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|  | **Lesson Plan** |

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| **LESSON TITLE:** | **Module 5: Privacy, Intellectual Property, Laws, and Ethics** |

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| **SUMMARY:** |
| **Topic Outline**   * Privacy Issues and Identity Theft * Intellectual Property Protection * Laws and Regulations * Ethical behavior in cyber space, cyberbullying |

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| **GRADE BAND:** | **Time Required:** |
| |  |  | | --- | --- | | K-2 | 6-8 | | 3-5 | High School | | |  |  | | --- | --- | | 60 | minutes | |

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| **Lesson Learning Objective/Outcomes: Upon completion of this lesson, students will be able to:** |
| * To understand privacy issues, intellectual property protection, laws, and ethics pertaining to cyber space. |

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| **Materials List:** |
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| **How will you facilitate the learning?**   * Describe the Warm-up Activity/Focused Activity/Closure and/or Reflection * Describe the Teacher Instruction |
| We adopt the following best instructional practices and strategies to facilitate learning:   * Multimodal presentation of information * Cooperative active learning * Team building * Periodic checking for understanding |

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| **This lesson includes:** |
| |  |  | | --- | --- | | Mapping to Cyber Security First Principles  Assessments | Learning Objectives | |

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| **Mapping to Cyber Security First Principles:** |
| |  |  | | --- | --- | | Domain Separation | Abstraction | | Process Isolation | Data Hiding | | Resource Encapsulation | Layering | | Modularity | Simplicity | | Least Privilege | Minimization | |

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| **Assessment of Learning:** |
| |  |  | | --- | --- | | TYPE (Examples Listed Below) | NAME/DESCRIPTION | | Quiz/Test  Presentation  Oral Questioning  Observation  Choose an item.  Choose an item.  Choose an item. | Online pop-quiz/survey using gosoapbox.com will be utilized to check understanding of key indicators.  Key Indicators of Understanding   * Recognition of Cyber Security Principle involved * Basic knowledge of privacy issues, identity theft and intellectual property protection * Familiarity with the cybersecurity rules and regulations * Familiarly with COPPA   Hands-on exercises will be conducted to reinforce learning. | |

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| **Accommodations: (Examples may include closed captioning for hearing impaired students; accommodations for students with disabilities.)** |
| We provide digital videos with closed captions of software tools and hands-on exercises. |

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| **Description of Extension Activity(ies):** |
| **Background Materials**  **Privacy Issues and Identity Theft**  The advent of technology, the Internet, and recently Web 2.0 technologies and social media, the issue of privacy and identity theft has catapulted in legal and ethical debates. Who is responsible to ensure an individual’s privacy? Should the burden lie solely on the person, or should companies, schools, organizations and agencies be held accountable?  This debate has modified and/or created laws and policies concerning accountability and practices to ensure an individual’s privacy and personal information is protected both in the physical and cyber infrastructure. The National Conference of State Legislatures (2016) has a site dedicated to identity theft laws in every state. In Alabama, The Consumer Identity Protection Act (Ala Code §13A-8-193 *et seq.*) and the Trafficking in Stolen Identities (Ala Code §13A-8-193) are considered Class B Felonies. If an individual contributes to Obstructing Justice using a False Identity (Ala Code §13A-8-194) they can be charged with a Class C felony. Alabama Code §13A-8-195 entitled Restitution the court can order the inmate to make restitution for the financial loss and pay $25.00 per day and medical expenses for the time spent in the county or municipal jails or state prison facility. The last law in Alabama is the Dealing in false identification documents (Ala Code §13-13-15), which is also a class C Felony (NCSL, 2016). In addition to addressing laws, this segment will discuss the categories of personal information and methods to protect that data. This will go into a brief overview of the other laws in the upcoming sections of this module.  **Intellectual Property Protection**  This module will discuss the various types of methods used to protect intellectual property (IP); such as, copyrights, patents, encryption, permissions for republication, pirating, social media and third hand plagiarism. Discussions will include Supreme Court rulings and an overview of the processes or methods used to protect IP. For instance, the United States Supreme Court reaffirmed “the primary objective of copyright is not to reward the labors of the authors”; rather, the public will benefit from “promot[ing] the Progress of Science and useful Arts [FN329] (as cited from Feist, 499, U.S. at 340)”.  **Laws and Regulations**  A brief review of key laws or acts pertaining to electronic data accessing, transmission and storage will be in the section. The laws and brief description of the materials covered are:  **HIPAA.** A discussion on the components protected by HIPAA: medical facilities, doctors, diagnostics, patient’s home computer, medical devices, insurance and other forums of electronic medical data. The state of the data: storage, transmission, and processing will also be addressed.  **HITECH**. The American Recovery and Reinvestment Act (ARRA) of 2009, which has expanded HIPAA and increased the enforcement of HIPAA will be discussed. The participants will be broken out into groups to converse on the methods their schools employ to protect this data.  **Sarbanes Oxley.** Addresses the protection of investors from fraudulent activity. Although this is important for schools, the requirement for transparent financial disclosures and processes surrounding fundraising events and school organizations is the primary focus. Participants will be asked to bring in their policies as a method of discussing this critical topic. A case study will be used.  **National Cybersecurity Protection Act.** Addresses the mission, critical infrastructure protection, and related DHS programs. This topic was also addressed in Module 1 to introduce the concept and framework of cybersecurity.  **PCI-DSS.** Or Payment Card Industry Security Standards Council requires that all companies involved in the transmission, storage, or processing of credit and debit card information must follow the PCI Data Security Standard (tenable.com, 2016). Participants will be asked to identify principles which align with various standards.  **Ethical Behavior in Cyber Space Cyberbullying**  Cyber threats are defined as actions that will exploit the vulnerabilities to steal information and money, and develop capabilities to disrupt, destroy, or threaten the delivery of essential services (DHS, 2016). One threat in the schools is the protection of a child’s privacy. This section will review in depth the meaning of personal information (PI), collecting, and the components of the Children’s Online Privacy Protection Act (COPPA).  **Associated Hands-on Exercises:**  **I. Protection Connection**   * Watch video: * <http://www.onguardonline.gov/media/video-0003-protection-connection> * Group discussion: Based on the video and lecture, what would be the best practices for online interactions?   **II. Social Media Policy**   * Participants will break into teams and each team will develop a social media policy for their schools based on the discussed guidelines.   **III. COPPA**   * Watch video embedded in the slides * Group discussion: Discuss how you can protect children’s online privacy at your schools complying COPPA |

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| **Acknowledgements:** |
| Identity Theft Laws by State. (2016). Retrieved June 30, 2017, from http://www.ncsl.org/research/financial-services-and-commerce/identity-theft-state-statutes.aspx  Intellectual Property Law: Patents, Trademarks and Copyright - AllLaw.com. (n.d.). Retrieved June 30, 2016, from http://www.alllaw.com/topics/Intellectual\_property  Software Enforcement and the U.S. Law. (n.d.). Retrieved June 30, 2016, from http://www.bsa.org/anti-piracy/tools-page/software-piracy-and-the-law/?sc\_lang=en-US  The Ethical Researcher: Template for a Plagiarism Policy. (n.d.). Retrieved June 30, 2016, from <http://www.noodletools.com/debbie/ethical/policytemplate.htm>  Whitman, M.E. & Mattord, H.J. (2016). *Principals of Information Security* (5th ed.). Boca Ratton, FL: CRC Press. |