tries not to let her district become distracted by something that looks, “cool and new and shiny but really solves no problem and you probably have three other resources that do the same thing.”

Instead, she and her team try to first identify the gap or issue they are trying to resolve through technology.

Then, they take a hard look at what the district has on hand and consider whether the solution is already in their stable of tools. If something new needs to be purchased, Gaddis calls on whoever will be using it—say, the human resources and finance departments if it is a finance tool, or school leaders if it is something for curriculum—and gets their take on what’s needed.

Next, she said, “it’s about doing research. What’s out there? What are the options? What are we actually looking for?” Once the district makes its selection, it will test drive the new technology, sometimes offering it to students or teachers to get their feedback.

Gaddis applies a similar decisionmaking process when it comes to bringing about big changes in the district. For instance, when Wake County was considering whether to move to a 1-to-1 computing model—a decision the district made right before the pandemic—she and her team asked themselves, “‘What are the trends? What’s good practice?’”

Other district tech leaders also say they take a hard look at evidence before they make a move. For instance, the Desert Sands school district in Southern California noticed a number of its students were actually performing better and participating more in class during virtual instruction compared with in-person instruction before the pandemic, said Kelly May-Vollmar, the assistant superintendent for educational and technology services for the 27,000-student district.

May-Vollmar surveyed teachers and parents, even doing some one-on-one calls with families, to get a sense of whether there was an appetite for having online learning continue during the 2021-22 school year. She’s now aiming to offer a virtual academy in the fall, something her district has never done before.

She’s also noticed that parents were much more likely to participate in school meetings during the pandemic when they were held virtually, compared with participation rates for the pre-pandemic in-person meetings. After doing outreach to parents and weighing the pros and cons, the district has decided to hold

half its parent meetings online, and the other half in-person.

Doug Vander Linden, the director of educational technology for the 1,000-student Burlington, Kan., school district, has lost a fair amount of staff to retirements or transfers. He wants to make sure that educators in his district stay up-to-date on the technologies that Burlington used for remote instruction during the pandemic, in part because it is not clear that the virus is gone for good.

When “professional development and technology support services are not prioritized over the stuff, then you don’t have the effectiveness,” Vander Linden said. “When teacher confidence is shaken, it’s hard to get that back.”

**Principals: Know the effect the tech decision will have on teachers and students**

As instructional leaders, principals had to do some quick thinking when their school buildings shut down in 2020. They are putting the knowledge they gained during that experience toward ensuring that schools can smoothly transition back to in-person instruction and maintain the technology best practices started during the pandemic.

Marcus Belin, the principal of Huntley High School, near Chicago, actually put himself in his teachers’ shoes during remote instruction, leading a discussion on Zoom about race with a mostly virtual class when his school was in hybrid mode in spring of 2021. “I walked in super confident and prepared. I’m like, ‘I’m ready to go.’ I tested everything out,” he said.

But the lesson was anything but smooth. Zoom kept kicking students out. The computer’s camera wasn’t working.

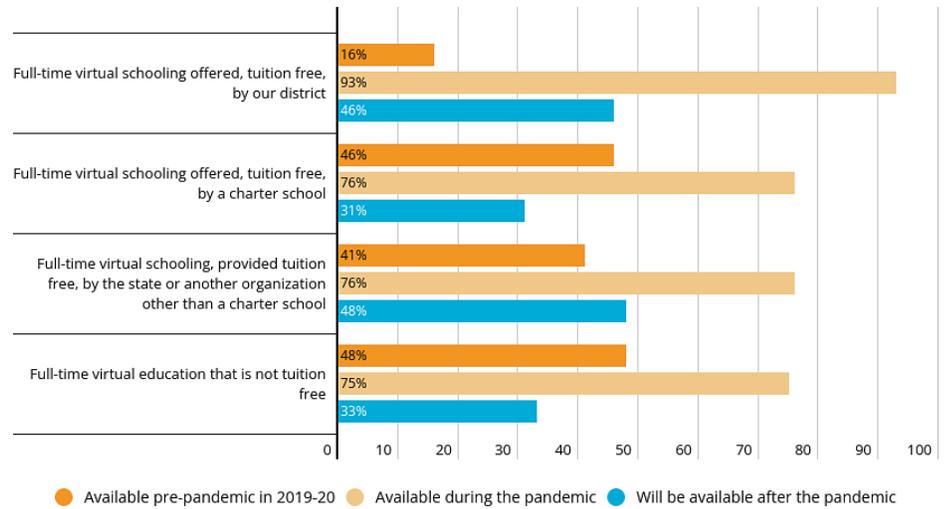
That drove home to Belin that the hard part in making decisions about technology is “knowing the effect that it will have on the people who are on the frontlines in the classroom.”

