NICE Webinar Series

NATIONAL INITIATIVE FOR CYBERSECURITY EDUCATION

Digital Citizenship- Safety and Security for an Online World
October 20, 2021

Cybersecurity Career Awareness Week

Inspiring and promoting awareness and exploration of cybersecurity careers.

- Inspire, engage, and inform the public about the demand, opportunities, and multiple career options

- Raise awareness about pathways to prepare a highly skilled and diverse workforce

- Support successful programs and showcase effective resources, especially those that increase participation of underrepresented populations

Operate and Maintain

Analyze

Collect and Operate

Securely Provision

Protect and Defend

Investigate

Oversee and Govern

Cybersecurity Career Awareness Week

OCTOBER 18-23, 2021

Discover Careers

Get Ideas for How to Engage

Make a Commitment

nist.gov/nice/ccaw

NICE
NATIONAL INITIATIVE FOR
CYBERSECURITY EDUCATION

NICE Strategic Plan

Goal 2 Transform Learning to Build and Sustain a Diverse and Skilled Workforce
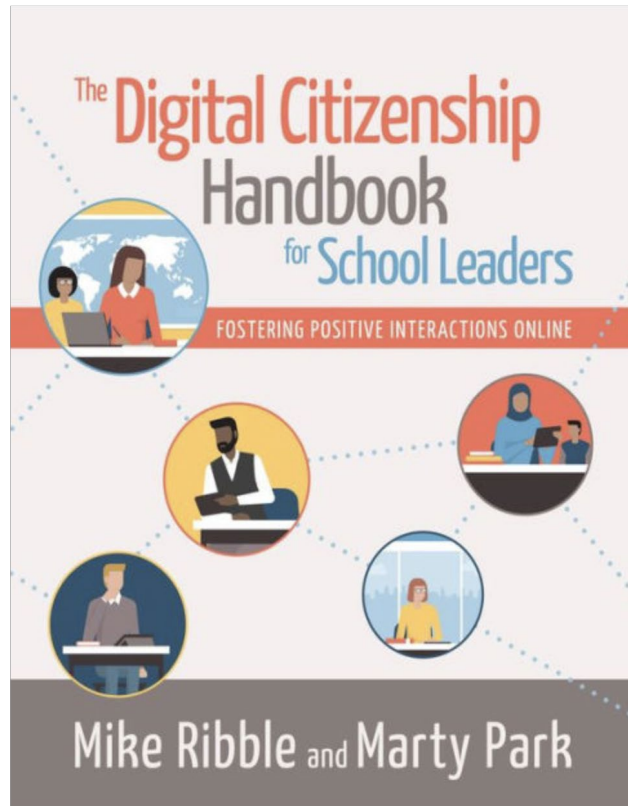
Objective 2.2 Advocate for multidisciplinary approaches that integrate cybersecurity across varied curricula that support diverse learners from a variety of backgrounds and experiences

Strategy 2.2.2 Encourage digital citizenship and digital literacy at all age levels

https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan

Digital Citizenship – Safety and Security for an Online World

Dr. Mike Ribble
Author, Presenter, Educator and Director of Technology

Putting the Digital Citizenship Definition to Action

Definition: *Digital citizenship is the continuously developing norms of appropriate, responsible, and empowered technology use.*

Action:

- *To lead and assist others in building positive digital experiences*
- *To recognize that our actions have consequences to others*
- *To participate in a manner for the common good*
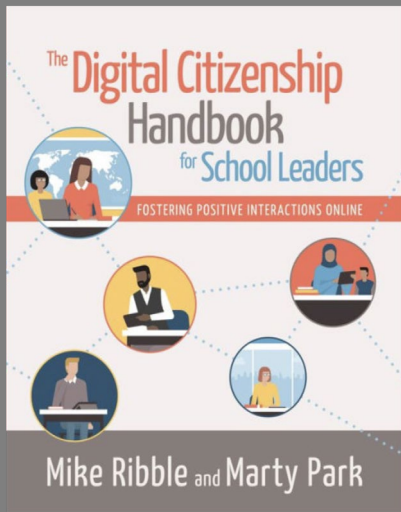
level 0

