Building Curiosity,
Confidence, and
Community
Through Making



Presented on March 9, 2018

# Save the date for these upcoming WiLS events:

- ★ Peer Council: June 4, 2018 Madison Public Library
- ★ WiLSWorld 2018: July 24th and 25th, Pyle Center, Madison



# Building Curiosity, Confidence, and Community Through Making

WiLS World Short March 9, 2018

imagine what's possible™

## **Today's Presenters**



Wendy Harrop, Educational Technology / Makerspace Librarian Summit Elementary School, Oconomowoc <a href="https://www.wkharrop@gmail.com">wkharrop@gmail.com</a>





Angie Schoeneck, Growth Strategy Manager - Demco angies@demco.com @ASchoeneck



# Summit Elementary School Maker Space





**Wendy Harrop** Educational Technology / Makerspace Librarian

wkharrop@gmail.com

## Why Makerspaces?

- Valuable design process and STEAM learning
- Develop "soft skills"
- Student driven/personalized ;earning
- Reach underrepresented populations
- FUN!



# Year 1 - Bringing Making into the Learning Environment

- Introduce the Maker Mindset
- Learn the materials
- Learn the design process
- Educating and involving the community





## Year 2 - Into the Classrooms

- Integrating curriculum
- Mobile carts
- Involve classroom teachers
- Community Outreach



# Year 3 - Becoming Part of the Culture

- Clubs
- STEAM Nights
- Student drop-in
- Student driven integration
- Enrichment blocks



# Year 4/5 - STEAM and Storytelling

- Integrating the Humanities
- Focus on Girls
- Focus on Global Collaboration





### imagine what's possible™



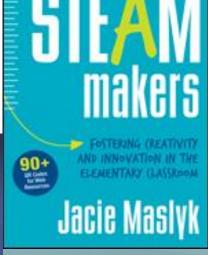


Ideas and resources from this webinar are available on my website: <a href="https://www.steam-makers.com">www.steam-makers.com</a>

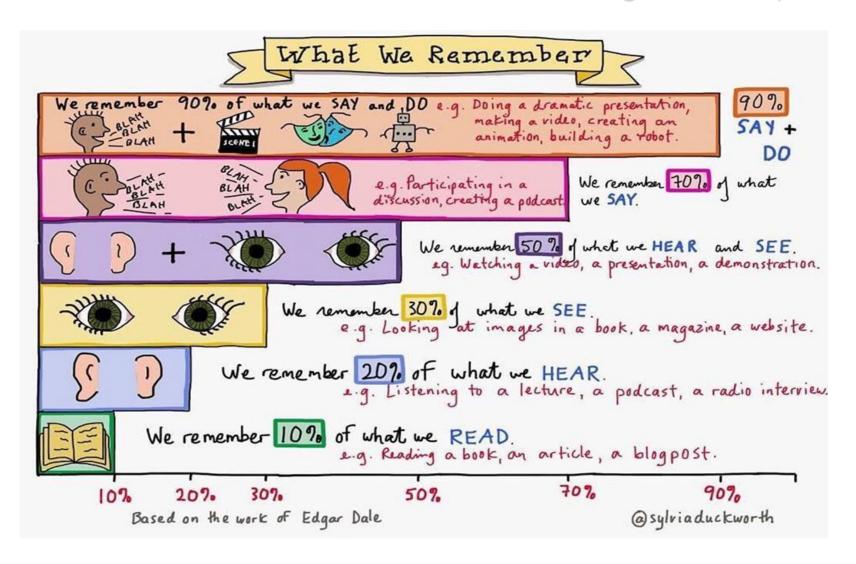
Check out my STEAM Makers Pinterest page: <a href="https://www.pinterest.com/jaciemaslyk/steam-makers/">https://www.pinterest.com/jaciemaslyk/steam-makers/</a>

Follow me on Twitter @DrJacieMaslyk











Innovation Literacy A way of thinking that creates new experiences ground likeracy teaching and learning through creativity and design.

- @DrJacieMaslyk



## Why Making?

•An opportunity to learn through hands-on/minds-on work that fosters curiosity, creativity and innovation through messing, building, designing, hacking, and remaking.