He said he always makes sure he runs his technology ideas by his instructional coaches first, asking “Are people going to value the change we’re making or is this just going to piss a whole bunch of people off? And if it’s gonna piss a whole bunch of people off, we don’t do it. Or we do it and we leave it as optional.”

Kathryn Procope, the principal of Howard University Middle School of Mathematics and Science in Washington, is also a fan of getting teacher input. She tries to make sure that every piece of technology the school takes on passes a special test: Can the school’s least technological-savvy teacher use it without too much hassle?

“If it’s not going to give her a headache,

**Tell us about the virtual/online learning options available to students in your school district. Select all that apply.**



SOURCE: EdWeek Research Center survey of district leaders, May/June 2021.



and it’s going to accomplish what the students need, then we’re good,” Procope said.

Her teachers picked up new tech skills when instruction was mostly remote during the pandemic. Procope will get educators’ input in deciding which programs and procedures to keep from remote learning and which to jettison once everyone is back in classrooms.

“I want to make sure that the things that we are renewing are the things that our teachers are absolutely going to use and things that they absolutely think are good for our children,” she said.

Trevor Goertzen, the principal of Spring Hill Middle School near Kansas City, Kan., has a similar strategy. Any new program or device the school chooses must be run through a technology committee, consisting of teachers, administration, and district technology staff. The committee gives teachers a chance to pilot the tool and examines additional considerations, like privacy and cost.

Good teaching, he said, is key to the success of any technology. “It doesn’t matter how shiny the service is, if you don’t have a good teacher, it doesn’t matter,” he said.

**Teachers: Ask for feedback from students**

Teachers’ tech skills improved by leaps and bounds during the pandemic, with nearly half

of teachers saying their ability to use technology had “improved a lot” during the 2020-21 school year, according to a survey of 386 teachers by the EdWeek Research Center in March 2021. Another 39 percent said it “improved a little.” Teachers now must decide how they are going to take that newfound prowess and use it to reshape their practice.

Tricia Proffitt, who teaches 6th and 7th grade English/language arts to both native English and Spanish speakers at Belvidere Central Middle School in Illinois, said she finds tech that works with her students through trial and error. For instance, before the pandemic hit, she was using a grammar program that she really liked. But many of her students “couldn’t handle it,” she said. “It wasn’t breaking things down enough, and I was pulling them aside re-teaching and using pencil and paper techniques.”

So Proffitt looked around and rediscovered an improved version of a program that she’d abandoned years ago, which did a better job of customizing instruction to a student’s particular level. It even offered instructions in Spanish, which Proffitt called “a huge game changer, especially with being remote.”

Finding that more-effective program was typical of her decisionmaking process, Proffitt said. And she’ll often ask a student who is caught up on their work to be her “guinea pig”

when she finds a promising new tool.

She'll ask the student "'Can you play around [with this technology]? Give me your feedback.' .. And then I'll sit with them. And we'll talk about what worked, what didn't work. What might be confusing for someone else?"

Theresa Goltermann, a STEM teacher at Tabb Middle School in Yorktown, Va., also relies on student feedback to help her make tech decisions. For example, in the fall of 2020 during virtual learning, she frequently used Kahoot, a game-based learning platform that allows its users to create multiple-choice quizzes.

"It's a big, big motivator because of the mu-

sic, the countdown, the big screen colors and all that fanfare," she said. "It's just really engaging."

But her students grew tired of it. "After a few months, they were like, 'Oh, no, not a Kahoot again!' So I would try to switch it up. I listened to the students."

When some of her students returned for in-person instruction, she felt that the students had online learning fatigue, so she said she cut back on the virtual tools, in favor of robots and Micro:bits, a pocket-sized, programmable computer.

