Demands on education networks have changed. Between blended learning, online coursework, digital applications, and connected devices, WAN bandwidth needs continue to soar; however, IT budgets simply can’t keep up with necessary infrastructure upgrades. And although fiber is becoming more widely available, many K-12 and higher education schools continue to purchase shared fiber networks, limiting their ability to keep pace with these demands. How can education communities adapt to this bandwidth-hungry reality without breaking the bank?

Here are nine reasons why private fiber WANs are the best way to cost-effectively future-proof your institution’s infrastructure for today, tomorrow, and beyond.

1. Upgrade to Modern, Durable Technology

Fiber optic connectivity transmits information as pulses of light through glass or plastic fibers. These fibers, called strands, create circuits capable of sending and receiving terabits of data, enabling providers to deliver speeds ranging from 1Gbps to multiples of 100Gbps. Private fiber networks provide dedicated, carrier-grade fiber connectivity to each location across campus(es), and fiber optic cabling is highly durable, with well-maintained bundles lasting for decades. Once a perk reserved only for large companies with huge budgets, owning a private fiber network is now affordable for small and mid-sized organizations.

2. Experience True Privacy

Multiple customers share resources within traditional networks, and your data transits the same hardware as everyone else. On shared networks, a simple configuration error can expose private information to unintended parties. With private fiber, the only data running across the network is your own. This dedicated, reserved, and genuinely private approach adds an additional layer of network and data security.
3. Achieve Unbelievably Fast Speeds
Today, network users expect instantaneous access to online resources no matter what device they’re using. With dedicated fiber, your organization can gain ultra-fast, low-latency connectivity with synchronous upload and download speeds. While the maximum bandwidth you can utilize is significant, latency is a more accurate measure of a network’s speed. By using dedicated fiber-optic infrastructure and removing the shared components of traditional carrier networks, your user experience will improve with the speed of light!

4. Gain Ultimate Scalability (Without Paying Extra)
What good is high-speed broadband if it costs a fortune every time you need to scale? Shared networks are often more expensive, and when your bandwidth needs increase, so does your monthly bill. Instead of buying a set amount of bandwidth, private fiber networks enable you to lock in flat rates over extended periods (10+ years), providing virtually unlimited bandwidth scalability without price increases. That’s right; there is no cost to upgrade your bandwidth at any time during your contract. This flexibility and freedom make your infrastructure truly future-ready and future-proof.

5. Say Goodbye to Repeated Procurement Processes
On top of never paying more for additional bandwidth, private fiber also frees your organization from the time-consuming and dreaded Groundhog’s Day approach to procurement. By securing a long-term rate, you’ll experience an exceptional ROI and ensure your team doesn’t need to go out to bid every few years. Additionally, private fiber networks and the equipment and services necessary to light and manage them are all E-rate Category One eligible, enabling K-12 school districts to receive up to a 90% discount on a truly transformative network that will serve their connectivity needs for years to come.

6. Get 100% of the Bandwidth You Pay For
On traditional shared networks, customers pay for bandwidth up to a specified amount, but sometimes users won’t receive their subscribed bandwidth during peak usage periods when other organizations or residential users use the network. Because shared services providers intentionally oversubscribe their networks to improve the profitability of their investment, slowdowns are an expected side effect of this approach. With private fiber, you won’t experience these inconsistent speeds because there are no other customers or equipment on your network that could cause degradation in performance or speed. Your connection is solely dedicated to you, enabling you to receive 100% of the bandwidth you pay for all the time.

7. Gain Peace of Mind With Exceptional Reliability
Speed, scalability, and bandwidth are great, but only if your network is reliable. Private fiber is by far the most reliable method to connect your sites and turns your network into a utility-like service with virtually 100% uptime – set it and forget it!
8. Reduce Management Complexity

IT teams manage, oversee, and support more devices and networks than ever before. We know their time is stretched thin, and many are stressed and overworked. At the same time, not every team has specialized network staff and resources in-house. Managed WANs help ease this workload by shifting your network’s ongoing management and maintenance to your provider. From designing and deploying to supporting the network, partnering with a managed service provider like ENA decreases strain on internal teams and helps save time and money while bridging skills gaps that may exist.

9. Receive a Custom Designed Network

Leveraging private fiber means your network will be purpose-built to fit your specific needs. ENA's tailored WAN approach ensures you have the engineering expertise and long-term support needed for a successful network. Our experienced engineers will analyze your current setup, review your goals, and design a custom network using point-to-point (dual and diverse), ring, or hub-and-spoke designs.

The Fiber You Need. The Proactive Management You Deserve.

A trusted network partner for education communities since 1996, ENA delivers reliable and secure connectivity via our turnkey and managed private fiber WAN service:

- All-inclusive, fixed price for your capacity
- Tailored network design and engineering
- World-class engineers augment your internal IT team
- Fully managed implementation and installation
- 24x7x365 proactive monitoring with security and performance evaluations
- Continuous maintenance of fiber infrastructure, including circuits, carrier-class equipment, and hardware
- Unrivaled customer support and only one vendor to call when issues arise
- 100% E-rate eligible and compliant network services

Ready to future-proof your infrastructure with private fiber WAN?

Learn more at ena.com/wan and sign up for a personalized network consultation at ena.com/connectivity-consultation.

Book Consultation

ENA delivers transformative connectivity, communication, cloud, security, and data analytics solutions supported by exceptional customer care. For more information, please visit www.ena.com, call 866-615-1101, or e-mail info@ena.com.