

## M+Box and M+Google

### Lesson Description:

This 45 minute session is part of a complete 8 hour professional development day. This session will focus on 3 objectives:

1. Locate and successfully login to both M+Google and M+Box
2. Discuss affordances and limitations of each
3. Properly store your "Required Ingredients(RI)" document into either M+box or M+Google

The lesson plan I will be following can be found here:

[https://docs.google.com/a/umich.edu/document/d/1p4vyYi2Za\\_iWMPtjIPqffX9vM1YMhHmvlL6VRFj-5cU/edit?usp=sharing](https://docs.google.com/a/umich.edu/document/d/1p4vyYi2Za_iWMPtjIPqffX9vM1YMhHmvlL6VRFj-5cU/edit?usp=sharing)

I will begin with this slide deck:

<https://docs.google.com/presentation/d/1ueLQrWeuDIhiGhj82fx-sQaoV-3neuDY6IR-A1FqeFk/edit?usp=sharing>

Discussion of each slide can be found in the lesson plan. Because not all Nurses will be able to get a full day release from work, both the lesson plan and slide deck will be shared with all participants in Google drive to enable their facilitation of small group classes on the unit with their staff and also increase the likelihood of further practice with cloud storage. After the slide presentation is complete, participants will login to M+google. On the big screen in the front of the classroom I will show participants how to navigate by "googling" M+Google. Due to the participant average age +49 with little prior experience to cloud storage, and the anticipation of possible kinks with technology, two assistants will be in the back as floaters and available for any that are having trouble. Participants will now click on the drive tab at the top of the page and then login with their level one password. After all participants have successfully logged in, I will start a new document and share it with a participant. I will then have the participant I have chosen open the document, showing that we can both be editing at the same time. This will be a new concept for many in the group. Most are used to using Microsoft word and tracking. Because this session is a portion of the whole

professional development day, the workshop is to create an Mlearning module framework document, required ingredients or, RI. I will now have participants upload their RI document into M+Google. I will then repeat the entire process using M+Box. First having all participants login, then sharing a document and editing together and then uploading their RI.

**Content (C)** - Accessing M+Google and M+Box and the affordances and limitations of each cloud storage in healthcare

**Pedagogy (P)** -Active Learning

**Technology (T)** -Google slides

TPACK-Analysis

**Pedagogical Content Knowledge (PCK)**

**Define:** Active learning is an effective pedagogy for teaching M+Google and M+Box

**Describe:** By using active learning the facilitator is speaking for no longer than 15 minutes, the participants are then engaging in navigating to both M+Box and M+Google and increasing knowledge through hands on learning. This structuring offers time for participants to ask questions if unclear how to navigate to the sites and also resolve any problems they may have with logging in. This method may help participants become more comfortable with the technology and increase the likelihood of continued use.

**Support:** In keeping with adult learning principles active learning was chosen, keeping lecture time to no more than fifteen minutes, research tells us that concentration in learners tends to drop after 10-15 minutes of continuous lecture (Penner, 1984;Verner and Dickinson, 1967). And because the majority of participants are digital immigrants the class was designed to be as participatory as possible with additional assistants to

help with questions. In a study done by Harris Interactive Inc. for AARP with a sample size of N=1019 adults over the age of 50, found through telephone and online questionnaires, “the best way most older adults report they learn is through a direct hands on experience”(p.3). In addition (Afzal, 2010) asserts, adults and children prefer learning experiences that are participatory; they learn faster when concepts are useful in their present as well as future lives.

### **Technological Content Knowledge (TCK)**

**Define :** Google slides are an effective technology for learning M+Google and M+box

**Describe:** Due to the fact that not all Nurses will be able to attend the workshop, Google slides was intentionally chosen to make it possible to standardize information for those that have attended and would like to share the information with staff so that the units can begin to work on projects collaboratively through cloud storage instead of emailing documents. The slides will compare and contrast the very important difference of HIPPA between M+Box and M+Google, which is critical and crucial communication that cannot be overlooked. Also in keeping with the contiguity principle, Google slides offer the ease of background graphic integration along with video clips to ground learning and promote retention through visual stimulus.

**Support:** The contiguity principle states that students learn more when narration and pictures are presented simultaneously rather than consecutively. This allows the brain to create connections between the two items (Penciner, 2013), and while not specifically looking at Google slides and learning, a study done by (Issa, et. al., 2011) looked at the effects of multimedia slides on learning with two medical student cohorts. The first group (n=91) were instructed with multimedia slides following the design principles of visual pictures and fewer words. The second group (n=39) received instruction by the traditional slide deck format, few pictures and bullet points. Results of the study compared pre and post test scores and found statistically significant greater improvement in retention for the group instructed using principles of multimedia design.

**Technological Pedagogical Knowledge (TPK)**

**Define:** Google slides are an effective technology to facilitate active learning.

**Describe:** Choosing to incorporate Google slides into this lesson allows more sensory stimulation through the incorporation of graphics, video clips and music to address multiple learning styles including active learning within the group, additionally promoting an engaging experience which is required for adult learners. The slide deck is intentionally very minimal and gives the participants only the amount of information needed to then successfully engage in active learning, which will require logging in and beginning to navigate to M+Google and M+Box.

**Support:** Choosing to incorporate technology into this lesson allows the facilitator to produce more sensory stimulation through the incorporation of effects, graphics, video and music clips and also standardize learning for participants to share the presentation with staff on the units . As stated above, the slide deck is short with just enough information to begin to navigate the system with some independence and success. According to Jones and Mungai (2003) technology can fill the gaps to address multiple learning styles within the group, additionally promoting an engaging experience which is required for adult learners and increasing retention as we remember approximately 50% of what we see and hear (Northwest Center for Public Health Practice, 2012).

**Technological Pedagogical and Content Knowledge (TPACK)**

**Define:** Teaching M+Google and M+Box through an active learning method along with a Google slide presentation to scaffold learning, creates an effective teaching and learning environment.

**Describe:** Since research and applicability of TPACK for adults continues to remain minimal, much of the planning still revolves around focusing primarily on andragogy. Because it is necessary for adult learners to experience the topic the decision to utilize Google slides was to scaffold learning before logging in and

deciding which cloud storage, M+Box and M+Google will best meet the needs of their individual projects, along with adding pictures and video clips that have been shown to help anchor learning. And because the lesson was to teach collaborative cloud storage, Google slides along with the lesson plan make it easy for the participants who were able to attend take the information back and share it in a standardized fashion that is compliant with our healthcare policies. In addition by actively practicing with the two systems with the support of a facilitator and assistants, questions and problems can be resolved individually in a timely fashion that will increase the comfort level of the participants.

**Support:** Michal Hughes (1998) suggests that in order to meet the needs of adult learners with computer systems, trainers must provide the necessary scaffolding. Through the use of a visual presentation directly before the hands on learning along with assistants in the room, it is my hope that learners will feel supported. “Software training is a paradox of learning, to learn, the student must interact with the system; to interact with the system the student must learn.” (Carroll, 1990) p. 147. This statement was one that I wanted to include because for this class, in the design, I struggled with how much information should be given about the system before they logged in, in order to create a successful experience. This is where the above literature is helpful in creating the lesson and design decisions.

## References

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