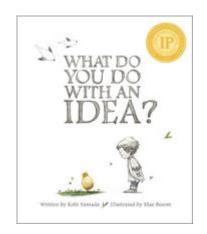


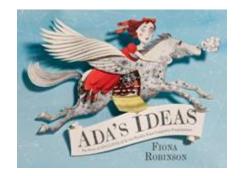
# **3 Literacy Connections**

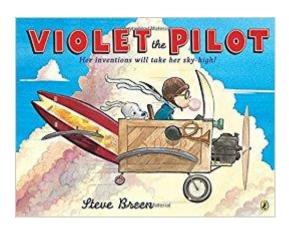
- Content
- Theme
- **Dispositions**



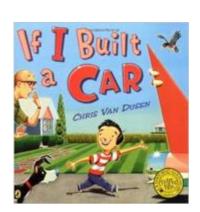
## **Content**











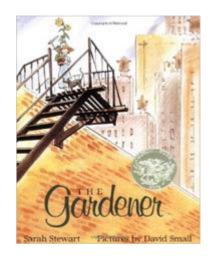


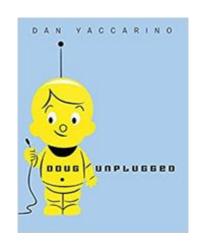




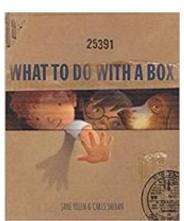
## **Theme**

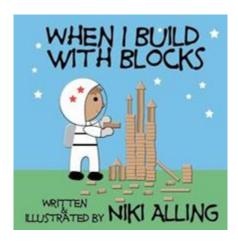






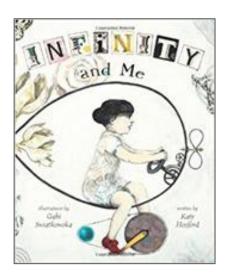




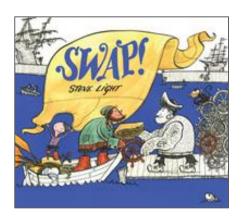




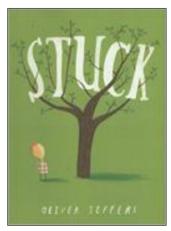
## **Dispositions**

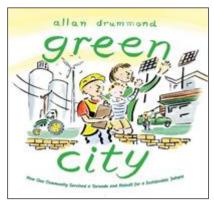






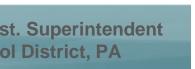


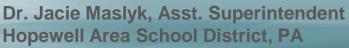




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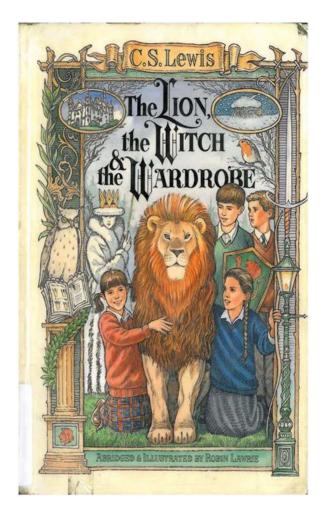


## **Secondary Literature Selections**

- The Giver
- Ender's Game
- Long Walk to Water
- Lord of the Flies
- To Kill a Mockingbird
- The Martian
- Ready Player One













## Simple Ways to **Add Making to ELA**

- Create a new ending to a story using video animation
- Bring the character to life through design/draw/build
- Construct a 3D scene from a story
- Design a solution for a problem a character is having
- Retell the story using robotics
- Design props, costumes, or artifacts