We just block and filter a ton of sites & apps in our school so we don't really need a DigCit plan.

level 1

We see the value of our staff and students learning DigCit skills, but don't yet have a program plan.

level 2

We have a DigCit plan, but it mainly consists of exposure to the skills (watching videos, lesson plans, etc.).

level 3

We have a DigCit plan & we check to make sure our students have the skills (base-level checks for understanding).

level 4

We have a DigCit plan & we ensure our students transition from DigCit literacy to DigCit fluency by student demonstrations and "doing" DigCit day-to-day. We also measure growth in our program.
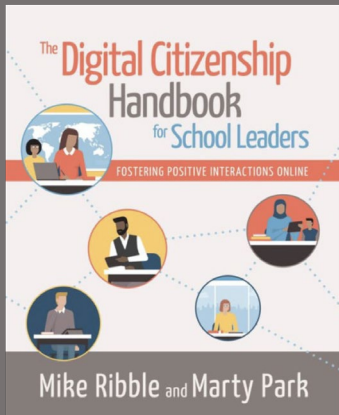
The Digital Citizenship Handbook for School Leaders
FOSTERING POSITIVE INTERACTIONS ONLINE
Mike Ribble and Marty Park

Today's S3 Student

Safe { Protect Yourself **&** Protect Others

Savvy { Educate Yourself **&** Educate Others

Social { Respect Yourself **&** Respect Others

The Digital Citizenship Handbook for School Leaders
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Safe

taking precautions to protect yourself and others from the risks of danger or injury

From: Admin Centre <bomni2817@stanfordblack.com>
Sent: Thursday, July 18, 2019 1:33 PM
To: ERIC REID <██████E@usd383.org>
Subject: ██████@usd383.org: PasswordReset

Office-365 Reset

Hi ██████@usd383.org,

Your Account Password is due for expiration today:Thursday, July 18, 2019.

Please kindly use the below to continue with same password.

[Keep Same Password]

Thanks,

The Security Team.

===

Please do not reply to this email.This automailbox is not monitored and you will not receive ██████@usd383.org response.

Savvy

wisdom and practical knowledge; the understanding to make good judgments

Deepfake Tom Cruise: You know I do all my own stunts, obviously. I also do my own music.

Deepfake Tom Cruise / **CHRIS UME/METAPHYSIC**

10

Social

creating cooperative and interdependent relationships and understanding of others

Example: Jeremiah Anthony @westhighbros

Westhigh Bros
December 19 via mobile

Don't Let your mistakes define you. Let your achievements show the world who you truly are!

Like · Comment

18 people like this.

Write a comment...

STEP Process

Stop – Take a Breath

THINK – True, Helpful, Inspire confidence, Necessary, Kind
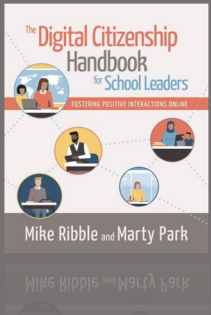
Empathize – Reflect on others

