

Session 1:

**Ice Breakers & Creating YouTube videos**

Through BookTube and Teen video challenges such as [Bean Boozled Challenge](#) and the [whisper challenge](#) teens will focus on creating videos and using YouTube. Thus, teens will be using digital literacy in a fun and interactive way while also staying up to date with current technology trends.

The challenges are a great way to break the ice and get teens comfortable enough to be in front of the camera once they start thinking about writing a book review/book talk script they will have to present.

\*The teens make 2 min. or less videos talking about their favorite/most current book they've read lately using imovie. They used iMovie to edit their videos.

Equipment: iPad & laptops

Online programs used: YouTube, YouTube Video Editor, and YouTube's AudioSwap library

Session 2:

**MaKey MaKey**

Teens will be introduced to the MaKey MaKey kit. They will watch Makey Makey YouTube videos and will be encouraged to make video game controllers made out of coins for online games, a piano using cups of water to play Mary Had A Little Lamb, and create a keyboard to type using humans, playdoh, and tootsie pops.

Equipment: Makey Makey kits, laptops, playdoh, tootsie pops, coins, cups, and water

Program: YouTube and Makeymakey.com

Favorite programs listed in School Library Journal April 2015 p. 12 & 13 by Chad Sansing, middle school language arts teacher in Saunton, VA.

Favorite Makey-Makey-Makes

- Christian McKay's 'Digitally Interfaced Book.' Combines handmade books, Makey Makeys, and Scratch. <http://ow.ly/JYPju>
- Eric Rosenbaum's 'Makey Makey Music Examples.' A diverse set of creative instrument makes on YouTube. <http://ow.ly/JYPp9>
- From Chad Sansing's classroom, "Minecraft Controller" on Instructables. How to make your own arcade cabinet for a new video game classic. <http://ow.ly/JYPwj>
- MakerJawn's 'oneKey.' How to build your own DIY Makey Makey on GitHub <http://ow.ly/JYPzV>

- MakerJawn’s ‘Magnetic Mazes.’ Interconnects a table top maze with its digital double programmed in Scratch. <http://ow.ly/JYPFc>

The Makey Makey helps to create stories. It is through this digital connection that “asks learners to consider how they can design holistic learning experiences that connect what’s happening on their screens to the physical cues built into their controllers.” (Sansing, 2015).

### Session 3:

#### **Create a Story Using Scratch**

Through MIT’s Scratch Lab. Teens will be introduced to the site and see what they are interested in creating a story about their chosen preference. MIT allows people to use animation and technology through code to create stories, video games, music, and art.

Equipment: laptops

Programs: MIT’s Scratch Lab <https://scratch.mit.edu/>

### Session 4:

#### **Make it @ Your Library: Arduino & Raspberry Pi**

Teens can make iPhone speakers, photorelector with Arduino, illumaphone with Arduino, Arduino microUSB, collect data on power from trees, participate in the Raspberry Pi challenge using Arduino and many other Raspberry Pi ideas using:

<http://www.instructables.com/howto/raspberry+pi/>

<http://makeitatyourlibrary.org/living/how-make-iphone-speaker#.VPoBxXzF-Ah>

<http://www.instructables.com/id/How-to-make-a-useful-Photorelector-for-Arduino/>

<http://www.instructables.com/id/Illumaphone-Light-based-Electronic-Musical-Instrum/>

<http://www.instructables.com/id/Arduino-Micro-USB-OTG/>

<http://www.instructables.com/id/Power-from-trees-And-using-this-power-to-collect-d/>

Equipment: Arduino, Raspberry Pi, laptops, and all minor supplies called for by instructables

Programs: Arduino.com, RaspeberryPi.com, and Instructables.com

### Session 5:

#### **Create a Digital Art Portfolio/Online Resume**

Create a digital art portfolio, About.Me page, or Prezi presentation to highlight their talents and skills for a job or a college application.

Equipment: Laptops

Programs: About.me, Prezi, free website, and corbisimages.com/content/royalty-free /

#### Session 6:

### **3D Printing**

Teens will be encouraged to visit Thingiverse.com and seek out information and ideas on what types of designs are available to print in 3D. They can then each choose two designs and enter it into a raffle. The design that gets pulled from the raffle will be the one we will print that session. Teens will then be exposed to Tinkercad.com to see how to create 3D designs.

Equipment: Laptops and 3D Printer

Programs: Thingiverse.com, Tinkercad.com, and Makerbot.com

#### Session 7:

### **Circuit Scribe**

Circuit Scribe is basic in design but can get involved once there are additional parts purchased. With the basic kit teens are exposed to inventing circuits and understanding basic engineering and wiring. Through Circuit Scribe's Pinterest and Instagram there is a wealth of information and ideas on creations.

Equipment: Circuit Scribe kit and laptops

Programs: Circuitscribe.com, Pinterest, and Instagram

#### Session 8:

### **Stop Motion Challenge**

Using [Stop Motion Studio](#) teens can create their own stop motion videos. A challenge can be created by selecting "Most Creative", "Funniest", "Best Overall" video. Teens can then be rewarded with a certificate and an opportunity to put it on their resume. Upload videos to YouTube.

Equipment: iPad, shoe box, figurines, any library supplies that is fitting

Programs: Stop Motion Studio app and YouTube