



## 4 reasons it's time for school tech to graduate from makeshift to modern

A year of hybrid learning has shined a light through the cracks in education technology. Families with—and educators of—school-age children had to cobble together a learning environment that's more reliant on technology than ever before. And they have encountered significant challenges.

### The state of the student

#### Access disconnection

Off-site and even some on-campus learning requires online access. Yet nationwide, millions of students simply don't have a way to get online—particularly learners in low-income households and rural areas. This disconnection creates a “homework gap” that hurts their education.<sup>1</sup>

**15–17 million students don't have internet at home.<sup>1</sup>**

#### Bandwidth bottleneck

Students have siblings. Families are taking turns hosting groups of learners. Parents are working from home. That's a lot to ask from a single residential internet connection. Students need speeds of 25 Mbps download and 12 Mbps upload to support activity by multiple, concurrent users.<sup>2</sup>

**70% of students live in a multi-learner household.<sup>2</sup>**

#### Online traffic jam

Teachers and students cannot always connect in a physical classroom. So one-on-one, small-group, and whole-group instruction takes place via online meeting tools, and assignments are posted to classroom sites. These concurrent activities push a lot of data across school networks.

**85% of network traffic in remote learning is used for video.<sup>2</sup>**

#### Down to the (hard)wire

IT administrators can't control students' connectivity quality outside school walls. Home construction, compatibility, router locations, and use of personal devices alongside school-issued ones all affect wireless connection strength—and often parents have already plugged the home Ethernet cable into their work laptops.

**92% of students use Wi-Fi instead of a wired network connection.<sup>2</sup>**



## The struggle is real—for teachers, too.

#### 2 of 3 teachers

say they haven't been able to do their jobs properly since they started to teach remotely.<sup>3</sup>

#### 6 in 10 new teachers

have no training on how to teach a remote classroom.<sup>3</sup>

#### 69% of district leaders

say their teachers need additional professional development to use technology more effectively in the classroom.<sup>3</sup>

Online teaching is a different skill set than live classroom teaching—not just in instructional technique, but also in technology expertise. It's hard enough to be an effective digital educator. But many teachers feel burned out—especially veteran teachers whose experience has all been in traditional settings.<sup>4</sup>

## Upgrade your ed tech from makeshift to modern.

From newer devices to better connectivity, K-12 students and parents depend on schools to help close the learning gap. Equip them with the tech tools they need at home to succeed in the classroom.

Want to learn how you can deploy technology that supports all students in their education journey?

**Read our ebook: *Blended learning and teaching in the connected classroom.***



<sup>1</sup> Alliance for Excellent Education and Future-Ready Schools, “Students of Color Caught in the Homework Gap,” <https://futureready.org/homework-gap/>

<sup>2</sup> Consortium for School Networking (CoSN) and Chan Zuckerberg Initiative, Student Home Connectivity Study, Accessed November 2021, Spring 2021, [https://emma-assets.s3.amazonaws.com/paqab/37cf06d0de533f59eb780f4ec065d766/Home\\_Connectivity\\_Study\\_Report\\_5.3.21\\_FINAL.pdf](https://emma-assets.s3.amazonaws.com/paqab/37cf06d0de533f59eb780f4ec065d766/Home_Connectivity_Study_Report_5.3.21_FINAL.pdf)

<sup>3</sup> USA Today, May 26, 2020 “Back to school? 1 in 5 teachers are unlikely to return to reopened classrooms this fall, poll says,” <https://www.usatoday.com/story/news/education/2020/05/26/coronavirus-schools-teachers-poll-ipsos-parents-fall-online/5254729002/>

<sup>4</sup> Rand Corporation, Remote Learning is Here to Stay—Results from the First American School District Panel Survey, 2020, [https://www.rand.org/pubs/research\\_reports/RRA956-1.html](https://www.rand.org/pubs/research_reports/RRA956-1.html)

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