

Governance Authority Committee

December 10, 2018

Today's Agenda

- Current Events: Cyber Attacks in K12
- CFISD Committee Development

Implemented Security Frameworks

- National Institutes of Science and Technology (NIST)
- Trusted Learning Environment (TLE)

Recent Implementations

- LEARN Network (Lonestar Education and Research Network)
- Resource Review
- Data Privacy Agreement

Action Items Escalated from the Internet Advisory Committee

- 1. Modify verbiage in the Student Handbook should be modified to ensure clarity regarding student login processes.
- 2. Require teachers to ensure the websites students are asked to review at home are accessible on the district network.
- 3. Require employees complete the Cybersecurity training distributed by Technology Services.



K12 Cyber Attacks

- K12 Cyber Attacks 391 incidents since January, 2016 across the US
- Florida Virtual Schools incident





Area K12 Cyber Attacks

	District	Description
2016		Katy ISD warned about 78,000 of its students and staff members that their personal
	Katy	data - including social security numbers, names and birth dates - may have been
		accessed during a security breach
	North East	The district says that there were three separate ransomware incidents over the past
		two months. 20 campuses and two departments were affected. About 2.5 terabytes
	East	of data were encrypted, but no student personal information was compromised.
	Pearland	Pearland ISD refused to fork over about \$1,600 in ransom demanded in two attacks
		this year, losing about three days of work from teachers and students. The district
		invested tens of thousands of dollars on security software.
		A hacker accessed through an unsecured remote desktop used to access school
	Kountze	computers from external locations. The hacker was able to lock the shared user files
		of all 1,300 students and employees. The district was able to restore their files.
		Splendora ISD says a cyber-attack has compromised information of families within the
	Splendora	district and could potentially give rise to threatening messages made directly to
		parents, students and staff.
2017	Spring	A local high school student is accused of hacking a school's computer system and
2	Branch	changing grades. The student faces a state jail felony charge.
	Multiple	The names and social security numbers of employees were made public on a website
		managed by the Texas Association of School Boards
	Multiple	Texas Dept of Agriculture employee's state-issued laptop computer was compromised
		through a malicious ransomware attack. The information included student names,
		social security numbers, home addresses, birthdates, and personal phone numbers of
		the affected students and their families.
2018	Rockdale	District officials said an employee responded to an email from a scammer pretending
		to be the superintendent. They requested copies of all the W2 forms for district
		employees. More than 350 employees had their personal information stolen.



Unauthorized disclosure/breach Ransomware Phishing

Committee Development

Internet Advisory Committee

 Purpose: To make recommendations, provide feedback, and disseminate information as it relates to the protection, privacy, and security of students, employees, and personal data.

Governance Authority Committee

 Purpose: To develop and implement data privacy and security policies and practices as it relates to the protection, privacy, and security of students, employees, and personal data.



Internet Advisory Committee

 Purpose: To make recommendations, provide feedback, and disseminate information as it relates to the protection, privacy, and security of students, employees, and personal data.

Curriculum

Diane Garland Jenifer Jones John Morrison Kay Pechacek Linda Sams David Srubar Stefanie Ware

Instructional Technology

Becky Cook Todd Sepulveda Steven Stone

Librarians

Jennifer Hill Deborah Jones Beth Keene Mary Bridget Maddan Heather McGuire Andrea Morris David Srubar Stefanie Ware

Technology Services

Larry Barrios James Costello Becky Cook John Crumbley Frankie Jackson Jennifer Miller Eric Pina Paula Ross Greg Rhodes



Governance Authority Committee

 Purpose: To develop and implement data privacy and security policies and practices as it relates to the protection, privacy, and security of students, employees, and personal data.

