



**Mrs. Gentile's Lesson Plan**  
**I.U.P. GenCyber Combination Camp**  
**Tuesday, June 19, 2018 11:00 - 2:00**

**Lesson Title: Exploring On-Line Cyber Security First Principles Resources**

**Summary:** Teachers will first discuss best practices in using Quizlet, Quizizz, Kahoot, FlipGrid and other common on-line learning tools. Then, time will be dedicated to discussion and development of engaging strategies for embedding Cyber Security First Principles through the use of Gen-Cyber.com, including the Day of Cyber experience.

**Grade Band:**

PK – 12 Teachers

**Time Required:**

Two 50-minute sessions

**Lesson Learning Objectives/Outcomes:**

**Upon completion of this lesson, teachers will be able to:**

- Develop at least one active, on-line game to practice the Cyber Security Principles
- Search and critique popular on-line learning games for resources already made
- Apply Webb's Depth of Knowledge levels and Marzano's 6-step Vocabulary Teaching to proposed activities and discussed strategies
- List ways they can model correct application of the Principles when using technology themselves, and how they can simplify the Principles with classroom design analogies.

**Materials List:**

Webb's DOK reference charts                      Google accounts  
Guided notes for on-line games

**How will you facilitate the Learning?**

**Session 1:**

- 1) Review Kahoot, Quizlet, Quizlet- Live, Quizizz and Flipgrid for variations and best practices. Especially demonstrate the use of Quizizz's individual assessment records.
- 2) Demonstrate Edpuzzle – discuss the benefits of assessment, retention-building, flipping the classroom.
- 3) Provide time for teachers to explore Gen-Cyber.com ready-made resources, keeping in mind that they could combine those with the assessment benefits of the on-line games previously viewed for their lesson they will attempt tomorrow with students.

**Session 2:**

- 1) Allow teachers time to explore the Day of Cyber experiences from the Gen-Cyber.com resources.

2) Discuss how some or all of this would be part of learning they can use in their classrooms, and if any part of it fits into what they will try tomorrow with students. Remind them that they can incorporate ideas presented yesterday, technology-based ideas presented today, and/or ideas students will offer to them in our merged session with students on Wednesday.

**Mapping to ALL Cyber Security First Principles:**

<b>Domain Separation</b>	<b>Abstraction</b>
<b>Process Isolation</b>	<b>Data Hiding</b>
<b>Resource Encapsulation</b>	<b>Layering</b>
<b>Modularity</b>	<b>Simplicity</b>
<b>Least Privilege</b>	<b>Minimization</b>

**Assessment of Learning:**

**TYPE:**

Written Records  
Oral Questioning  
  
Lesson Plan

**Name/Description:**

additions to guided notes as we discuss topics  
Teachers offer additional examples, ask for clarification on difficult principles or workings of on-line tools  
Tested out on students Day 3,  
Revised/submitted Day 5

**Accommodations: N/A**

**Description of Extension Activities: It would be wonderful if we could also explore Hyperdocs, and if we could add our 2018 lesson plan ideas and resources to the shared Gen-Cyber teacher folder from 2017.**

**Acknowledgements:**

**Gen-Cyber.com**