Integrating Cybersecurity into Social Studies Curriculum

Teacher: Nicholas Ehlerding
Advisors: Dr. Melissa Dark & Dr. Brandeis Marshall

Problem Statement
To integrate cybersecurity into the 7th Grade World Geography curriculum by increasing awareness of cyber crime today and the significance of information security during WWII.

Overview

Introduction
- 63% of cybercrime victims are mobile device and/or social network users.

Unit Details
- Day 1-2: Intro to cyber security
- Day 3: Encryption and the Caesar Cipher
- Day 4: Security Empire
- Day 5: Encryption and WWII

Standards
- 7.2.5 Define, compare and contrast citizenship and the roles of citizens in government.
- 7.4.3 Trace the development and change over time of the economic systems.

Caesar Cipher
- Introduce the historical impact of the Caesar Cipher.
- Students in small groups will given an encrypted message which they must decrypt.
- Each group will have part of a larger message that will appear once all groups have decrypted their message.

UMBC’s Security Empire
- The game's objective is to build green energy units by purchasing parts in a marketplace while securing the cyber network.
- Teaches students the importance of security in an market economy setting by punishing students, who do not purchase anti-virus software, with malware.

World War II and Encryption
- Students will see the importance of the German Enigma and the Navajo Talkers during WWII.
- Students will use an online version of the enigma provided by the CIA to decrypt messages in small groups in different ciphers.

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