



## CASE STUDY: BART CHARTER

# Bringing Digital-First Learning Into the Classroom With Enhanced Wireless

### Technology Needs

- Wireless infrastructure upgrade to support 1:1 digital learning environment
- Simplified network management to reduce time spent on troubleshooting
- Reliable network that kept new tech-centric curriculum online

### Extreme Solution Components

- ExtremeWireless™
- ExtremeCloud™ IQ

“My job is to just make sure that technology works so flawlessly that teachers don't even think about it, they just get to do their jobs.”

“Our teachers get to focus 100% on implementing the great things they have planned and they don't have that nagging concern that the technology is not going to work.”

“The teachers were forced during the pandemic to find new and exciting ways to engage students wherever they were. That has carried over, and there are just some amazing things going on and the network infrastructure is supporting that.”

**Christopher Tawes,**  
Director of Technology, BART Charter

Berkshire Arts and Technology Charter Public School (BART) is a public charter school serving nearly 400 students across grades 6-12 in Western Massachusetts. The school's mission is to provide students with a strong foundation in arts and technology as part of preparation for college.

BART Charter supports students and faculty with 1:1 computing initiatives, provides access to technology and digital arts programs as part of its core curriculum, and hosts a computer lab. The school's IT footprint had been growing for several years before the pandemic shutdown. When learning went fully remote, the school took advantage of the opportunity to conduct device upgrades for both students and staff.

Upon returning to campus for in-person learning, Christopher Tawes, Director of Technology at BART, found his existing wireless infrastructure was no longer able to support the volume of new, modern devices. The tech-centric learning models that teachers created to satisfy remote needs were no longer functioning with existing wireless. In addition, the school faced problems with chipset compatibility between the newer devices that came online during the pandemic and existing wireless access points.

Tawes partnered with Extreme to test upgraded hardware throughout his environment. After seeing a dramatic drop in help desk tickets in the areas they tested, the school rolled out 36 new Wi-Fi 6-enabled wireless access points across the school.

After swapping out their entire wireless infrastructure in less than a week, Tawes saw better throughput and connectivity across the network, and through ExtremeCloud IQ, was able to see higher quality data on network performance and capacity. The upgraded infrastructure helped BART get back online in time to support online state-mandated testing and live-streaming graduations, while setting the stage for new projects to enhance the student experience.

“If a student's test fails due to tech difficulties, there are real-world implications to that, so it was nice to have an infrastructure back in place that just met everything I threw at it.”

**Christopher Tawes, Director of Technology**

## Results

### Better Classroom Experience

- Digital learning enhancements that came online during the pandemic now work seamlessly in the classroom environment.
- Students are able to engage with more feature-rich content, including video, interactives, and podcasts.

### Reliability and Trust in the Network

- Simplified management and network reliability give Tawes time to focus on strategic projects like a wireless video distribution platform.

### Planning for Future Programs

- Amplifying both the technology and arts focused curriculums by providing students access to the latest software and applications.
- Support for individualized education initiatives, where students in one class receive tailored instruction and materials delivered digitally.