Business & Financial Services Mable Isles Melissa McAnear Karen Smith

Curriculum

Becky Cook Lana Mock Denise Kubecka Barbara Levandoski Kenya Turner

Human Resources Jan Price Jill Smith

Legal Services Marney Sims Principals Heather Bergman Cheryl Fisher Sarah Harty Cathryn Jacobs Gary Kinninger Maria Mamaux Onica Mayers Michelle Rice

Police Chief Eric Mendez

Student Services Candy McCown Jae Simpson-Butler

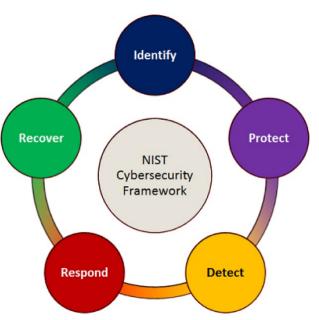
School Leadership & Administration Sheri McCaig Technology Services Larry Barrios James Costello Frankie Jackson Jennifer Miller Eric Pina Greg Rhodes Paula Ross



Supporting Frameworks

 National Institutes of Standards and Technology (NIST)

 Trusted Learning Environment (TLE)

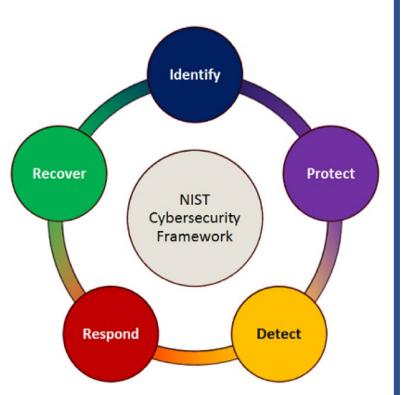


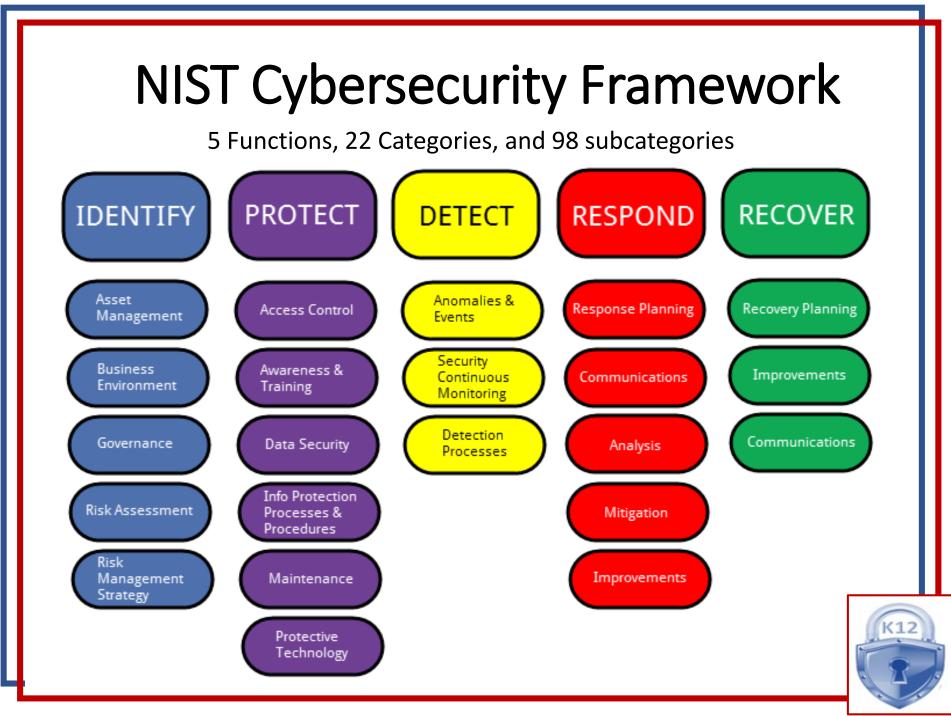




NIST Cybersecurity Framework

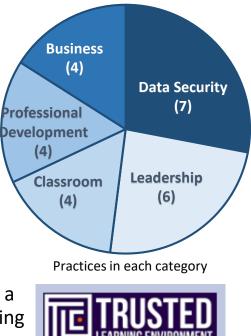
- Best practices created to prevent, detect, and respond to cyberattacks.
- Goals of using a framework:
- To improve the protection, privacy, and security of students, employees, and district data.
- Align with regulations such as FERPA, CIPA, COPPA, and PPRA.





