



Innovation in K-12 Education

How K-12 Schools Gain IT Consistency and Reliability with Managed Services

In times of budget turmoil and uncertain IT resourcing, K-12 districts find footing in the form of managed services, which ensure always-on technology and support.

Classroom and foundational technologies that power learning and connectivity in K-12 schools require reliable, consistent, and nearly always-on support. Yet, in many areas, it has become increasingly difficult to provide that support. Historic IT talent shortfalls are affecting all industries, education included, making finding — and retaining — qualified and reliable technology professionals a highly competitive process. Projected budget shortfalls and uncertain funding streams also raise questions about whether to phase out some technologies or forego upgrades to instead focus funding on more pressing technology needs. Districts are facing such challenges just as schools are starting to examine whether and where it makes sense to introduce AI opportunities in the classroom. How will schools lay the proper foundations for AI infrastructure and learning?

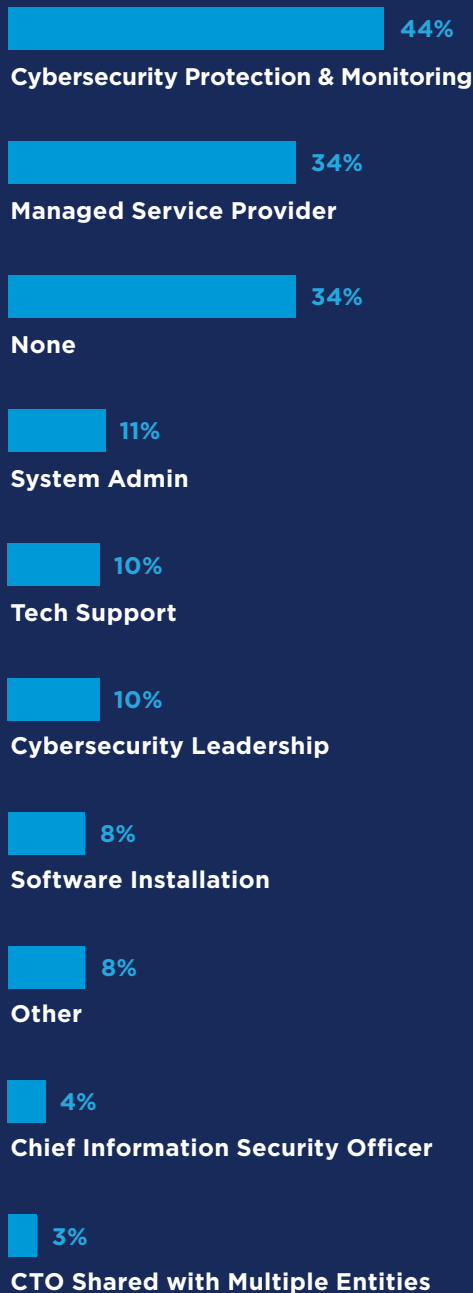
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OUTSOURCING STRATEGIES FOR KEY IT FUNCTIONS



Many districts see hope in the form of managed services, which bridge gaps to keep everything running smoothly and securely. With managed services, districts can maintain consistent service and operating expenses (versus capital outlays). Because nearly every area of IT and technology can be managed by third-party service providers today, it's important for K-12 leaders to understand which services they should outsource versus maintain in-house. This guide is designed to help education IT decision-makers understand what managed services packages typically include, along with important considerations when partnering with any provider.

Are Managed Services Right for Your District?

With so many variables and unknowns now affecting the K-12 ed tech landscape, gaining a handle on costs to achieve reliable, consistent service enables schools and educators to instead turn their focus to the true work of education.

"Hiring and retaining staff is a challenge across all functional areas and levels. However, nearly a quarter of respondents (22%) report that their district doesn't employ any strategies for keeping or attracting IT staff," noted CoSN's recently released "[2025 State of EdTech District Leadership](#)" survey.

The survey also revealed several shifts from previous years in the ways districts approach and maintain critical infrastructure, as well as the functions they prioritize, including:

- **Support for off-campus broadband access has decreased, with only 66% of districts providing support.**
- **A majority of respondents (78%) said their districts spend cybersecurity dollars on monitoring, detecting, and response, with 44% relying on outsourced cybersecurity protection and monitoring — the most commonly outsourced function.**
- **Most respondents' districts (66%) use outsourcing strategies for IT functions, but the specific functions that are outsourced vary, with no single function outsourced by a majority of respondents.**
- **Beyond cybersecurity, the next commonly outsourced functions included remote network maintenance (34%), system administration (11%), help desk (10%), and cybersecurity leadership (10%), while 8% of districts outsourced other functions that weren't included on the survey.**



The Latest on E-Rate

In May, USAC announced that all eligible Category One and Category Two E-Rate requests for 2025 will be fully funded, projecting a total demand of \$3.225 billion — \$1.8 billion for Category One (internet access) services, and \$1.4 billion for Category Two (internal connections, basic maintenance of connections and managed internal broadband services). Another \$500 million in unused funds from prior years will also be available for use in 2025, according to [Funds for Learning](#) and the [FCC's public notice](#).