Proffitt also finds limits to technological tools. During the 2021-22 school year, her stu-

dents struggled with organization. "Because everything had to be tech-based, there was a lot of like, 'I can't find it in my drive,' or they would make a copy of something like 10 times and then send you the wrong one," she said.

She normally has each kid use a binder to stay organized. "It definitely made me realize that tangible and tactile is still really important. Tech is wonderful, because it allows me to do a lot of differentiation and allows the kids to work at their own pace. But now I realize we can never go all tech in school. We still have to have, you know, some paper, we still need projects, we need a lot of choices." ■

## OPINION

Published November 17, 2021

# How to Start Using Data to Achieve Equity for Students

By Mackey Pendergrast  
& Erica Hartman

**T**he Morris school district is in northern New Jersey, about an hour northwest of New York City, depending on the traffic. Serving just over 5,700 kids in 10 schools, we're small but diverse: More than 50 percent of our students are minorities, and we have a 41 percent free and reduced-price lunch rate. For us, "equity and inclusion" is not just some phrase on our website; it is deeply personal and shapes everything we do, including our technology initiatives. For instance, even before the pandemic hit, we were at nearly 100 percent access for our students to high-speed internet and devices, well ahead of the majority of schools. This history of maximizing access means we have data over a longer time period than most, but it also underscores that commitment to equity. Here's how we use data to support our mission.

### What Is Catalytic Data?

The belief that data can drive better outcomes is not unique to our district. In fact, most districts are awash with data. But insight by itself is really useless. To drive real change and support an equity-driven mission, the data has to result in action at a systemic level.

The pandemic was hugely disruptive to schools. It upended so many well-intentioned and well-planned initiatives, but the shift to



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online learning also came with some great benefits. We now have access to real-time insights into where students and staff were spending time and what tools and platforms they prefer to facilitate learning. For us, the data from online learning accelerated our insight—it's what we refer to as catalytic data—and got us to move faster toward our equity-driven instructional goals. So what insights did we glean that other districts can leverage to ensure that ed-tech is delivering the data to support real learning for all students?

### Paring Down the Platforms

Even as recently as eight years ago, our district was the Wild Wild West of digital platforms. Every school was using a different platform—we had a total of more than 240. There was no talking to each other and there was no flow of analytics or data upward.

Now, we actually use a 22-point rubric to decide whether to purchase any new platform. Even though we're very careful in choosing those ed-tech platforms, that doesn't mean they're going to get us to where we want to be.

So administrators must also be flexible and responsive to student and staff needs.

We monitor trending applications in the district. Occasionally, we'll see an application that's not approved, and so we have to ask why everyone is using it. Why are teachers going to this platform? Why are students going to it? Is it something that we should look into? Being intentional about ed-tech is key.

### Engagement Doesn't Equal Learning

There are many platforms and tools that give you engagement data. How many students logged on? How long did they stay in the application? Is it being used properly? But just because something is being used does not mean that students are actually engaged. These are questions we've always struggled with in education.

Using a learning analytics platform like CatchOn, we can dig into when something is being used, how it's being used, and what programs within it are being used. We take that engagement data and map that over student growth. We compare it against standardized state testing and AP scores, as well as longitudinal studies with i-Ready.

We don't just want to entertain students. Our objective is for students to learn in accordance with the standards. So we looked at academic performance over the past five years and we overlaid the student- and class-level engagement data to really understand how engagement was impacting student growth along those standards. And for us, we were able to see a correlation with increases across all areas in testing scores and across every single type of student as well.

### Democratizing the Data

Any organization that wants to thrive has to be a learning organization, and certainly school districts should be learning organizations. To be a learning organization, you have to have a feedback loop based on data. There's so much out there, though, that you have to make sure you're looking at the right data. For us, the critical question to ask is, "Does our ideal of what should be happening in the classroom match the reality of what is actually happening in the classroom?"

If there is a gap between your values and what you intend to happen and what's actually happening, the data should reflect and inform that conversation. But those conversations can only happen if you can produce the data in a format that is digestible. You can't just share 10 pages of spreadsheets with teachers. They

don't have the time to make sense of them.

