Statewide IT Bridge Curriculum
Contextualized Social Studies Module

Outcome #1 - Present findings on current events in IT

Module Content - Research current events; provide written summary and present findings with correctly cited source

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Targeted ABE/ASE Content Standards -

5.R.CI.6 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

5.R.CI.3 Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by particular details; provide an objective summary of the text.

5.W.WL.3 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.

Targeted ESL Content Standards -
ELP Standard 1 / AE.1.1 Determine a central idea or theme in oral presentations and spoken and written texts.
ELP Standard 2 / AE.2.1 Participate in conversations, discussions, and written exchanges about a range of topics, texts, and issues.
ELP Standard 2 / AE.2.6 Summarize the key points expressed.
ELP Standard 3 / AE.3.1 Deliver oral presentations about a variety of texts, topics, or events.
ELP Standard 3 / AE.3.2 Compose written informational texts about a variety of texts, topics, or events.
ELP Standard 3 / AE.3.3 Develop the topic with some relevant details, concepts, examples, and information about a variety of texts, topics, or events.
ELP Standard 9 / AE.9.2 Introduce and develop an informational topic with facts, details, and evidence.

Targeted IL IEL/CE Competencies - N/A

Activities & Resources - Discover news and trends in Information Technology

Activity 1: Research and present a current technology news event

- · Ask for current technology news events
- · Begin discussion about current technology events occurring in the

region and around the world
· Introduce websites mashable.com and www.usatoday.com
· Students research a current technology news event and write a short summary to present to the rest of the class
· Summary should include why they chose the news item, three key points from the article, explain any technical terms used, and say how it relates to IT/computer networking
· Students will need to list the website from which they took their current events news article

Assessment -
Completed written summary
Completed presentation of summary to class

ELL Supports / Instructor Notes - To further support ELLs, students could introduce any new vocabulary to their peers prior to sharing their summaries to the class.

Outcome #2 - Understand internet safety and security practices

Module Content - Apply knowledge of the importance of internet security as it relates to online security; explain key terms about internet safety

Targeted ABE/ASE Content Standards -

5.R.CI.6 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

5.R.CI.3 Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by particular details; provide an objective summary of the text.

5.W.WL.3 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.

Targeted ESL Content Standards -
ELP Standard 1 / AE.1.1 Determine a central idea or theme in oral presentations and spoken and written texts.
ELP Standard 2 / AE.2.1 Participate in conversations, discussions, and written exchanges about a range of topics, texts, and issues.
ELP Standard 2 / AE.2.6 Summarize the key points expressed.
ELP Standard 7 / AE.7.2 Use a wider range of complex general academic and

content- specific words and phrases.
ELP Standard 8 / AE.8.1 Determine the meaning of general academic and content-specific words and phrases, figurative and connotative language, and a growing number of idiomatic expressions in spoken and written texts about a variety of topics, experiences, or events.

Targeted IL IEL/CE Competencies - N/A

Activities & Resources -
- Identify issues regarding social networks and online activity
- Explain the importance of internet security, privacy, information sharing, etc.
- Apply new knowledge of internet safety
- Describe and explain key terms about internet safety

Activity 1: Internet safety experiences

- Students discuss any experiences they have had where the internet was not safe.
- Talk first in small groups and then ask if they would like to share out with the class.

Activity 2: Internet safety video

· Show the class a video about internet safety: 'Social, Smart, Secure Tips for Staying Safe Online'
https://www.youtube.com/watch?v=CjkUU6Ou4Q4
· Highlight key points from the video including an introduction to internet safety and risks such as cyberattacks, phishing, and malware
· Have a class discussion regarding precautions – emphasize the exercise of good judgment about the info you share and who you share it with.
   o Think before you click – verify the ID of sites, links, and individuals before connecting with them online.
   o Never share personal info with someone you do not know.
   o Keep antivirus software, browsers, and privacy settings up to date.
   o Use different logins and passwords for each of your accounts and keep them to yourself.

