

E-Learning: Keeping Educators and Students Cyber Safe

May 27, 2020

CYBER READINESS
INSTITUTE



Mahalo to our Community Partners!



State Public Charter School Commission
(*Aha Kula Ho'āmana)*



Presenters

- **Jennifer Sabas**, CyberHawaii
- **Craig Moss**, Director - Content and Tools, Cyber Readiness Institute
- **Maverick Fernandes**, Director of Information Security Office, Kamehameha Schools
- **Vincent Hoang**, Chief Information Security Officer, Enterprise Technology Services, State of Hawaii
- And Special Guest, **Jodi Ito**, Chief Information Security Officer, University of Hawaii

Agenda

- ❖ Welcome & Introductions
- ❖ E-Learning: Keeping Educators and Students Safe
- ❖ Kamehameha Schools Approach
- ❖ State of Hawaii Approach
- ❖ Q & A
- ❖ Closing



The Cyber Readiness Institute

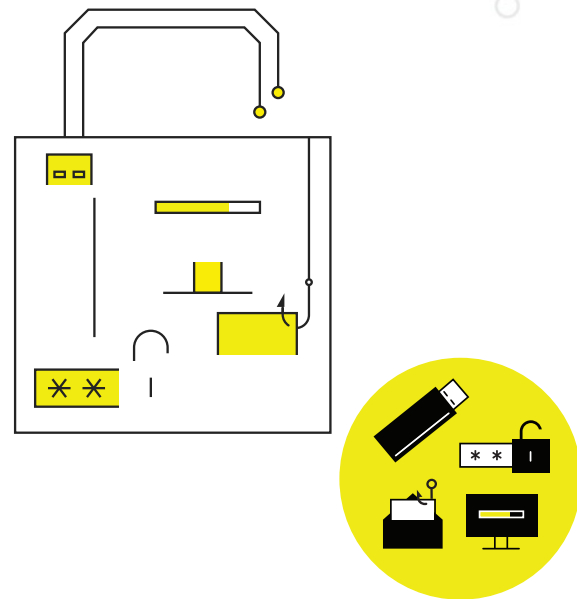
Craig Moss



“For health and safety reasons, we’ll be transitioning to cyber crime.”

The Cyber Readiness Institute

- ❖ Convenes senior leaders of global companies and value chain partners
- ❖ Shares cybersecurity best practices and resources
- ❖ Develops *free* content and tools to improve cyber readiness of small and medium-sized enterprises



THE CENTER FOR
GLOBAL
ENTERPRISE



The Cyber Readiness Program

❖ **Focus on four issues for prevention**

- Passwords (authentication)
- Software Updates (patching)
- Phishing
- USBs

❖ **Know how to respond to an incident**

❖ **Get Started:** Select Cyber Readiness Leader.

❖ **Assess & Prioritize:** Learn about four key issues. Prioritize what to protect.

❖ **Agree & Commit:** Develop policies and incident response plan.

❖ **Roll Out:** Train and communicate to employees.

❖ **Measure Success:** Measure impact. Earn certificate from the Cyber Readiness Institute.

Role of the Cyber Leader

- ❖ Point person in Cyber Readiness Program
- ❖ Implement practical policies
- ❖ Build awareness
- ❖ Establish a culture of cyber readiness
 - Prevention
 - Incident response



E-Learning: Keeping Educators and Students Safe

The Cyber Readiness Institute

Cyber Readiness in E-Learning Environment

- ❖ Remote learning is the new norm for school systems
- ❖ Teachers can continue teaching and students can continue learning
- ❖ Classroom has no boundaries

Considerations

- ❖ Personal or shared **device**
- ❖ Internet **connection**
- ❖ Document or platform **access**

Passwords/Passphrases



- ❖ Use strong passwords – passphrases with 16 characters are best
- ❖ Always use a separate password for school versus personal access
- ❖ If a shared computer, each person use their own password
- ❖ Check and update your home router - do not include your address or personal names
- ❖ Enable multi-factor authentication when possible (example: document sharing between teachers and students)

Patches



- ❖ Make sure you have auto-updates turned on
- ❖ Accept all relevant software updates and security patches as soon as they are released
- ❖ Hackers look for patch releases to identify a vulnerability and then target those who delay accepting the patch

Phishing



- ❖ More online presence and activity means more online scams, social engineering, and phishing attempts – often tied to COVID-19
- ❖ Teachers should use consistent subject lines with students so they can easily validate that emails are legitimate
- ❖ Always mouse over the email sender's name to determine the sender's true origin
- ❖ Remind students to pay close attention to the sender's name and email
- ❖ When in doubt – confirm directly with the “sender”

USB Use



- ❖ Convenient to use USBs or removable media devices to transfer information from school computers to home computers or between home computers
- ❖ Ask school/district about subscription to cloud-based data storage provider so teachers and students can access and share documents securely
- ❖ If USBs must be used, make sure to run virus scans

Video and Chat Applications



- ❖ Verify that your school uses a secure, encrypted communications video platform/app
- ❖ Always use the “password required” feature for meetings
- ❖ Quit the app when not in use
- ❖ Turn off video and audio functions when not in use, and block the video camera with a piece of tape or a post-it note
- ❖ Do not forward invitations to others
- ❖ Verify any unfamiliar phone numbers

The ABCs

How to Make it Easy for Your Students

Teach your students the “ABCs” of good cyber hygiene:

- A** – Authenticate your accounts by using strong passphrases.
- B** – Beware of phishing attempts and help students verify that you are the sender of the email.
- C** – Caution students to only use their video app if they SEE your screen name calling.