Post – If you have met the criteria above

13
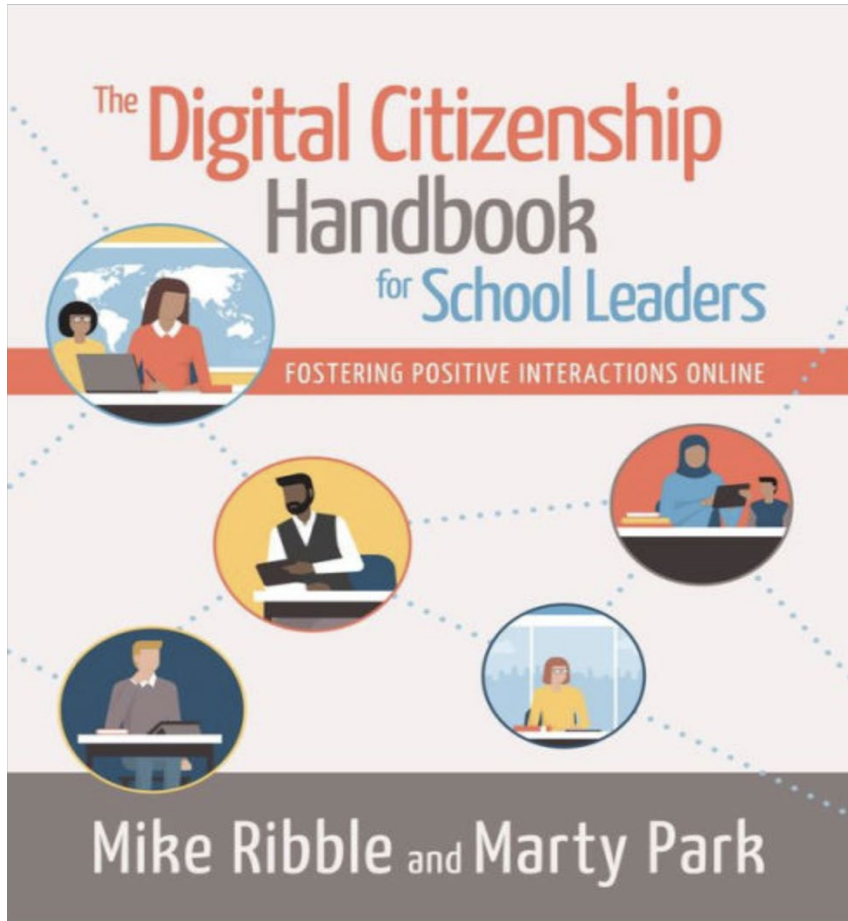
NEW
Research &
Resources

- **DigCit 2.0** (6 E's - engagement, enactment, empathetic, emerging, empowerment, & energy)
- New Element Reframing (privacy, collaboration, **upgrades to:** fluency & welfare)
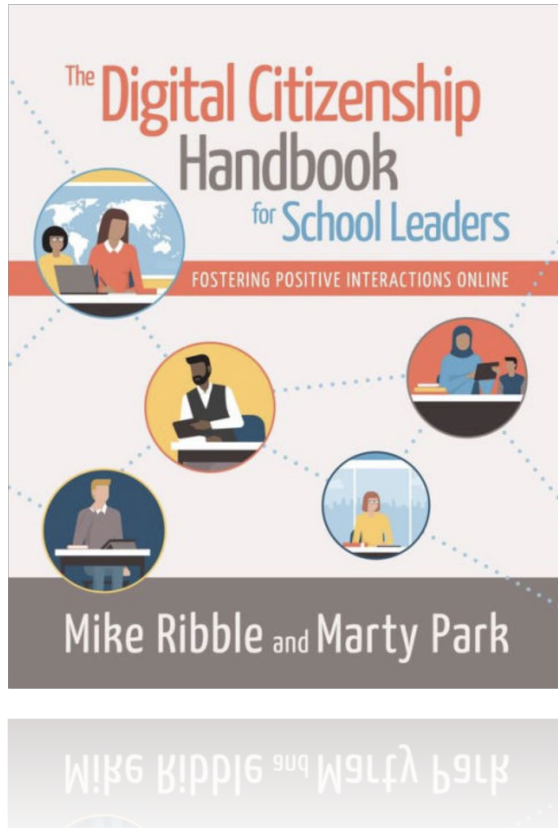- More on the S3 Framework
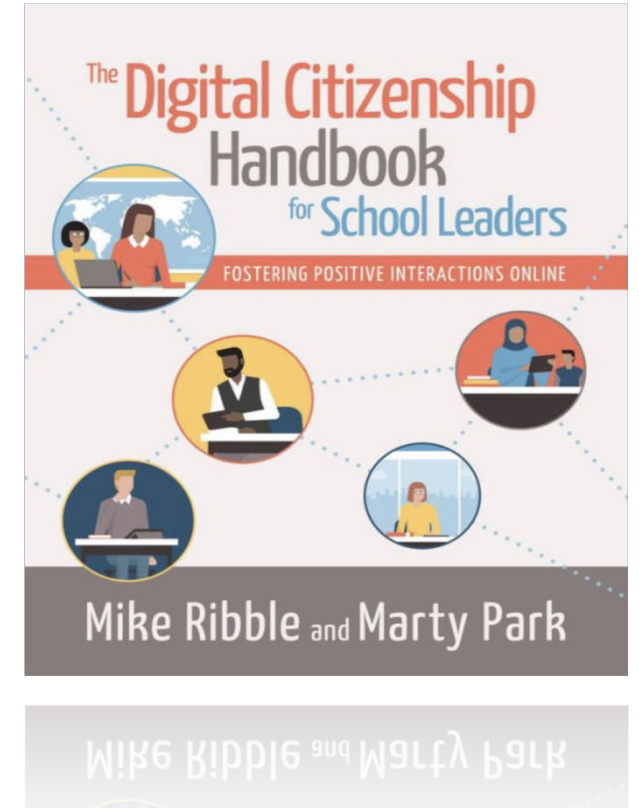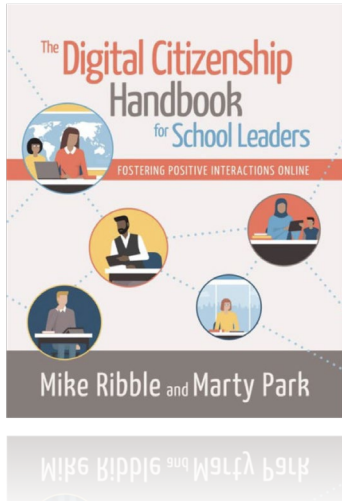
New Progression Chart