Trusted Learning Environment Framework

- Leadership Practices
 - Manage and collaborate with stakeholders regarding the use and governance of student data to inform instruction
- Business Practices
 - Establish acquisition vetting processes and contracts that, at a minimum, address applicable compliance laws while supporting innovation.
- Data Security Practices
 - Perform regular audits of data privacy and security practices and publicly detail these measures
- Professional Development Practices
 - Require school staff to conduct privacy and security training and offer the instruction to all stakeholders
- Classroom Practices
 - Implement educational procedures and processes to ensure transparency while advancing curricular goals





https://trustedlearning.org/framework/

Implemented Solutions

LEARN Network



- Resource Review
 - Website
 - Software
- Data Privacy Agreement

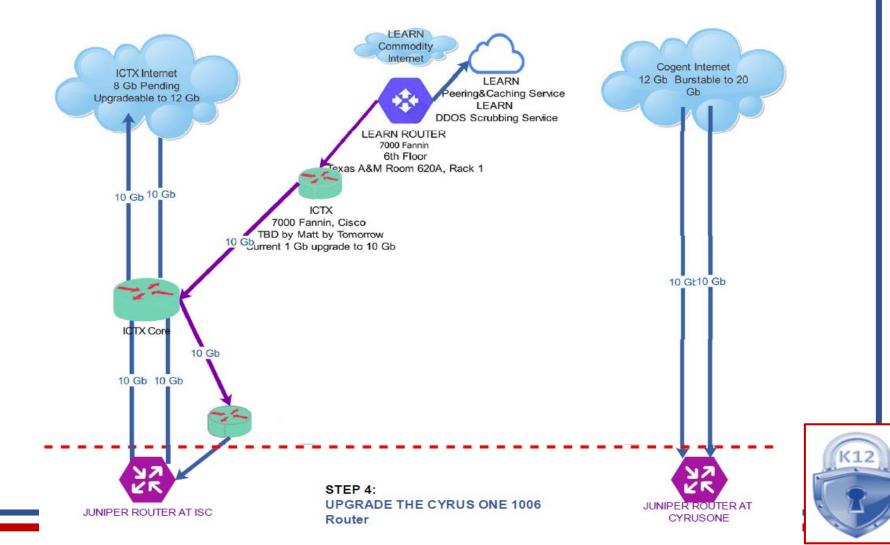
CFISD Resources

This database lists the vetted, approved, and declined resources that may be utilized by CFISD teachers and staff.



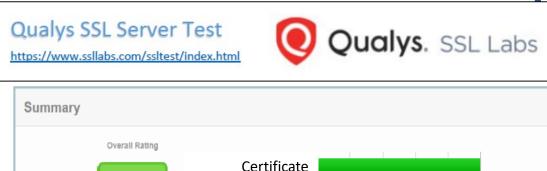
Qualys SSL Server	VUUVS. SSL Labs
Summary	
Overall Rating	
	Certificate Protocol Support
	Key Exchange
	Cypher Strength
	0 20 40 60 80 100
Visit our documentation p	ge for more information, configuration guides, and books. Known issues are documented here.
	Experimental: This server supports TLS 1.3 (draft 23).

Implemented Solutions: LEARN Network



Implemented Solution: Resource Review

- Resources reviewed for security and privacy adherence
- Qualys SSL Server Test Results
 - rankonesports.com
 - Grade F -> A
 - sogosurvey.com
 - Grade B -> A
 - edgemakers.com
 - Grade C -> A
 - esgisoftware.com
 - Grade **B** -> **A**



Protocol Support

Cypher Strength

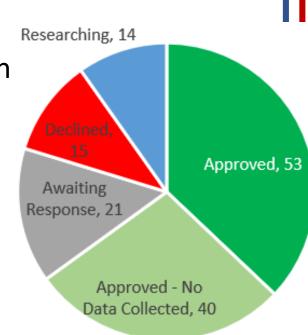
Key Exchange

entation page for more information, configuration guides, and books. Known issues are documented here.