STEAM Makers: Fostering Creativity and Innovation in the Elementary Classroom



## **Robotics**

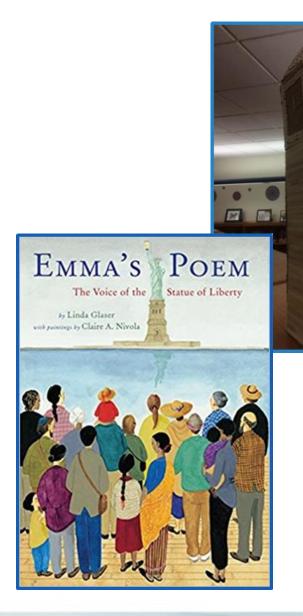






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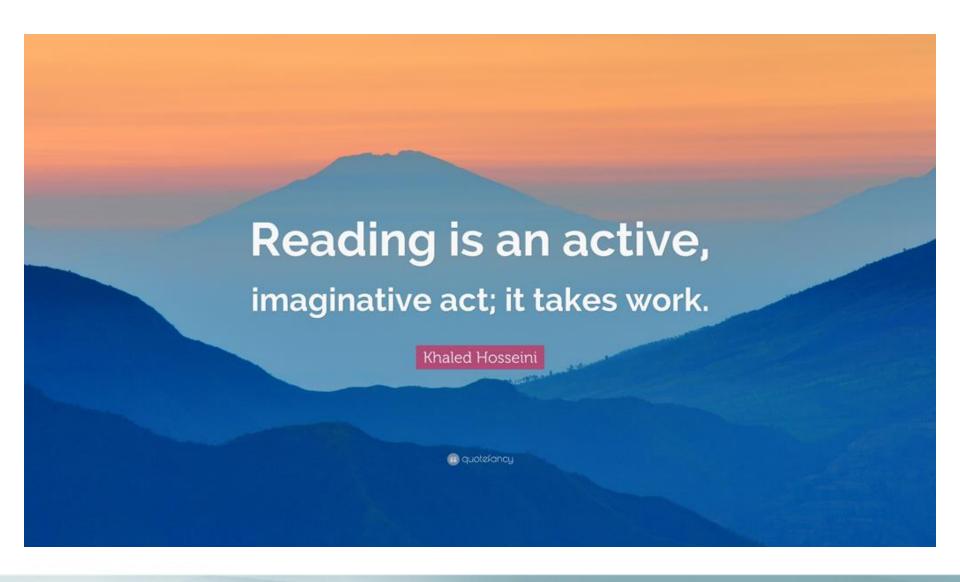








Dr. Jacie Maslyk, Asst. Superintendent Hopewell Area School District, PA 23







# 21st Century Learning Spaces





- Flexible
- Access to Power & Device Charging
- Inviting & Comfortable
- Seating Options for individual and group work





## Massapequa Before...









Challenge: Update outdated, dull, and static space to bring in more students



## Massapequa After...







Action: Make small changes to tables, chairs, and storage.



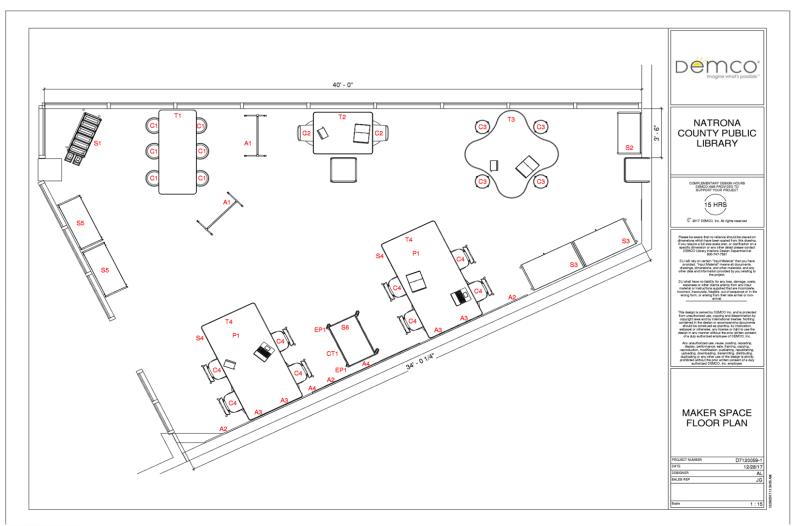




Outcome: Space is welcoming, engaging, and gives students easy access to needed materials. Read the full story.



# Makerspace Floor Plan Drawing Natrona County Public Library



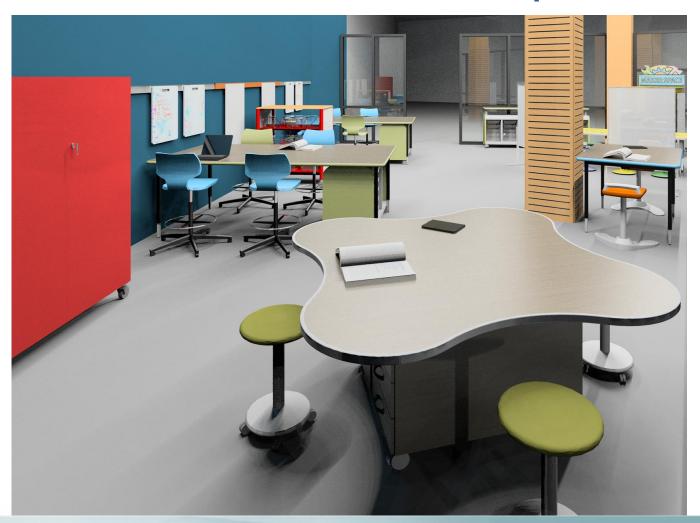


# Natrona County Public Library New Makerspace Shown as a 3D Rendered Drawing





# Natrona County Public Library Take a Virtual Tour of New Makerspace





EXPERIENCE THIS SPACE IN VIRTUAL REALITY!