The background of the slide features a grayscale photograph of a classroom. In the foreground, a male teacher is leaning over a desk, pointing at a laptop screen while talking to a male student. To the left, a female student is also looking at a laptop. In the background, two other students are seated at a desk, working on laptops. The entire image is dimmed. White circuit-like line art is overlaid on the image, with one set in the top right corner and another in the bottom left corner.

Kamehameha Schools

Maverick Fernandes

Traditional classroom



New view of the classroom



New view of the home



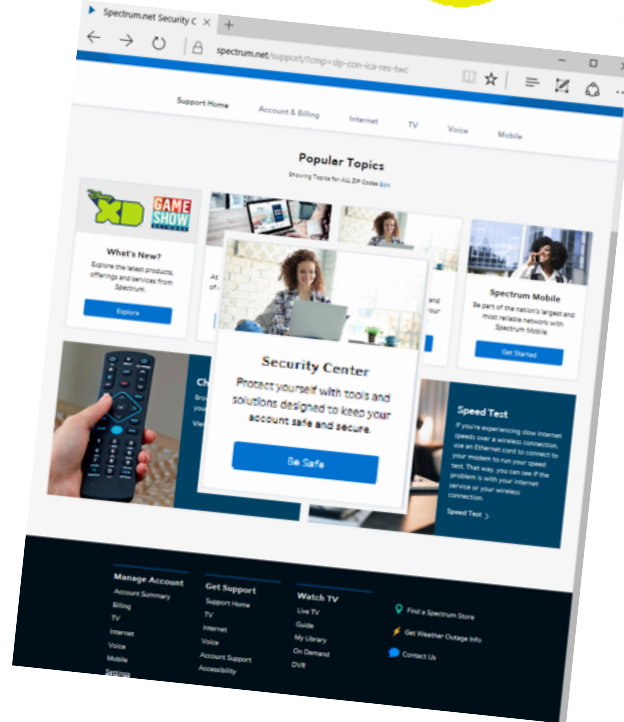
Securing your Home Network

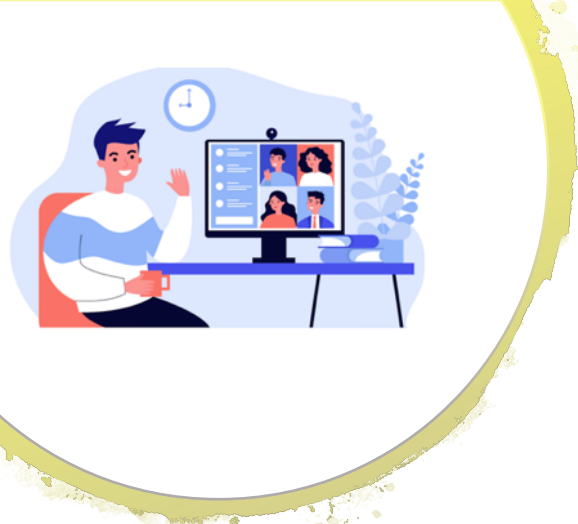
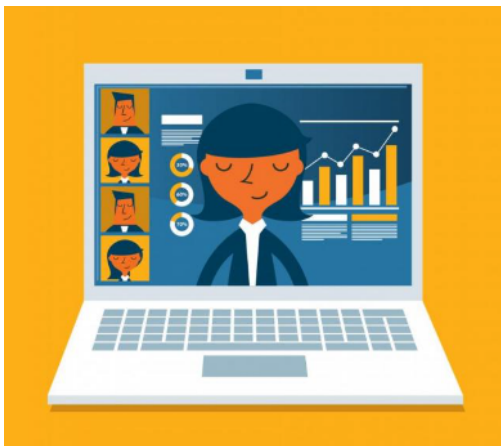


- ❖ Change the default administrator password. The administrator account is what allows you to configure the settings for your wireless network.
- ❖ Make passwords strong. The passwords people use to connect to your wireless network must be strong and different from the administrator password.
- ❖ Only let people you trust connect to your network. Do this by enabling strong network security, which requires a password for anyone to connect to your wireless network.
- ❖ Not sure how to do these steps? Ask your Internet Service Provider, check their website, check the documentation that came with your wireless access point, or refer to the vendor's website.

Source: SANS institute

Internet Provider Security Support





Video Conferencing Security

Video Conferencing Security



- ❖ Make sure password protection is enabled
- ❖ Use waiting room features
- ❖ Update to the latest version of the software
- ❖ Remove participants you do not recognize
- ❖ Lock your meeting
- ❖ Educate all employees who host meetings
- ❖ Don't share links
- ❖ Don't allow participants to screen share by default
- ❖ Don't record meetings unless you need to.

State of Hawaii

Vincent Hoang

Information Security CIA Triad

❖ Confidentiality

❖ Integrity

❖ Availability





Longer Passwords are Better

HOW PASSWORD
LENGTH WINS
THE INTERNET

Passwords 102

2019 Speeds to Crack Passwords

Characters	Password Recovery Time for NTLMv2 (@ 1.22 TH/s)
8	3 minutes, 0 seconds
9	3 hours, 5 minutes
10	1 week, 0 days
11	1 year, 4 months
12	83 years, 10 months
13	5.2 million years



Microsoft Statistics on MFA



Microsoft Security ✓

@msftsecurity

Follow

One simple action you can take to block
99.9% of attacks: msft.social/z781gR

99.9%

of attacks can
be blocked with
multi-factor
authentication¹

Read more at

aka.ms/gopasswordless

¹ 2018 Microsoft announcing MFA, aka.ms/MFA99



27.4K views

0:30 / 0:30



SEAR the Phish!



Stop. Examine. Ask. Report.

As a teleworking parent

❖ Communications

❖ Connectivity

❖ Time management

❖ Safety

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Thank You

www.BeCyberReady.com