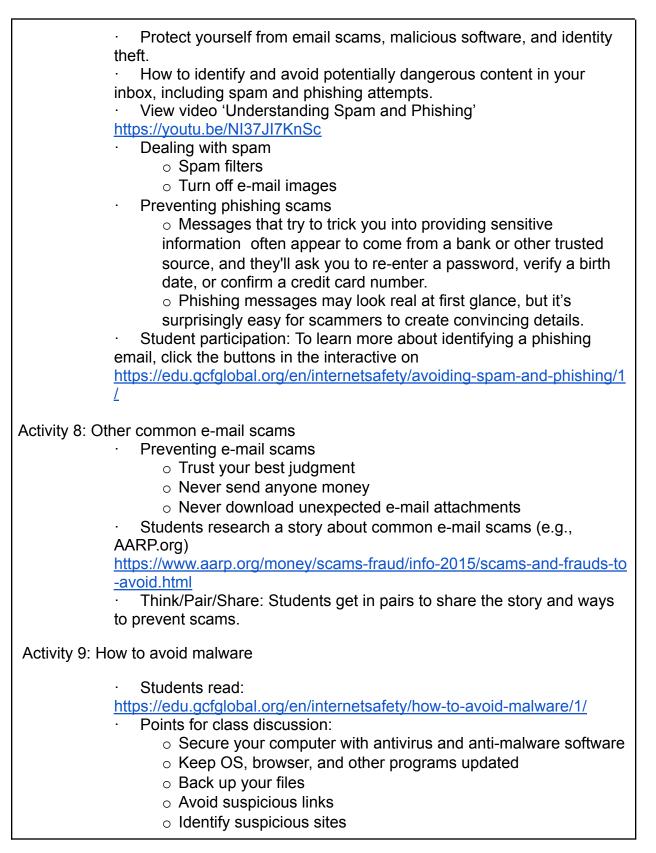Activity 3: Creating Strong Passwords

· Show video 'How to Create a Strong Password'
https://youtu.be/aEmF3Iylvr4
· Questions for class discussion:
   o Why do you need a strong password?

o Explain the concepts of hacking & e-mail scams.
o What makes a password strong and secure?
o List some precautions when using passwords: keep them secret, make them difficult to guess, log out of public sites after using a password
o Give some of the examples from the video
o Use passwords that are long, strong, and difficult for someone else to guess while still keeping them relatively easy for you to remember.
o Use different logins and passwords for each of your accounts and keep them to yourself.
· Tips for creating strong passwords
https://edu.gcfglobal.org/en/internetsafety/creating-strong-passwords/1/

Activity 4: Application activity: Common password mistakes

· Distribute a different password scenario to each group.
· Pair/group work: for each scenario, discuss the problem and develop a solution.

Activity 5: Browser safety features
· Discuss security features to deflect threats from viruses, malware and spyware.
· Students read:
https://edu.gcfglobal.org/en/internetsafety/your-browsers-security-features/1/
· View video: 'Internet Safety: Your Browser's Security Features'
https://youtu.be/2ZZQlgV2Gus
· Key tips for class discussion:
o Check web address—deceptive web addresses
o Look at the security lock symbol and/or https connection
o Update browser software regularly

Activity 6: Check browser safety features

· Students read the "Browsing Privately Online" article:
https://edu.gcfglobal.org/en/techsavvy/browsing-privately/1/
· Google a topic to find some web addresses
· Select one web address and check the web address and security symbol or https connection
· Check the browser version and update if necessary
· Report back student findings in pairs

Activity 7: Avoid spam and phishing

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· Protect yourself from email scams, malicious software, and identity theft.
· How to identify and avoid potentially dangerous content in your inbox, including spam and phishing attempts.
· View video 'Understanding Spam and Phishing' https://youtu.be/NI37JI7KnSc
· Dealing with spam
  o Spam filters
  o Turn off e-mail images
· Preventing phishing scams
  o Messages that try to trick you into providing sensitive information often appear to come from a bank or other trusted source, and they'll ask you to re-enter a password, verify a birth date, or confirm a credit card number.
  o Phishing messages may look real at first glance, but it's surprisingly easy for scammers to create convincing details.
· Student participation: To learn more about identifying a phishing email, click the buttons in the interactive on https://edu.gcfglobal.org/en/internetsafety/avoiding-spam-and-phishing/1/

Activity 8: Other common e-mail scams
· Preventing e-mail scams
  o Trust your best judgment
  o Never send anyone money
  o Never download unexpected e-mail attachments
· Students research a story about common e-mail scams (e.g., AARP.org) https://www.aarp.org/money/scams-fraud/info-2015/scams-and-frauds-to-avoid.html
· Think/Pair/Share: Students get in pairs to share the story and ways to prevent scams.