Democratizing data is the process of making it digestible so that everybody can look at it and share their perspective on it. As part of democratizing our data, we do regular data walks in which we hang up posters of data and everyone in the building walks around and gives their perspective. We ask one another questions about the data and engage in meaningful conversations. For a lot of folks, looking at data is scary, so it's critical to build a culture where it's OK to not know, where you're expected to ask questions. With this approach, we're able to understand and empathize with what parents are thinking; what students are thinking; what teachers, nurses, or custodians are thinking. Everyone matters when it comes to data, and all of their viewpoints and perceptions of the data are really important.

### Appointing a Data Steward

If you want data to effectively drive instruction, it cannot exist in silos. There has to be cross-communication, and it should come from the district level. We created the role of data steward to make sure there is connective tissue between the technology and the instruction. Bureaucracies don't reform themselves, so district leaders have to make sure that the time is built in. It's a significant challenge for all of us at the moment, but it's critical.

The data steward is the person who manages all of the data. They decide how to standardize our data, how it flows from one platform to another, and how we export it—all those things that are very uncool and dirty but absolutely necessary. They ensure that our data is clean, centralized, and in coherent formats.

That position also acts as the gatekeeper of the data. We want to ensure that we are protecting our student data and privacy. That's something that all districts are thinking about, but if you don't have someone in charge of it, no one is in charge.

As district leaders, we tend to develop systems that help us create reports for board meetings or state departments. It can become easy and convenient to forget that the data we collect should always be in service of teaching and learning. Ed-tech, and the data it produces, is just a tool we use to build equitable access to high-quality learning. ■

*Mackey Pendergrast is a former superintendent of the Morris school district in New Jersey. Erica Hartman is the district director of technology and integration for the Morris school district in New Jersey.*

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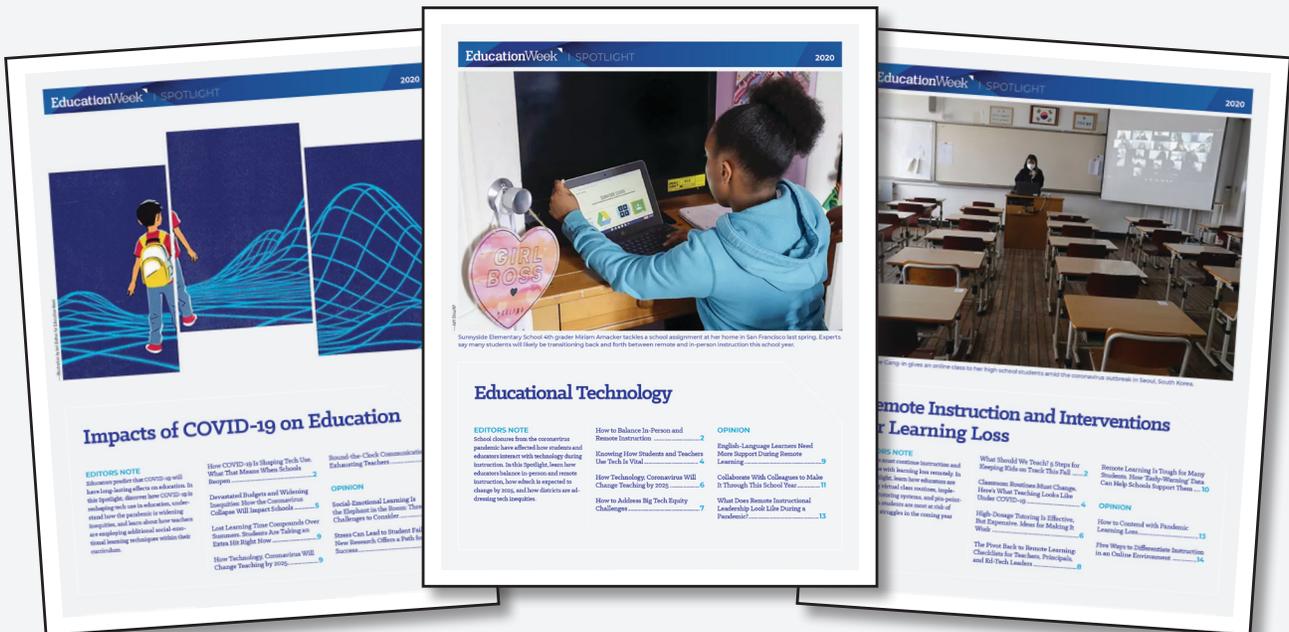
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