



TYLER ISD

SUCCESSFUL STUDENT OUTCOMES

Cyber Security Update

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Cyber Security – Senate Bill 820

Senate Bill 820 passed in 2019

Requires School Districts to:

- Adopt a Cyber Security Policy
- Designate a cybersecurity coordinator
- Report any cyber attacks TEA

Cyber Security - Policy

CQB (Local) Policy states:

“The District shall develop a cybersecurity plan to secure the District’s cyberinfrastructure against a cyberattack or any other cybersecurity incidents, determine cybersecurity risk, and implement appropriate mitigation planning.”

Tyler ISD Cyber Security Plan

Establishes a district-wide approach to cyber security

Defines mechanisms to help protect Tyler ISD’s IT resources

Acknowledged and accepted annually by all employees

Details specific standards and guidelines governing district cyber security include:

- District Password Standard
- Acceptable Use Standard
- Network Access Standard
- Incident Management Standard

Cyber Security – House Bill 3834

House Bill 3834 passed in 2019

Requires state and local government employees to annually complete a certified cyber security training:

- Knowbe4 – Security Awareness Training
- Training in place since 2017
- All employees must successfully complete training each year - Currently 86% complete, including all staff, subs, temps

Cyber Security – Expertise

Network Security Engineer – Daryl Kisosondi

- Position created in 2017
- Serves as the district Cyber Security Coordinator for TEA
- Oversees Tyler ISD's cyber security profile
- Reports cyber attacks to TEA – nothing to report
- Performs random phishing tests of employees
 - Only 2.5% of employees fail phishing tests
 - Anything below 5% is considered very good.

Sentinel Cyber Intelligence:

- Assisted with creation of Cyber Security Plan
- Performs regular network penetration testing
- Performs ongoing threat monitoring and assessment

Cyber Security – Notable Tools

- Knowbe4 Cyber Security Training – Employee Training Program
- Palo Alto Firewalls – Industry Leader in Firewall Security
- Content Keeper – Internet Content Filter
- Cyber Centurion – Network and System Penetration Appliance
- Cisco Email Security Filter – Protects against phishing, spam and other email scams
 - Blocked over 71,000 phishing and malware emails since February 1, 2021
- Crowdstrike - Antivirus Software
 - Detected and quarantined 258 attempted virus installation since Thanksgiving
- Aristotle Insight – Student Behavior Analytics
 - Flagged 21,000+ instances of inappropriate content this school year
 - Reports sent daily to Tyler ISD Police and Campus Administration for review

Cyber Security – Infrastructure

Security relies on network infrastructure:

- Phone systems
- Alarm and Access Control Systems
- Security Cameras and video storage
- Other systems rely on network infrastructure
- Downtime means lost access to critical systems

Administration Data Center Revitalization:

- Refreshed Administration Core Data Center to provide optimal network uptime
- Upgraded outdated HVAC system with Liebert Data Center Cooling
- Installed Fire Suppression System
- Updated Electrical System
- Revitalized the backup generator with new transfer switch and wiring

Cyber Security – Data Center



Cyber Security – What's Next

Future Plans in Information Security include:

- Continually reinforcing Cyber Security training for all employees
- Revising the Cyber Security Standards and Guidelines as needed
- Updating core hardware and software systems to ensure optimal system uptime
- Establish a secondary data center located at Tyler Legacy High School
- Provide multiple paths for increased internet connectivity
- Connecting all campuses, Administration Data Center and Tyler Legacy High School Data Center with fiber optic rings to create a resilient network that approaches 99.99% network uptime.