

## Technology Lessons/Makerspace Share Session MS/HS

February 16, 2017

Please share your ideas here! Provide a short description and grade level and provide links as needed.

Osmos for iPad – If you have access to some iPads, the Osmos Genius kit is about \$99 on Amazon and students love it, even in middle school. There are six games involving everything from art to math to tangrams. We use it during our "Play Room" lunches. Students sign up and come play during lunch, but it is also wonderful for teacher checkout to use with small groups or station activities in a classroom. ~Taylor Wickline, Palmer MS

We link to multiple options appropriate for high school students and provide supporting instructional guides for many in the [Online Presentation Tools & Digital Maker Spaces](#) section of WheelerLibrary.com. ~ Valerie Bryan, Wheeler High School

Connex robot kits have been extremely popular in makerspace as well as Stikbots Stop Motion kits. All are available through the Scholastic Resource catalog and particularly the Stikbots are very affordable.

History can be boring for students:) we just co-taught a US History class where students did research on CDL and put together an infographic using PiktoChart. There are many infographic sites out there: Canva, Vennage, Infogr.am, Visualize.me, Easel.ly, and many more. Microsoft even has Infographic templates. Piktochart is very easy to use, simple to teach, saves automatically (like GoogleDocs) and is easily shared with the teacher. This lesson is totally digital! Use CDL, EasyBib, and an infographic maker ...share the link to the teacher's Google or other form. Students loved doing something different. And other teachers want to try it too. And, in EOC classes where there isn't much time for PBL, this is a quick and memorable alternative. ~ Hillgrove HS – Cindy and Kelly

College interviews? We have a MediaScape for collaboration that is used all the time by students doing group projects, teachers conducting IEPs, etc. This week we used it twice for college interviews! Two students came to us because they needed to do their interview during school hours. Students gave us their contacts from Morehouse and Ohio Northern University. We emailed, set up a Skype for Business session, and sent the link for the interviewers to join. So, two of our students had "face-to-face" scholarship interviews! ~Hillgrove HS-Cindy and Kelly

3D Printing Collaboration: We collaborate with our Marketing teacher on a lesson about the role of rapid prototyping in bringing a new product to market. Students work in groups of 3-4, and their task is to take a classic toy and "remix" it for a new generation, demographic, or market. In addition to creating a marketing plan and 2D marketing materials, they have to create a 3D prototype of the new toy. I explain the role of rapid-prototyping in product development, show them how to search for and download 3D models online, and teach them how to use TinkerCAD to create and modify 3D models. As each group gets its prototype ready to print, we show them how to use the slicer software to create the printable file. It takes about 2 weeks to get all the prototypes printed, but the students are super-engaged so it's well worth it. ~ Andy & Marty, Campbell Commons

We have a way for all students either individually or by whole classes to submit files to be printed with our 3D printer for school purposes. We usually teach TinkerCAD to classes, but students are free to use whatever program they wish. Students save their 3D file as a .stl document under their student number on the K Drive. The student then tells the teacher they have a file needed for class ready to print and gives the teacher their ID# and file name. The teacher then emails that information to the Media Center Staff. It is easy for us to print the file since we have access to every student folder. Once it is printed, we then deliver it to the teacher much like we do laminated materials (with our mentors). I believe files can also be transferred over Office 365 in a similar way. We usually show students the 3D printer in operation and describe how it prints even though they do not physically touch the machine. Our main focus is to give

students experience with CAD programs more than anything. We also resize their models so they can be printed in a timely manner (around 30 minutes or under of printing time). Brian Ragsdale- South Cobb High School

Wendy Sultenfuss – Lost Mountain Middle School -One of our teachers taught us how to create an Escape Game using OneNote and Spiral.

## ESCAPE CHALLENGE USING ONENOTE

- Go to the following website: <http://tinyurl.com/hv6t5yu>
- You will have 10 minutes to escape the OneNote.

## HOW TO CREATE AN ESCAPE CHALLENGE IN ONE NOTE

- Click on the Start button
- Click on All Programs
- Select Microsoft Office 2013
- Choose OneNote 2013
- Once OneNote is open
  - Click on File
  - Click on New
  - Give your Notebook a name
  - Click Create Notebook
- Add new pages to your Notebook by clicking the plus sign
- Add the content you want on each page by clicking anywhere on the page
- Right click on the page you want to password protect & click password protect this section
- Click set your password and type in your password
- Keep creating pages and password protect them

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- Right click on the page you want to password protect & click password protect this section
- Click set your password and type in your password
- Keep creating pages and password protect them

## SPIRAL

- Go to the following website:
  - [gospiral.ac](http://gospiral.ac)
- Spiral will allow you to create an account using your Edmodo account and will automatically import all of your students from Edmodo
- Resources:
  - [Get Started with Team Up](#)
  - [How to Turn Your Presentation into a Conversation](#)
  - [Spiral Frequently Asked Questions](#)
  - [Spiral](#)