Mrs. Gentile's Lesson Plan
I.U.P. June 15, 2017 11:00 – 11:50 am, 1:00-1:50 pm

Lesson Title: Using Google Apps to Share Ideas

Summary:
After a full week of learning concepts about the GenCyber Security Principles, teachers will be given this time to more fully develop their Google Site from Dr. Machado's session, create shared documents with other participants through Google Docs, contribute to a Team Drive Folder (if possible on IUP's server) and possibly create/revise a hyperdoc for students to explore at their respective grade levels or in specific subject areas.

Grade Band:
PK – 12 Teachers

Time Required:
2 50-minute sessions

Lesson Learning Objectives/Outcomes
Upon completion of this lesson, teachers will be able to:

- Create an on-line resource of ways to organize practice methods for mastering the Cyber Security Principles, including Google Sites and Google Docs and Slides, and to compile the week's big ideas
- Collaborate with other teachers by commenting with one another on their slides
- Observe how I use Google Classroom to organize work/activities, retention – building materials
- In grade level teams or subject-specific teams, create a Hyperdoc to be used with students studying the Cyber Security Principles
- Review ways teachers can briefly apply the Cyber Security Principles when using technology in front of students in their classrooms

Materials List:
Chromebooks
Hyperdoc How-To's
Google Accounts/TEAM DRIVE/Google Site
Notes from all sessions from the camp

How will you facilitate the Learning?
Session 1:

1) Introduce the concept of a Team Folder, as one Google possibility for sharing information with one's colleagues
2) Introduce the Google Slide I made with preset heading (previously shared w/participants). Discuss how the principle of *least privilege* is involved here, but again, is another method for sharing the Cyber Security Principles with everyone on one's school team.
3) Ask for contributions to each slide, and show how the commenting feature can be applied to provide immediate feedback to students

Session 2:

1) Demonstrate hyperdocs (Includes question, links for discovery, create authentic assessment) using Kidsdiscover.com and other resources (TBD).
2) Have teachers assemble into grade-level or subject area groups.
3) Begin the process of creating one Hyperdoc to help students actively discover various depths of knowledge about Cyber Security Principles. Hyperdocs can include teacher-made games, vocabulary building through Marzano's 6 step process, on-line explorations for acquiring new information or on-line games for building retention. Hyperdocs can be designed to accommodate different types of learners, as well. The use of Hyperdocs practices the Cyber Security Principles of *Minimization,* where students are guided to explore only certain areas of the Internet.
4) Finally, given time, we will brainstorm ways we can share the week's learning with our colleagues at our home schools.

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**
On-line Writing Assignment (Google Slide)	Compiled Concepts from the GenCyber Camp, to be shared
Hyperdoc Creation in Small Groups	Discovery activity for students at various levels in various subjects

Accommodations:

N/A

Some teachers' districts do not have a contract for GAFE, but still have access to Google Docs. These teachers can just plan on email attachments and making copies to share their knowledge gained from the camp.

Description of Extension Activities:

On-going encouragement to contribute to our Google Slide resource compilation

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