



Education as we knew it has been transformed as a result of the pandemic. Educators and administrators have been faced with the challenge of keeping up with the ever-changing shifts in scheduling and attendance, mask policies, staff vaccination rules, learning modes, school closures, and a multitude of evolving practices and procedures.

As new waves of COVID continued to thwart the best laid plans, one challenge for school and district leaders is how to make sure this crisis is ultimately viewed as an opportunity for transformation. We are now entering a new era of education that has been accelerated due to this unprecedented crisis, and the outcomes will be stronger as a result of the struggle.

After all, as educators and those in support roles are learning, when nothing is sure, anything is possible. This period is opening up "an opportunity to reimagine what schools will look like," as **Education Secretary Miguel Cardona noted.**

And technology is at the heart of the equation:

- Distribution of computers and learning—in and out of the classroom—is enabling continuity of schoolwork regardless of location;
- Investment in wireless infrastructure and mobile hotspots is extending high-speed internet—and access to students who have lacked it: and
- Remote conferencing is delivering counseling, advising, tutoring, coaching, and telehealth to students and families.

But as this new era of education unfolds, the work of the IT organization is only just beginning.

"This is no longer a temporary situation," said Erik Lindborg, who oversees education and government for AT&T in the Gulf States region. "For all of the technology that has been put in place to address remote learning, the question schools are trying to answer is how to make these solutions sustainable so they can continue to accelerate digital transformation and grow as needs change."



IT converges with the interests, concerns, and needs of students and teachers on a number of fronts:

- Addressing learning loss and the digital gap;
- Addressing teacher challenges and development; and
- Long-term investment in innovation.

Addressing learning loss and the digital gap

COVID exposed and highlighted long-standing racial and economic inequities. Those students in families and communities without—whether by virtue of zip code, residency status or family circumstance—fell further behind. According to McKinsey, just the first year of the pandemic left students five months behind in mathematics and four months behind in reading by the end of the school year. The hit to historically disadvantaged students was even harder: "In math, students in majority



Black schools ended the year with six months of unfinished learning, students in low-income schools with seven."

IT must continue playing a role in addressing the technical aspects of the digital and homework gap.

Helping teachers continue to develop

Teachers are still struggling to adapt to the new blended learning environment especially as they gravitate to instructional models that emphasize student personalization. IT can help teachers understand the nuances of learning applications and guide choices that adhere to data privacy rules and best serve educational purposes.

IT can also help create the most efficient ways to measure student participation, which is useful for two reasons. First, knowing how students respond can guide educators toward modes of instruction that work and help avoid practices that aren't hitting the mark. Second, IT can provide



the information schools need for outreach: it's impossible for districts to successfully help students who have fallen off the radar without having a relationship with them.

Benefits of connectivity

While schools and families have adapted to the technological challenges of the last several years, demands for connectivity have rapidly increased. Connectivity ensures operating systems, processors, and applications speak to each other with speed and ease. Expectations for connectivity now include reduced lag, full coverage for connected classrooms and access beyond the classroom walls. Whether students are connecting an iPad in a car or accessing school health services at home through a laptop, teachers and school staff have resources to teach and assess learning outcomes. Connectivity has the power to remove barriers, elevate student success, and advance education equity.

The upside for IT

Several of the challenges resulting from the pandemic are obvious places for IT to lead. But there are other areas where IT can show leadership by helping the school or district community gain a new perspective on what they are experiencing and help flip the narrative. IT is transforming almost every aspect of education as we knew it.

"Innovation is happening. Investment is happening. People are understanding that the student learning environment is dynamic and changes day to day, week to week," suggested Lindborg. "IT can help illustrate that there's a lot of good that can come out of this unprecedented situation."

For example, IT is best positioned within the school system to serve as the navigator for innovation in teaching and learning. A part of IT's job is to track what's new and possible in education; participate with



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educators in developing ways to pilot the most promising ideas; and help participants understand what the results of the data are and how innovation might play out more broadly if scaled properly.

IT hasn't always been viewed as an enabler of innovation. In many districts, the IT organization was loaded down with so many operational activities, there was little energy or time for new tools or approaches. Managing help desk and tech support work consumed most hours of the day. This leaves little room for strategic matters such as driving new initiatives and introducing new technology.

Rather than "just throwing technology at specific problems," district IT leaders are learning how to take a "more holistic approach to support new strategies," Lindborg observed. Often, that requires calling on ed tech partners for broader guidance. AT&T, for example, is working with education customers in all 50 states and deriving best practices that bring value to every new project undertaken for schools and districts.

