

Future-Proof Your K-12 IT Strategy

Key Insights to Building Secure, Interoperable Systems in K-12 IT

Today's schools can't afford disconnected systems or thinking. That's why the smartest strategies don't separate cybersecurity from system integration. They start with an SIS-led infrastructure that's built for both.

1. Design with Interoperability in Mind

- Adopt common data standards (like Ed-Fi or OneRoster) to ensure clean integration between SIS, LMS, financial systems, and other tools.
- Demand API-first systems that provide secure, structured, real-time access to key data points without risky manual workarounds.
- Inventory your system architecture regularly to identify redundancies, conflicting data sources, or manual touchpoints.
- Prioritize platforms that support modular integrations, letting you swap in best-in-class solutions without overhauling your stack.

2. Centralize Identity and Access Management (IAM)

- Use your SIS as a source of truth for role-based permissions. When systems are fragmented, it's harder to enforce least privilege access.
- Integrate single sign-on (SSO) and multi-factor authentication (MFA) across all platforms, including classroom tools.
- Establish automated deprovisioning workflows to revoke access when students or staff leave or change roles.

3. Build Data Context into Your Defense Strategy

- Enriched, connected data improves threat detection. When systems talk to each other, it's easier to detect anomalies or compromised accounts.
- Support incident response with clear system relationships. Identify which systems rely on others so you can isolate threats without shutting everything down.
- Include your data map in your business continuity plan. If your SIS or learning platform goes down, what are the ripple effects?



4. Train Users with Contextual, System-Specific Awareness

- Move from generic cybersecurity training to system-specific simulations. Focus on real-world workflows in your SIS, LMS, and email tools.
- Use your SIS to trigger risk-based training. For example, alert users accessing sensitive student info to potential phishing threats.
- Test awareness, not just attendance. Tabletop exercises and social engineering drills are more valuable than checkbox modules.

5. Plan for Recovery, Not Just Prevention

- Ensure backups are isolated, encrypted, and regularly tested, especially for mission-critical systems like your SIS or tuition platform.
- Include data interoperability in your disaster recovery plans. If one system is compromised, how quickly can the others recover data or function independently?
- Conduct regular tabletop exercises that simulate ransomware threats across systems, including scenarios during peak periods like back-to-school or admissions.

BY THE NUMBERS

36%

of successful K-12 cyberattacks stem from compromised credentials.

71%

of K-12 ransomware victims lose at least some of their backup repositories in the attack.

\$6.6 M

The median ransomware payment in K-12 in 2024.

80%

of organizations that implement awareness training see a reduction in phishing susceptibility.

Three Pillars of a Secure, Integrated School IT Strategy

1

Interoperable Systems

Unified data across SIS, enrollment, billing, and more

2

Stronger Human Defenses

Reduced phishing risk through better user context and system access

3

Faster Detection + Recovery

Real-time insights + fewer silos = more informed response