What's the right process
for **your learners**?

Digital Citizenship 9 Elements Progression Chart

Main Concept (9 Elements)	S3	Subconcept	Elementary (K-2)	Elementary (3-5)	Middle School (6-8)	High School (9-12)	Touch Points/ Crossover with other Main Concept	Cross-Curricluar Connections	Student Digital Citizenship Action & Demonstration of Learning
				Action Verbs: Remember & Understand					Apply, Analyze, Evaluate, Create
1. Digital Access	Safe	Digital Inclusion	☑	☑	☑	☑	Digital Etiquette, Digital Rights & Responsibilities	ELA, Social Studies	
		Digital Exclusion	☑	☑	☑	☑	Digital Etiquette, Digital Rights & Responsibilities	ELA, Social Studies	
		Accessibility	☑	☑	☑	☑	Digital Etiquette, Digital Rights & Responsibilities, Digital Fluency	Social Studies, Career/ Vocational Studies	Students use Read & Write for Google's "read aloud" feature to read an eBook.
	Savvy	Home Access/ Homework Gap	☐	☑	☑	☑	Digital Rights & Responsibilities, Digital Fluency	Social Studies, Career/ Vocational Studies	
		Assistive Technology	☐	☑	☑	☑	Digital Communication & Collaboration	Social Studies, Career/ Vocational Studies	Student uses the speach to text function to type their project design report.
		Equitable Access	☐	☐	☑	☑	Digital Etiquette	Social Studies, Career/ Vocational Studies	
	Social	Equal Opportunity	☐	☐	☑	☑	Digital Rights & Responsibilities, Digital Fluency	ELA, Social Studies	
		Equal Digital Rights	☐	☐	☑	☑	Digital Rights & Responsibilities	ELA, Social Studies	Students compare and contrast the digital rights under two different current governments.
2. Digital Commerce	Safe	Web Storefronts & Shopping Carts	☑	☑	☑	☑	Digital Law, Digital Security & Privacy	Economics, Social Studies, Career/ Vocational Studies	Students research key elements of ensuring a "secure" and legitimate shopping website.
		Identity	☑	☑	☑	☑	Digital Law, Digital Security	Economics, Social Studies, Career/ Vocational Studies	Studenets create a checklist of what "Personal Information" is and write a summary of what information should and should not be shared online.
		E-Commerce Secure Transactions	☐	☑	☑	☑	Digital Law, Digital Security & Privacy	Economics, Social Studies, Career/ Vocational Studies	
	Savvy	E-Commerce Recommendations & Ratings	☐	☑	☑	☑	Digital Security & Privacy	ELA, Economics, Social Studies, Career/ Vocational Studies	
		Digital Advertising	☐	☑	☑	☑	Digital Rights & Responsibiliites	ELA, Economics, Social Studies, Career/ Vocational Studies	
		Digital Currency	☐	☐	☑	☑	Digital Law, Digital Security & Privacy	Math, Economics, Social Studies, Career/ Vocational Studies	
		App Economy	☐	☐	☑	☑	Digital Law, Digital Fluency	Math, Economics, Social Studies, Career/ Vocational Studies	
		Digital Economy	☐	☐	☑	☑	Digital Law	Math, Economics, Social Studies, Career/ Vocational Studies	