As more school buildings bring physical access security and facilities monitoring technologies or IoT under the purview of ed tech teams, security, cybersecurity, HVAC, and lighting now frequently fall on IT's growing list of responsibilities. "As their role expands, it's encouraging to see that most serve as members of their superintendent's cabinet," the survey adds. "District leadership and ed tech leadership increasingly need to rely on each other to address the needs of ever-evolving educational environments."

Gaining a seat at the leadership table is an essential development for K-12 IT leaders, showing the critical importance of the growing mix of technology tools essential to the day-to-day work of education. As districts' IT infrastructure grows in complexity, maintaining a strict handle on refresh cycles, software licensing and interoperability, reliable and trustworthy cybersecurity, along with the general health and scope of it all, requires multiple layers of oversight and management to keep everything running reliably and smoothly. Keeping costs under control is imperative for K-12 environments, given the unpredictability of funding sources and budgetary cycles.

Managed solutions allow redeployment of IT resources to address other strategic priorities districts frequently don't have time for, such as implementing new IT systems or training teachers on how to use technology effectively for instruction. Outsourcing allows schools to treat technologies and their underlying infrastructure as a commodity and can help schools readily deploy new tools that advance tech-focused instruction in the classroom, enabling STEAM, coding, and AI innovation.

Many districts opt for hybrid outsourcing scenarios where they maintain control over certain parts of their infrastructure or networks while handing off the management of other pieces to their managed services provider. Schools and districts can now select from a wider menu of services and technologies to be outsourced than ever before. Districts find help in third-party service providers, gaining awareness of resources that may be available, along with which technologies or skills should be outsourced. This is key to entering a successful, mission-driven partnership that can provide value for years to come.

What Do Managed Network Services Provide?

Managed network services and technology allow K-12 districts to invest in solutions that match current demands while easing accommodations for future requirements. Schools that leverage managed network services aren't locked into using the same technology for three to five years, which is especially attractive in cases where the risks are high that any purchased technology will become outdated before the next refresh cycle, or the next round of available funding becomes available. Instead of owning and supporting obsolete equipment, managed services offer IT teams peace of mind, knowing they will have access to the latest technology and solutions that meet their school or district's exact needs at any given time.



Managed solutions ensure knowledgeable and highly qualified experts are available 24 hours a day to maintain, support, troubleshoot, and update network infrastructure.

Managed network services' ability to reduce burdens on overextended IT departments cannot be overstated. Managed solutions ensure knowledgeable and highly qualified experts are available 24 hours a day to maintain, support, troubleshoot, and update network infrastructure, ensuring schools can keep their networks running smoothly without having to commit their own IT personnel.

Providers typically install and lay all the requisite and essential network and connectivity components, including Ethernet or dedicated internet, which should include 100% uptime guarantees as part of any service agreement. Dedicated fiber internet services should also offer faster upload and download speeds and scalable bandwidth, up to 100 Gbps.

Managed WiFi services include installation, management, and support of wireless network solutions and allow schools to optimize coverage and troubleshoot problem areas with highly experienced and qualified teams.

Modern network edge solutions allow districts to build more efficient networks that support a wide range of traffic, reliably connect multiple buildings or public cloud locations, and streamline operations through all-inclusive platforms, including SD-WAN. These solutions can also deliver more advanced security and flexibility, offer comprehensive views of school grounds through smart cameras, or environmental sensors that help improve security and monitoring.

Schools and districts frequently opt into other managed network technologies, such as router services, which fully manage the design, implementation, and monitoring of the most up-to-date routing solutions.



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What Does Managed Security Protect?

AI innovations have spawned new threats and capabilities among bad actors, which makes appropriate, up-to-date cybersecurity solutions more important than ever before. Keeping up with the sheer pace and volume of threats impacting K-12 networks and infrastructure is essential to protecting highly sensitive student data and the ongoing safety of everyone who connects to and relies on school networks every day. Managed security services offer protections that districts may not otherwise have the means or knowledge to provide, let alone update and patch as frequently as may be required to ensure ongoing protection.

Managed cloud security allows schools to protect devices, users, and locations through cloud-based solutions that include zero-trust network access (ZTNA), multi-factor authentication (MFA), cloud-based firewalls, and identity management — the latest essentials for protection, no longer nice-to-haves.

Distributed denial of service (DDoS) protection allows schools to identify and help stop malicious traffic before it even reaches the network, through scalable DDoS solutions that allow seamless expansion as protection or coverage needs evolve and grow.

What About Managed Voice?

As schools and districts increasingly offer hybrid or fully remote teaching and learning opportunities, unified communications solutions may be experiencing something of a renaissance.

Managed voice and unified communications allow districts to provide the latest seamless communication and collaboration tools, through calling, videoconferencing, messaging, and more in a single application.

Create a digital education-rich learning environment with managed services from Spectrum Business®

For more than 20 years, the public sector team at Spectrum Business, a Charter Communications brand, has partnered with K-12 schools, districts, and libraries of all sizes to provide tailored education technology services and help secure critical funding.

Spectrum Business offers a full array of managed technology and support services for K-12 environments, ensuring students and educators enjoy access to critical infrastructure and always-on connectivity that powers technology for learning.

Learn more at enterprise.spectrum.com/k12ed.