Activity 9: How to avoid malware

· Students read: https://edu.gcfglobal.org/en/internetsafety/how-to-avoid-malware/1/
· Points for class discussion:
  o Secure your computer with antivirus and anti-malware software
  o Keep OS, browser, and other programs updated
  o Back up your files
  o Avoid suspicious links
  o Identify suspicious sites

Activity 10: Research antivirus and anti-malware software

- · Students research in pairs: Find different brands of antivirus software
- · What features do they offer? How much do they cost? (e.g., McAfee)
- · Find some antivirus shareware (free) online
- · Compare with the commercial products
- · Pairs share their findings with the class

Assessment -
Completed research summary

ELL Supports / Instructor Notes - Given the number of vocabulary terms, it is recommended that the content is spread out across multiple lessons.

Outcome #3 - Manage your online presence and identity

Module Content - Understand social media privacy; practice Internet safety

Targeted ABE/ASE Content Standards -

5.R.CI.3 Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by particular details; provide an objective summary of the text.

5.W.WL.3 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.

6.R.CI.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words to address a question or solve a problem.

Targeted ESL Content Standards -
ELP Standard 1 / AE.1.1 Determine a central idea or theme in oral presentations and spoken and written texts.
ELP Standard 2 / AE.2.1 Participate in conversations, discussions, and written exchanges about a range of topics, texts, and issues.

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ELP Standard 3 / AE.3.2 Compose written informational texts about a variety of texts, topics, or events.

Targeted IL IEL/CE Competencies - N/A

Activities & Resources -
Activity 1: Safe online shopping
- View video 'Staying Safe when Shopping Online' https://youtu.be/el3N6qQjr-I
  - Online shopping websites—ask students for examples of ones they have used.
  - Talk about safe online shopping.
    Show how to find online reviews, especially for technology purchases.
  - Have students shop for an item, find online reviews for an item, and make a purchasing choice.

- Student practice: Buying tickets online
  - Show different websites for buying tickets for a ballgame, a concert, or a movie. (Primary and secondary ticketing sites such as Stubhub)
  - Demonstrate how to buy tickets online
  - Read the article 'How to Avoid Online Ticket Scammers' https://money.usnews.com/money/personal-finance/articles/2013/06/19/how-to-avoid-online-ticket-scammers
  - Read the article 'What to Consider Before Buying a Concert ticket from a stranger'

    https://www.cnbc.com/2018/07/31/what-to-consider-before-buying-a-concert-ticket-from-a-stranger.html Students report back their findings on how to buy tickets safely online.

Activity 2: Understanding browser tracking
Before the lesson: This lesson involves students choosing from a list of online resources which they will use to explore and analyze the lesson topic. Use the Resource Notes on the Teacher Version of the student handout to review the resources beforehand. You may want to suggest particular resources for particular students, or you may want to watch a resource together as a class. You also need to confirm that all resources are accessible and not blocked by your school or district's filter.

· Questions for Class Discussion:

  · *What kinds of information about yourself do you share online?*

  · *Who do you share this information with? Who sees it?*

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· *What do you know about the people and companies that own the apps or websites you post on?*

· Explain that when companies do this, it is called online tracking, which means *apps, websites, or third parties collecting information about your online activity (other sites you visit, links you click, how long you stay, etc.)*

· Show the video "Hot on Your Trail." (Slide 6 of presentation) Note that students may feel overwhelmed by the number of ways that companies and the government are tracking them. It may be helpful to explain that some of the examples in the video are exaggerated. They show what could possibly be tracked, rather than what actually is being tracked.

· *Ask: What are some other ways that companies might use the data that they collect about you? What do you think of tracking and targeting? Do you think it is OK for companies to collect information about you?*

· Distribute the "Both Sides of the Track" Student Handout. Allow students 15 minutes to work in pairs or small groups to review two of the resources and complete the notes tracker.