There's also considerable upside in taking advantage of commercial investments and innovation to offload IT organizations of operational support and management of services. One of the primary challenges with implementing connectivity programs out of the classroom for students and families is providing the necessary support services, like help desk, translation services, and inventory management. These services are an exact example of how industry can free up much needed time for IT administrators so they can focus on innovation initiatives.

Another lesson education customers are embracing is to think long-term.

"In the private sector, there's an understanding that you have to invest deeply in technology solutions. You don't go order Chromebooks and cellular network connectivity and call it done," Lindborg explained. "It's something that has to be worked every single day in terms of support and scale."

And what that work consists of varies. depending on where the district is in terms of the technology maturity curve. When remote student learning was exploding at the onset of the pandemic, Lindborg recalled, "we were dealing with requests to help schools establish emergency connectivity for students and teachers. That's what it was all about. But that was only the beginning.



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Now, decision-making is becoming more thoughtful and taking into account lifecycle maintenance. How do you support those technology solutions long-term for this new era of education?"

Make technical support a priority

Lindborg said he believes that support is a big part of lifecycle management. That includes taking into account the "vast array of end users that a school district needs to support."

First, there are the students. "There's this thought that you put a device in a student's hands and give them access to the internet and because these students are nimble. creative, and flexible, they'll be able to do a lot of things we can't do. But the device is really just the beginning," he contended. "You're still going to have those situations where Wi-Fi goes down or the router stops working and the student doesn't know why or what to try next."

And planning for support needs to encompass more than the technology, he added. There's the situation, as one example, of students living in nomadic situations because parents

work essential jobs at varying hours or their families are homeless. "What are we doing for those students that don't have what we may consider essentials—such as a consistent place to study every night? Or for students who go to their grandparents or neighbors after school and at night to do homework?" How can IT support those students too?

Then there are the teachers. "Today, teachers have to be technology specialists. They have to understand many different platforms the district is using and also stay in close contact with students and parents or caregivers in a lot of different ways," said Lindborg. "It's not the parent-teacher conference twice a year anymore," he pointed out. "Many teachers are committed to the field because they love educating and positively impacting the future of students. The role of a teacher has expanded significantly and there are substantial challenges that need to be addressed."

"Students and teachers need help 24/7," Lindborg pointed out. "If the student has a paper due or a test that's scheduled and they can't get their device or network to function,



what do they do? They may call the school district, but more likely, they'll call their teacher or someone in the school office."

Lindborg also noted, districts approach the problem of support differently. Large school districts may be better positioned than "under-resourced" districts to handle support in house."

Similarly, he added, the education community should look at best practices in terms of who's in the best position to provide that support. "We as an industry understand customer care and end user help desks. The solution may be working with a provider, maybe it's not," he offered. "But the important thing is, you've got to look long-term and think about how the students and teachers are going to be supported every day."

Lean into public-private opportunities

As school districts work with local and county government agencies and industry to fill connectivity gaps for serving the school community, the IT organization plays an important role.

According to Lindborg, district IT professionals are the ones who understand what the baseline requirements are, in terms of connectivity speed and feed. "But it's much more than that," he added. "Whoever is embarking on a public-private partnership needs to understand the unique and specific needs of those school end users—what applications they're accessing, whether they're uploading large files, whether there's a need for broader collaboration in the home, whether this is a multi-device environment where you have several students and family members in the house competing for bandwidth."

Only with that kind of input, he said, will the request for proposal, or request for information, enable potential vendors "to understand the full scope of needs and how the school intends to best use the funding available." The more informed prospective industry partners are, the better targeted their proposed solutions will be.



Experience is a wise teacher

"Connectivity has become the new pen and paper. The ability for students and teachers to learn—in and out of the classroom—is a priority of both educators and policymakers," asserted Lindborg. "It may not be a pandemic. It may be something else. But the key is to help districts be flexible and ready for change."

Lindborg, who worked as a young person at Disney World, learned a lot about customer service during his time there—how to look people in the eye, how to communicate, how to get the little details right. What also stayed with him was the company practice of putting executives "out in the park," to do front-line jobs, such as selling popcorn or working in a kitchen. "The reason they do that is because they want the leaders making the strategic decisions to understand what's really going on with the guest experience."

The same practice could be used in the education environment, he suggested.

"With IT and administrators spending more time in the classroom, and talking to parents and students, education leaders can understand what they're experiencing firsthand. We all kind of need to get our hands dirty, to have direct knowledge of what these challenges really look like," Lindborg offered. "Because it's one thing to read about it; it's another thing to sit down with a family or a child and experience it. What do students, families, and teachers really need? They'll tell you."

To learn how AT&T is helping to connect schools, students, and teachers, visit att.com/closethegap.