Innovation of Making

Heather A. Turner
@heatheraturner
haturner@gmail.com
tech4schoollibraries.com
“A makerspace is a place where students can gather to create, invent, tinker, explore and discover using a variety of tools and materials.”

Diana Rendina, LMS
But what is it?

Anything!

◎ From a repurposed bookcart filled with arts and crafts supplies to a table to a full blown fab lab with 3D printers, laser cutters, and handtools.

◎ No two makerspaces are the same or should be! They represent their tinkerers, creators, crafters…

Why Makerspaces?

◎ Kids and Adults need challenge and “hard fun” that inspires them to dig deeper and construct big ideas.

◎ No rights answers, no single solutions
Personalized
A thematic approach to planning your makerspace ensures that you uncover themes that are unique, relevant, and meaningful to your school community.

Differentiated
Provide materials, activities and supplies that meet the needs of ALL students. Create a learning environment that nurtures a community of learners.

Deep

Be sure to provide opportunities for your students to take their learning deeper.

WORLDSOFMAKING.COM

Empowering

The setup of your physical makerspace, along with the items in it, should invite ALL students in.

WORLDSOFMAKING.COM

Equitable

Create an inclusive learning environment that encourages tinkering, play, and open-ended exploration for ALL.

WORLDSOFMAKING.COM

Intentional

Have a vision for your makerspace.

WORLDSOFMAKING.COM

Inspiring

Create the conditions to inspire your students to WANT to make.

WORLDSONMAKING.COM
Challenges

Engineering Challenges
- Catapult
- Marshmallow Challenge
- Tower Challenge
- Bucket Tower
Cardboard Challenges
- Help Harry
- Mars Lander
The Catapult Challenge
Create a Catapult using only the following items and propel your paper ball the furthest.

50 Mini Marshmallows
50 Toothpicks
Marshmallow Tower Rules

1. Your group’s tower must be at least one toothpick in height.

2. Your tower must fit on the paper towel on your desks.

You will get 1 minute for planning, and then you will have 10 minutes to build your tower. You are trying to build a structure that will hold weight...we’re not competing for the highest tower 😊
Green Screen Room

- Video Recording
- Video Editing
- Photo Editing
- Selfies
- Content Creation
- YouTube Channels
  - Vlogging
The Books

◎ Inspire your patrons with books
  ◎ [Pinterest Board of Books](#)

◎ Topics
  ◎ Arduino
  ◎ 3D printing
  ◎ Origami
  ◎ Duct tape crafts
  ◎ LEGO

◎ Great way to crowdsourced your population
Where do I start?

◎ Have a vision on what you want
  ◎ Tell the people!
◎ Current items you may have forgotten about (Even at home)
  ◎ Crafting supplies & Legos
◎ Hold a Supply Drive
  ◎ Bin for donations
◎ Donorschoose.org
◎ Make Stuff! - Show the power!
But Where?

◎ Use those old carrels for creation stations
◎ For the Duct Tape Craft Cubby/Cart
  ◦ Spring loaded rod for tape, shower caddy for supplies
◎ Instant Makerspace for $350 from Daring Librarian

Where are we going with this?

Gradually releasing responsibility of a structured making to learner independence
What are your goals?

- Are you focused on getting students to exercise their creativity?
- To learn about electronics hands-on?
- To design and prototype their own creations?
- To practice engineering skills?

What do you already have?

- What tech do you already have?
- What supplies do you already own?
- Are there supplies at other libraries not being used?
What physical space do you have?

- Looking at mobile makerkits
- Maker Club
- Maker Events
- Drop-in or extended projects?
  - This will change the space needed
  - Ex. Project in process - Storage

Where will you get the supplies?

- Donorschoose
- Grants
- Store Donations
  - Take apart stations
- Patron donations
  - Legos

Worksheet Time

Fill out the worksheet with your answers.
Sharing

Share your goal with a partner

Add yours to our padlet (bulletin board)

bit.ly/msyss2017
Innovation of Making

Heather A. Turner
@heatheraturner
haturner@gmail.com
tech4schoollibrarians.com
Bibliography