The Digital Citizenship Handbook for School Leaders — FOSTERING POSITIVE INTERACTIONS ONLINE

Mike Ribble and Marty Park

digcit.life/progression

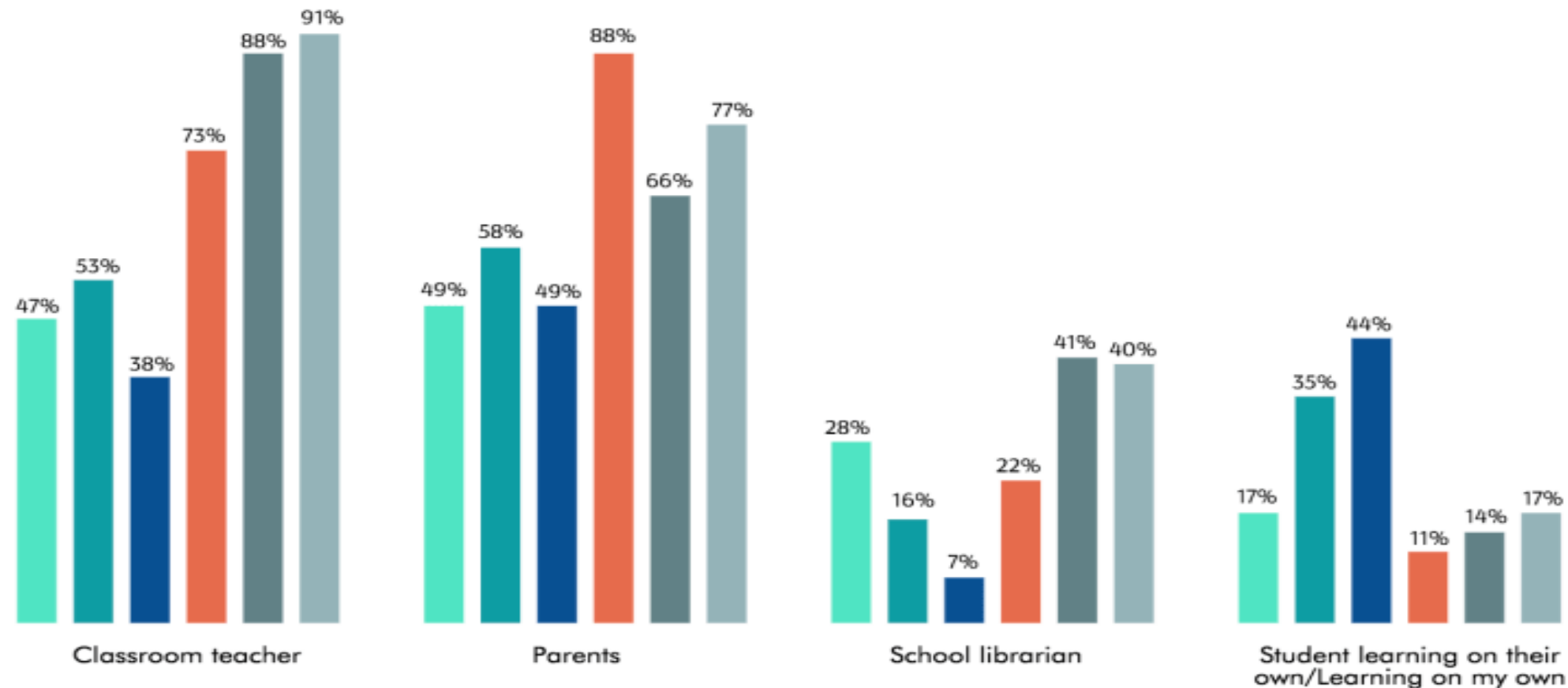# What is the role of parents and community in a technology discussion? Are we providing resources? How can they be partners in this process?