Experimental: This server supports TLS 1.3 (draft 23).

Implemented Solutions: Resource Review

- Data Privacy Agreement
 - Data Privacy Agreement distributed to all software/website vendors utilized in the district.
 - Cypress-Fairbanks ISD version utilized April 2018 – November 2018
 - Approved to move to the Texas DPA utilized by the Texas Student Privacy Alliance



CFISD Resources

This database lists the vetted, approved, and declined resources that may be utilized by CFISD teachers and staff.

Status	Approved: Contract is signed and app is in use.	
Key	Approved w/ Guardian Release: Guardians signed a contract to allow it to be used in a specific classroom with a specific group of	
	students.	
	Not Approved: Vendor was unable to sign the contract and, therefore, teachers are not allowed to use the app with students.	

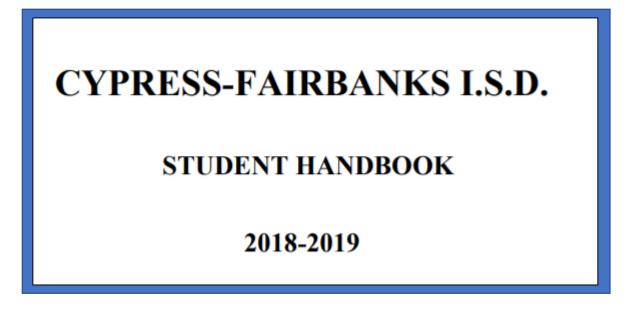
Items to Consider

- 1. Modify verbiage in the Student Handbook should be modified to ensure clarity regarding student login processes.
- 2. Require teachers to ensure the websites students are asked to review at home are accessible on the district network.
- 3. Require employees complete the Cybersecurity training distributed by Technology Services.



1 Student Handbook Review

 Modify verbiage in the Student Handbook should be modified to ensure clarity regarding student login processes.

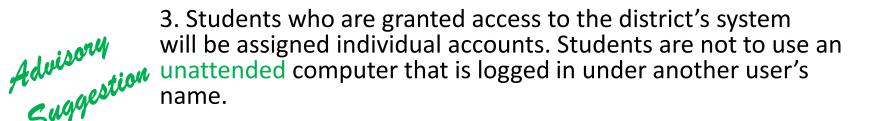




1 Student Handbook Review

- Student Handbook page HB-49
- SYSTEM ACCESS Access to the district's electronic communications system will be governed as follows:

3. Students who are granted access to the district's system will be assigned individual accounts. Students are not to use a computer that is logged in under another user's name.





Owvent

3. Students are not to use a computer that is logged in under another user's name unless that student is present and the use is part of a class assignment. Students should not use a device logged in as an employee.



2 Website Filtering and Utilization

- Teachers should ensure careful review of homework involving home internet utilization.
 - Vimeo
 - Youtube
 - Possible solutions





2 Website Filtering and Utilization

• Vimeo / Youtube

- Accessible for employees.
- Blocked for students at the URL and application control layers.
- Issues occur when education applications use Vimeo to house videos.
- Unblocking specific videos has not been successful and work-arounds contain additional risks.
- Curriculum team working on alternative solutions to store video files.
- Content Filter RFP





2 Website Filtering and Utilization

Desired Criteria:

- CIPA Compliant
- K12 Emphasis
- Integrated with AD
- Profiles based on AD Groups, subnets, machine type
- SSL Decryption
- Mobile and At Home Protection
- Entire School Year History available
- History should be exportable
- Custom Reporting
- Allows YouTube designated educational
- Website Overrides
- Reportable User Searches
- Real-time monitoring of user
- Educational Games Category