CLICK ANY IMAGE OR SCAN QR CODE



## 4 Idea-Starter Makerspaces



**TINKER NOOK** 



**BUILDER HAVEN** 



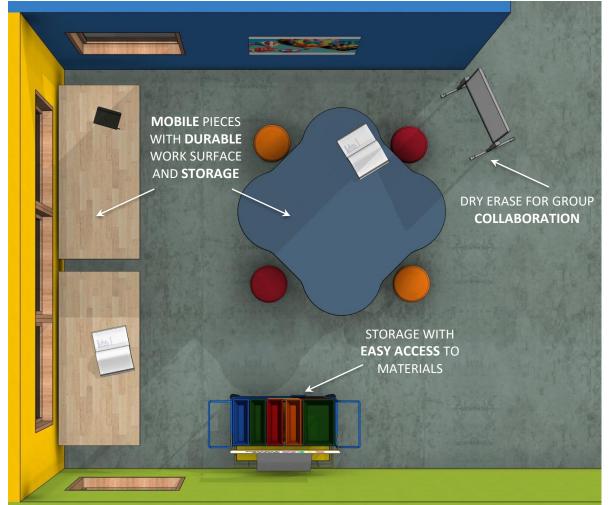
**CREATOR COVE** 



**INNOVATOR SANCTUARY** 



### TINKER NOOK- 12' x 12' (144 SQUARE FEET)







FREE FORM IMAGINATIVE CRAFTY COOPERATIVE BUSY

Even the smallest space can become an inspirational starting point. With a flexible, open work environment your space can encourage exploration and creativity. This atmosphere gives the guest permission to be creative.





**FREE FORM** 

**IMAGINATIVE** 

**CRAFTY** 

**COOPERATIVE** 

**BUSY** 



Mobile STEM Station Item # WF13746520



Mobile Work Bench Item # WF13719180



Premium Maker Station Item # WL13668760



Teen Orbit Stool Item # WR13745570



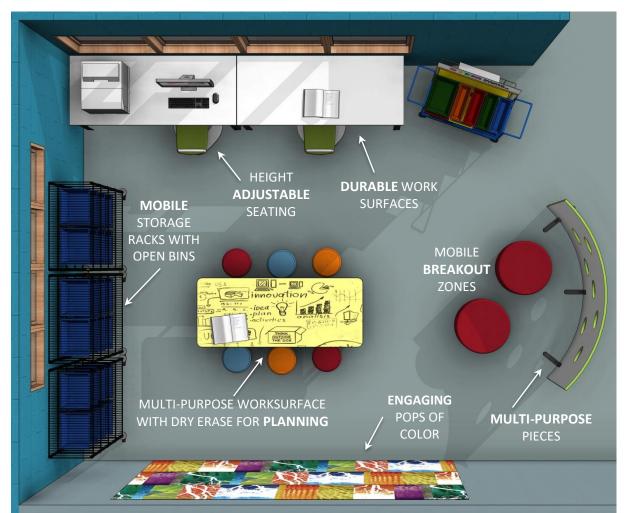
Marker Board Easel Item # WE13714800



Stick Together Item # WL13748030



### CREATOR COVE - 15' x 17' (255 SQUARE FEET)







ORGANIC HANDS ON ACTIVE MESSY FUNKY

Take advantage of every opportunity to update an unused space into a creative hotspot. Durable work surfaces and ample storage are the name of the game in most developing maker spaces. Building a functional environment with a few key pieces of furniture will help foster the creativity of your patrons.