Image from http://www.ikeepsafe.org/wpcontent/uploads/2011/01/BAPResearchImage.png

Digital Citizenship Skills, Speak Up 2017:
Who Should Teach These Skills and Who Has Taught These Skills

Thank **YOU** for the opportunity to learn with you!
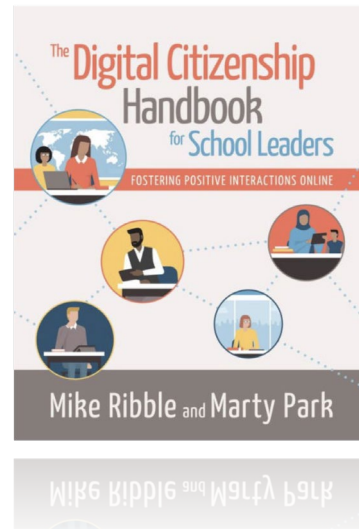
What Questions Do You Have?

Q & A

LIBRARIES AND CYBERSECURITY

DAMON L. AUSTIN

DIRECTOR OF LIBRARY AND MEDIA SERVICES

DEMATHA CATHOLIC HIGH SCHOOL, HYATTSVILLE, MD.

LIBRARY CAREER

Academic & Federal Librarian

School Library / Media Center

American Association of School Librarians

American Library Association

American Library in Paris

Maryland Library Association

Library Foundation Board

Cyber Security Management & Policy

CYBERSECURITY & LIBRARIES
THE PERFECT MATCH

Libraries & Librarian Roles

- Academic – research, information

- Public – access, management, local community

- School – embedded, curriculum, literacy and more

- Special Libraries

  - law, government, industry, archives, museums, hospitals, etc.