- URL and Application Control Blocking
- Customizable user notification/block pages
- Supports non-windows devices
- Supports multiple datacenters/ISPs with single history repository
- Supports large bandwidths and up to 300k devices
- Zero-minimum latency
- Network Peering Support (LEARN)
- Redundant
- Blocks Ultrasurf/Psiphon/proxies
- Adaptive alert capability i.e. user has 30 porn blocks in last 15 minutes
- Industry/K12 recognized
- Up-to-date categorizations
- Option to block Unrated sites



3 Cybersecurity Training

- Require employees complete the Cybersecurity training distributed by Technology Services.
 - Training

ST(THINK

Number of Packages: 1 **UPS Service:** STANDARD Weight: 5,0 KGS

Mouse Over Training

Tracking Number: Invoice Number:

E18A6840121864 🔽

323093 STAN http://wwwapps.ups.com/WebTracking/ Reference Number 2: DEL TO C'NEE processRequest? HTMLVersion=5.0&Requester=NES&AgreeToTe rmsAndConditions=yes&loc=en_GB&tracknum =1Z06E18A6840121864&WT.z_eCTAid=ct1_e ml Tracking

3 Cybersecurity Training

Initial Introduction

KnowBe4 Cybersecurity Training Beginning September 7, 2018

Beginning Friday, September 7, 2018, you will receive an email notifying you of new cybersecurity training from KnowBe4. KnowBe4 is a third-party cybersecurity software used for security awareness training and simulated phishing attacks that helps us keep our electronic information safe. Once you click the link, you will be directed to a webpage with instructions to check your email inbox. A new email will appear in your email inbox with a unique secure link that does not require a password. The link provided will connect you to the training module.

Weekly Distribution

Dear JENNIFER MILLER,

Please see your **NEW** cybersecurity training module as part of this month's KnowBe4 cybersecurity training. The training will help equip you with the skills and knowledge you need to secure student, personal, and district data. The link provided will connect you to the training module, and will allow you to access the training as time permits.

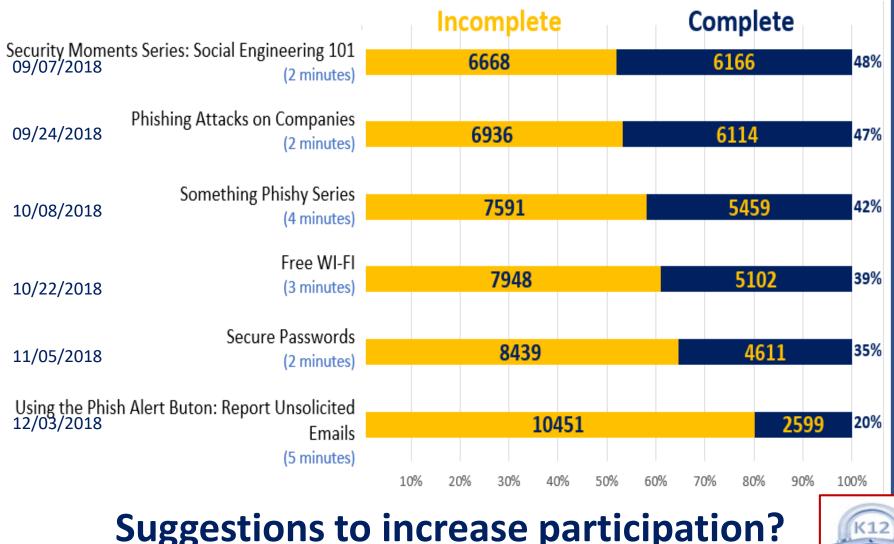
The courses you've been assigned are displayed below:

- Using the Phish Alert Button: Report Unsolicited Emails

Please use this link to start your training: https://training.knowbe4.com/login/77b171100a0893/15d27190da4902



3 Cybersecurity Training Participation



KnowB



In Conclusion. . .

• Additional Concerns/Questions