· Invite students to share what they identified as the best way forward and why.

· Point students to Part 2 of the "Both Sides of the Track" Student Handout. Students work independently or collaboratively to complete the two examples.

· Have students share out their examples in groups or as a class.

Resources:

Understand browser/digital tracking (use slide show during class discussion):

https://docs.google.com/presentation/d/1_65d-QugBIR_UzriIFAXlm2o282VZRBqn1gE_7Amw4E/edit#slide=id.g3b037fe8d8_1_117

Distribute the following "Both Sides of the Track" assignment to students:

https://docs.google.com/document/d/1LLpjZTMg8jO_D2LXCU4u0W8Vrk_bXjiLQue9jcoCZSs/edit

(Teacher version of the activity):

https://docs.google.com/document/d/1icNDsIgXr1yUt4KmBhLx7Z1b0MhtEOzssN_MA4jXRfY/edit

 Activity 3: Understanding social media privacy

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Group participation: Select a student who will be your target (but don't tell the class). Have all the students stand up. Tell the class to name some types of personal characteristics that people often share on social media (for example, age or graduation year) or that can easily be seen or guessed by looking at someone's social-media posts or photos (for example, hair color, ear/facial piercings, whether they wear glasses). Encourage them to name relatively objective characteristics. As each characteristic is named, tell students to sit down who don't have the same characteristic as the target student (e.g., if the students say, "Language," you could say, "Everybody who doesn't speak Spanish, sit down."). Once the target has been identified, point out how few steps it took to pick that person out, with minimal information. Then ask students to think about how someone could do that process automatically with all of the information about someone posted online.

· View video: 'Think Before you Share': https://youtu.be/BcdZm3WAF4A
· Distribute the "Filling in Your Footprint" student worksheet (See "Resources") and have students fill out the footprint side individually, according to the directions. Then students work in pairs or groups to answer the questions on the worksheet together.
· Have students individually check their social media accounts and privacy settings.

Assessment -
Completed handout about information tracking
Completed worksheet about digital footprint

ELL Supports / Instructor Resources - It is recommended that you turn on the Closed Captions or transcript function on the videos given that the focus is on content. If students are watching videos on their own, model how to enable transcripts and slow the video speed.

Outcome #4 - Create an online newspaper

Module Content - Understand principles of cyber-security and publish the information as a group

Targeted ABE/ASE Content Standards -

5.R.RH.11 Select and use appropriate computer research tools and resources to obtain information.

5.W.WL.3 Produce clear and coherent writing in which the development, organization

and style are appropriate to task, purpose and audience.

Targeted ESL Content Standards -
ELP Standard 1 / AE.1.1 Determine a central idea or theme in oral presentations and spoken and written texts.
ELP Standard 2 / AE.2.1 Participate in conversations, discussions, and written exchanges about a range of topics, texts, and issues.
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ELP Standard 3 / AE.3.3 Develop the topic with some relevant details, concepts, examples, and information about a variety of texts, topics, or events.
ELP Standard 7 / AE.7.2 Use a wider range of complex general academic and content- specific words and phrases.
ELP Standard 8 / AE.8.1 Determine the meaning of general academic and content-specific words and phrases, figurative and connotative language, and a growing number of idiomatic expressions in spoken and written texts about a variety of topics, experiences, or events.
ELP Standard 9 / AE.9.2 Introduce and develop an informational topic with facts, details, and evidence.

Targeted IL IEL/CE Competencies - N/A

Activities & Resources - Use an online publishing tool to educate others about cyber-security

Activity 1: Create an online newspaper about cyber-security as a class project

Paper.li is an online tool that allows teachers or learners to create an online magazine or newspaper which will automatically find, publish, and promote articles, videos, and photos across the web based on the search criteria that is entered.

View the video 'Curating an Online Newspaper with Paper.li':
https://www.youtube.com/watch?v=k3B9ta-HXCk

Place students in groups of three or four. Students will curate and display content about cyber-security in a friendly, readable format, using Paper.li. Groups then will present their online newspapers in class.

Assessment -
Completed online newspaper or magazine
Completed presentation of work to the class

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ELL Supports / Instructor Resources - It is recommended to scaffold this work across multiple class sessions.