Library Impacts

"Libraries are major sources of information for society and they serve as guardians of the public's access to information." - American Library Association (www.ala.org)
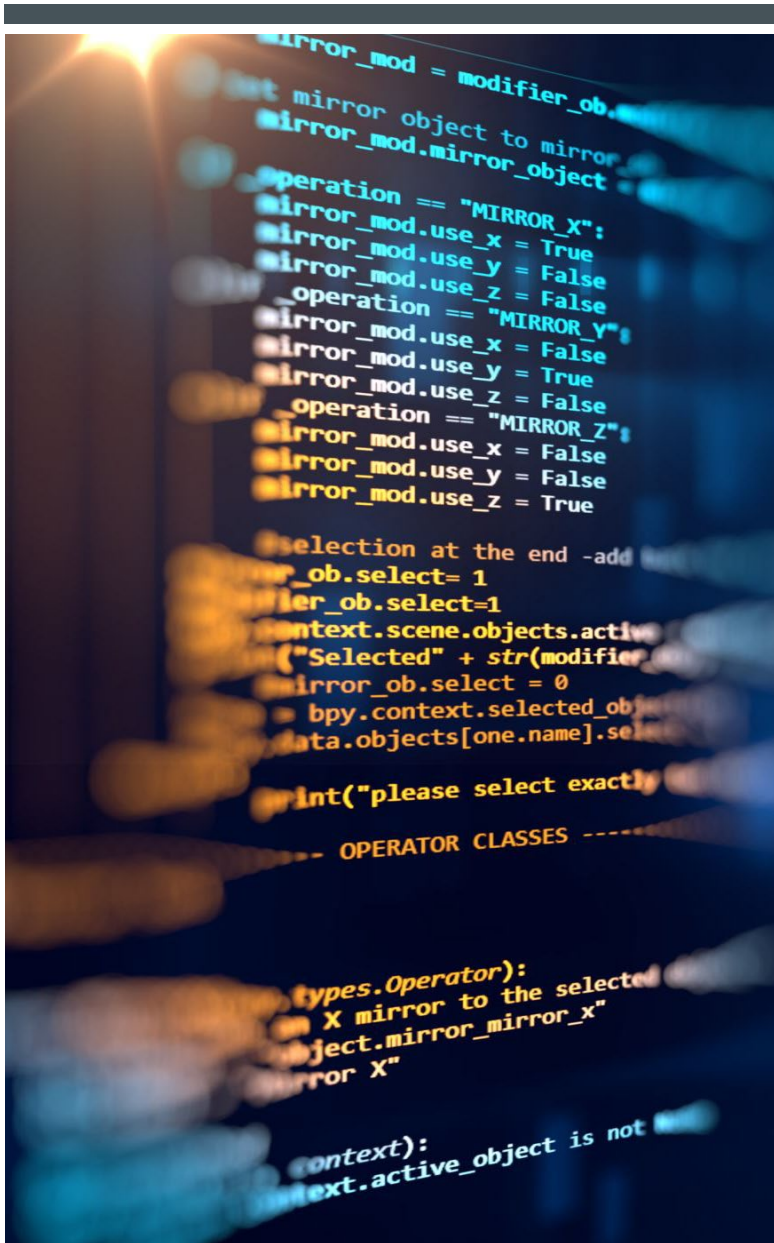
CYBERSECURITY AND LIBRARIES
A PERFECT MATCH

Libraries value cybersecurity awareness

Libraries actively support cybersecurity standards

Libraries are important in cybersecurity (social effects)

Librarians implement critical cyber standards daily

Librarians encourage cybersecurity training and education

MULTIPLE CYBERSECURITY STANDARDS

WHERE DO LIBRARIES IMPLEMENT CYBERSECURITY STANDARDS?

- School Library workspaces (print network)

- Library higher education spaces

- Library professional training (remote and on-site)

- Library outreach to underserved populations

- Library advocacy

    - IMLS Grants

    - Foundations/Philanthropy

COMMON THREADS OF STANDARDS

01

ETHICS

02

ETHICAL SHARING OF IDEAS

03

ETHICAL COMMUNICATION

04

ETHICAL DATA AND INFORMATION COLLECTION

05

ADAPTIVE CREATION AND INVENTION WITHIN CURRICULUM

COMMON THREADS OF STANDARDS

RESPONSIBILITY & ACCOUNTABILITY

Evaluation of legacy footprint of work created

The perpetual and infinite digital environment

Cultural and legal outcomes of activity

Creating works inspiring secure behavior

CRITICAL CYBER COMPETENCIES

Understanding impact of cyber ethics, information and technology

(propriety, empathy)

Responsible application to technology and media learning

(gaming much?)

Evaluation of information for accuracy and social context

(critical thought)

CRITICAL CYBERSECURITY COMPETENCIES

Evaluating information for validity – digital literacy

- (social media, fantasy and viral 'fakes')

Personalized information technologies

- Stories, branding, etc.

Inspiring others to engage in safe responsible behavior

- Breakout rooms

ALIGNMENT OF STANDARDS

AASL & ISTE CROSSWALK

EDUCATORS: FACILITATOR (Investigate 7a)

AASL - Consistently engaging with the school community to ensure that the school library resources, services, and standards align with the school's mission

ISTE - Provide alternative ways for students to demonstrate competency and reflect on their learning using technology.

ALIGNMENT OF STANDARDS

AASL & ISTE CROSSWALK

EMPOWERED LEARNER (Collaborate 1c)

AASL - Involving diverse perspectives in their own inquiry processes

ISTE - Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

ALIGNMENT OF STANDARDS

AASL & ISTE CROSSWALK

Empowered Learner: Global Collaborator (7c)

AASL – Actively contributing to group discussions and learning about diverse perspectives as a social responsibility.

