



## **K12 SIX Essential Cybersecurity Protections for the 2022-2023 School Year**

### **– What K-12 Leaders Need to Know –**

Given the rising frequency and severity of [recent K-12 cybersecurity incidents](#), it should be no surprise that education leaders and policymakers are turning their attention to the question of how to better defend school communities from the myriad cyber threats facing the K-12 education sector. Indeed, K-12 cyber incidents have led to significant disruptions in teaching and learning, the theft and extortion of millions of taxpayer dollars from school districts, and identity theft and fraud stemming from student and teacher data breaches.

While there is no shortage of best practice guidance available from government and private sources, that guidance often presumes greater IT capacity and resourcing than most school districts can afford. Moreover, general guidance is not well-suited to the specialized software applications and cultural realities of technology implementation in K-12 settings.

To address the security capability and expectations “guidance gap” in school district cybersecurity practices, the K12 Security Information eXchange ([K12 SIX](#)) created the ‘[K12 SIX Essential Cybersecurity Protections](#)’ series of products. Developed by K-12 IT practitioners, for K-12 IT practitioners—and aligned to nationally-recognized cybersecurity frameworks—the K12 SIX-recommended cybersecurity protections are designed to defend school districts against the most common cyber threats they face, including those identified by the Federal Bureau of Investigation (FBI), the Cybersecurity & Infrastructure Security Agency (CISA), and school cyber insurance providers.













Updated guidance for the 2022-2023 school year represents a refinement and enhancement of last year’s edition. Nonetheless, it retains important key features, such as focusing on a small number of cost-effective, pragmatic security controls and offering guidance on their impacts on school system budgets, IT staff workload, and educators’ time and workflows.

Implementation of these protections should not be construed as a guarantee of the cybersecurity of school district-managed IT systems and data, nor should the implementation of these protections be considered a substitute for instituting a comprehensive, cross-organizational cybersecurity risk management program. While K-12 IT staff have a critical role to play, organizational risk management—including for cybersecurity issues—is a core governance responsibility of school district policymakers and leaders.

*K12 SIX Essential Cybersecurity Protections* for the 2022-2023 school year (summarized on the following page) consists of a dozen cybersecurity controls—grouped into four categories—that every school district and K-12 organization should strive to implement.



**K12 SIX ESSENTIAL CYBERSECURITY PROTECTIONS  
2022-2023 SCHOOL YEAR**

Recommended Protection	Description
<b>1.0 Sanitize Network Traffic to/from the Internet</b>	
 <b>1.1 Block malicious web content</b>	Block access to known malicious online content
 <b>1.2 Defend against email attacks</b>	Protect users from email-based scams and fraud
 <b>1.3 Segment &amp; limit exposed services</b>	Establish safeguards for access to critical internal and external services
<b>2.0 Safeguard Student, Teacher, and Staff Devices</b>	
 <b>2.1 Restrict administrative access</b>	Keep devices protected and in compliance with security policies
 <b>2.2 Apply endpoint protection</b>	Ensure devices used for school remain safe whether used on or off premises
<b>3.0 Protect Student, Teacher, and Staff Identities</b>	
 <b>3.1 Protect user logins</b>	Implement multi-factor authentication (MFA) to safeguard against compromised passwords
 <b>3.2 Improve password and account management</b>	Prevent account compromise, sharing, and re-use—commonly responsible for data breaches
 <b>3.3 Minimize 3rd party risk</b>	Mitigate risks introduced by relying on vendor tools and services
<b>4.0 Practice Continuous Improvement</b>	
 <b>4.1 Install security updates</b>	Protect against known vulnerabilities through timely patching of IT systems, computers, and equipment
 <b>4.2 Manage sensitive data</b>	Enact policies to regularly backup, archive, and/or delete sensitive data and documents
 <b>4.3 Train to improve cybersecurity awareness</b>	Reinforce cyber hygiene practices and precautions to prevent cyber-attacks from succeeding
 <b>4.4 Plan for cyber incidents</b>	Prepare for cyber incidents by developing and testing a cyber incident response plan



School systems that implement these cyber defenses will be less likely to experience significant cyber incidents involving breaches of student and teacher data, interruptions in teaching and learning, and the theft of taxpayer funds.

Forthcoming free, public facing K12 SIX products in the K12 SIX Essential Cybersecurity Protections Series will provide standards of practice for implementing each of the K12 SIX-recommended protections and access to an online cybersecurity self-assessment tool for school district IT leaders updated for the 2022-2023 school year. [K12 SIX membership benefits](#) include access to additional guidance and implementation support.

*Questions or comments about this product series can be directed to K12 SIX at <https://www.k12six.org/contact>.*

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### **About the K12 Security Information eXchange**

The K12 Security Information eXchange (K12 SIX) is a cyber threat information sharing hub for K-12 organizations—including school districts, charter schools, private schools, and regional and state education agencies—to aid in preventing and mitigating attacks. This non-profit member community is a cost-effective forum for crowdsourcing security information among a vetted, trusted group of professionals with a common interest, using common technology and with supporting, independent analysis from the K12 SIX security staff and the Global Resilience Federation multisector network of information sharing communities. Visit [www.K12SIX.org](http://www.K12SIX.org) to learn more.

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