Lesson Title: On-Line/Tech-Based Engagement and Assessment

Summary:
Based upon pre-camp survey data, teachers will be given time to explore and develop engaging on-line strategies for teaching and assessing Cyber Security First Principles, culminating on Day 4 with the creation of an on-line sharing tool. Kahoot, Quizlet, Quizizz, Edpuzzle, Google Forms and possibly Hyperdocs will be explored as effective assessment methods with immediate feedback for students.

Grade Band:	**Time Required:**
PK – 12 Teachers	2 50-minute sessions

Lesson Learning Objectives/Outcomes
Upon completion of this lesson, teachers will be able to:
- Create an active, on-line game to practice the Cyber Security Principles
- Search and critique popular on-line learning games for resources already made
- Create a video lesson for review, assessment or to flip the classroom
- Observe how I use Google Classroom to organize work/activities, retention – building materials, videos, games, assignments
- Apply Webb's Depth of Knowledge levels to all activities and assessments
- List ways teachers can briefly apply the Cyber Security Principles when using technology in front of students in their classrooms

Materials List:

Chromebooks	Google Accounts/Knowledge of Drive
Webb's DOK reference charts	Guided Notes about On-Line Games

How will you facilitate the Learning?
Session 1:
1) Review Kahoot (previously played in week) for variations, ways to customize
2) Play Quizizz to see its individual assessment records and ways to customize
3) Play Quizlet and Quizlet.live on the Chromebooks, both vocabulary-building and communication/collaboration tools

Session 2:
4) Demonstrate Edpuzzle; Discuss the benefits of Assessment, Retention-building, Flipping the Classroom
5) Demonstrate Google Forms by showing my GenCyber teacher or student survey data, my Friday review forms, how to make quizzes from forms
6) Given time, further develop hyperdocs from earlier session (Includes question, links for discovery, create authentic assessment) using Kidsdiscover.com

Mapping to ALL Cyber Security First Principles:

Domain Separation	**Abstraction**
Process Isolation	**Data Hiding**
Resource Encapsulation	**Layering**
Modularity	**Simplicity**
Least Privilege	**Minimization**

Assessment of Learning:

TYPE	Name/Description
Oral Questioning	Teachers offer additional examples of each topic demonstrated
Guided Notes	Completed as we discuss each activity
On-line Writing Assignment (Google Slide)	To be completed on Day 4

Accommodations:

N/A, except that some teachers' districts do not have a contract for GAFE, but still have access to Google Docs

Description of Extension Activities:

It would be wonderful if we could work as a team to make a GenCyber Hyperdoc to share on Day 4.

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