ISTE - Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal

PROFESSIONAL DEVELOPMENT

& RISK REDUCTION

IDENTIFYING THE WEAK LINK?

+ Crisis =
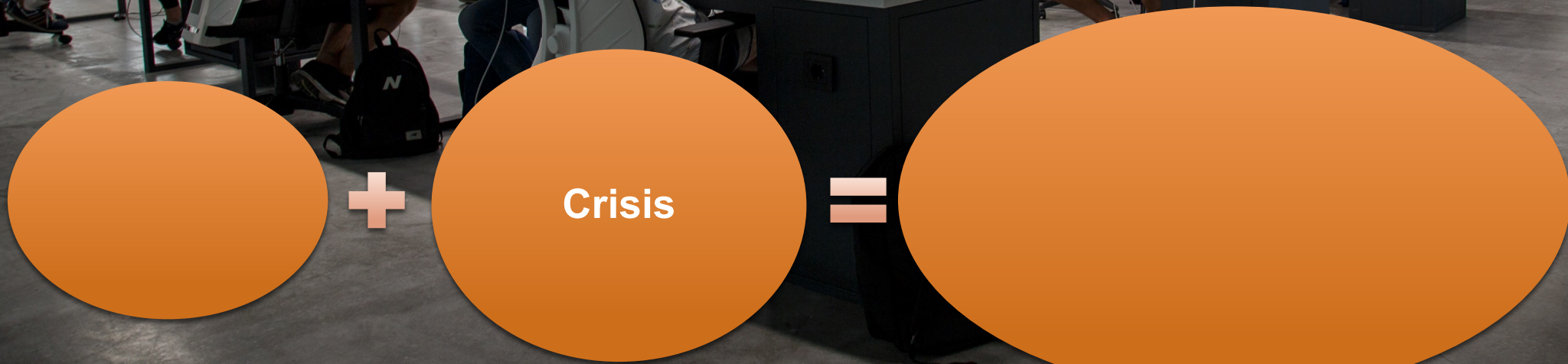
REDUCE RISK

Uninformed

- Unknowingly committing security infractions or violations

- Discussing sensitive information in online forums

- Unknowingly clicking on a phishing scam

Misuse

- Using storage devices for official business without authorization

- Attempting to access information or space not relevant to the work assignment

- Misusing IT systems for non-work functions

Fraud/Theft

- Stealing sensitive information and sharing it for personal gain or RANSOM

- ID Theft

- Unauthorized use of password access

PROFESSIONAL DEVELOPMENT

Confidentiality Integrity Accessibility (CIA)

- Many opportunities for cybersecurity training

- Library Directors should strongly encourage staff

- Staff require time to educate sufficiently

- Improves security and reduces insider risk

OUTREACH TO UNDERSERVED CITIZENS

- Public library efforts to retirement communities

- Increased library support saves losses in the long-term

- Elder and other populations reinvest in the community

NEXT STEPS FOR INCREASED SUPPORT

LOCAL ADVOCACY AND GOVERNMENT COMMITMENT

- IMLS Grants (agency)

- State Library Associations (stewardship, advocacy)

- Library Foundations (philanthropy, community)

- 'Big Internet' philanthropy frames conversation on accountability

LINKS OF INTEREST

- Grants to States: Five Year Plans | Institute of Museum and Library Services (imls.gov)

- AASL and Future Ready Librarians crosswalk

- National School Library Standards crosswalk with Next Generation Science Standards

- AASL/ ISTE Crosswalk

- Professional Development - National School Library Standards (aasl.org)

Q & A

Complete Survey

https://www.surveymonkey.com/r/octnicewebinar

NICE
NATIONAL INITIATIVE FOR
CYBERSECURITY EDUCATION

Thank You for Joining Us!

Upcoming Webinar: Witnessing an Evolution: The NICE Framework and its Role in Building a Better Cybersecurity Workforce

When: December 15, 2021 from 2-3PM ET

Register: https://go.usa.gov/xMzhA

nist.gov/nice/webinars