### **CREATOR COVE - 15' x 17' (255 SQUARE FEET)**

ORGANIC HANDS ON ACTIVE MESSY FUNKY



UltraZinc Steel Wire Shelving Item # WF13749980



Economy Workbench Item # WL13744160



Vivo Perch Stool Item # WR13745400





Colors of Nature Wall Mural Item # WF13692900



Premium Maker Station Item # WL13668760



Teen Orbit Stool Item # WR13745570



Imagination Station Dry-Erase Table Item # WR13698170

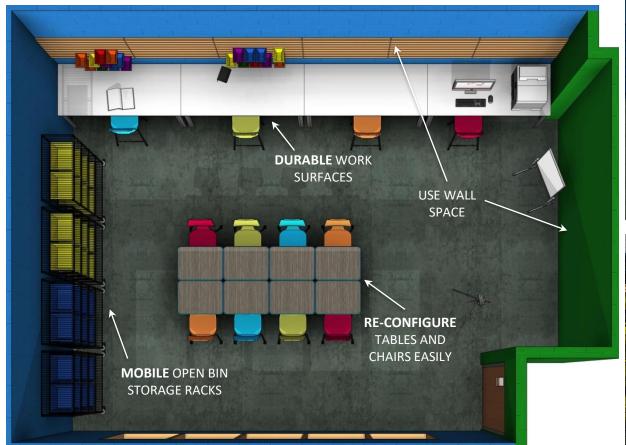


Totem Pod with Casters Item # WF13670420





### **BUILDER HAVEN- 25' x 18' (450 SQUARE FEET)**







CREATIVE ORGANIZED INNOVATIVE FLEXIBLE INSPIRING

Space is a tool that can be used to generate enthusiasm. Make the most of your space with long lasting flexible furniture. Patrons will be excited to create, tinker, and explore new ideas that will nurture their problem solving skills.



EXPERIENCE THIS SPACE IN VIRTUAL REALITY!
CLICK ANY IMAGE OR SCAN QR CODE



### **BUILDER HAVEN- 25' x 18' (450 SQUARE FEET)**

CREATIVE ORGANIZED INNOVATIVE FLEXIBLE INSPIRING



UltraZinc Steel Wire Shelving Item # WF13749980



Economy Workbench Item # WL13744160



Flavors Café Stool Item # WF13638590



uLite Green Screen Kit Item # WR12244900



Slat Wall Display Panel Item # WF14907170



Flavors Stack Chair with Casters Item # WF13740690



Silhouette Desk Item # WF13746890



Marker Board Easel Item # WE13714800

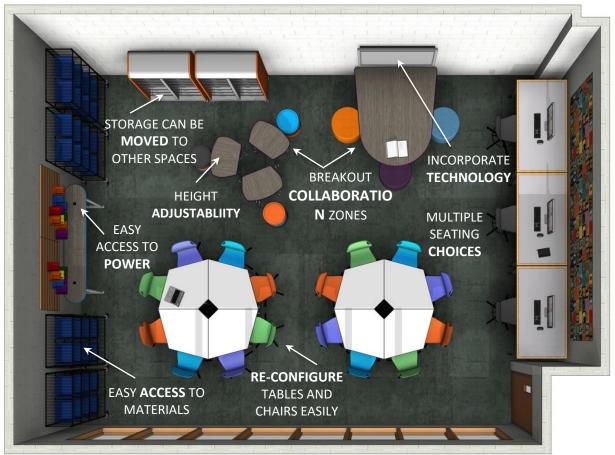


Dremel 3D Printer Item # WL13747200





### **INNOVATOR SANCTUARY - 30' x 22' (660 SQUARE FEET)**







INTERACTIVE FUNCTIONAL ENGAGING MOBILE COLLABORATIVE

Makerspaces have a wide variety of functions. The appropriate furniture mix can help facilitate multiple activities; from large group classes, to small group collaboration, to individual endeavors. Allowing these differing types of hands-on work in one space can reveal new methods and ideas and inspire growth.





INTERACTIVE FUNCTIONAL ENGAGING MOBILE COLLABORATIVE



UXL Power Bar Item # WR13720380



Kite Mobile Tables Item # WF13684780



Intuit Adjustable Chair Item # WF14909010



Skware Maker Table Item # WL13702290



Sit & Stand Student Desk Item # WF13755040



UltraZinc Steel Wire Shelving Item # WF13749980



Totem Pod with Casters Item # WF13670420



D-shaped Media Table Item # WF13655610



Wall Mural Item # WF13631840



Cascade Mega Tower Item # WF12219890



oodle Seating Item # WF13747570





### Makerspace Resources - Available from Demco





DEMCO Interiors works collaboratively with librarians, educators, architects and designers to create inspiring environments.

Read the story of <u>Hartland South Elementary School's</u> Library and STEM Lab renovation.



A collection of free webinars, blogs, & idea galleries. Register for the April 5 webinar, Promoting Meaningful Making in Your School by Nicholas Provenzano, known as The Nerdy Teacher



#### Upcoming

### Promoting Meaningful Making in Your School

April 5, 2018, 4:00 p.m. ET / 3:00 p.m. CT Register

Do you already have a makerspace, or are you looking to start one and you want to make sure it is more than just a fad or a glimmick? In this webinar, maker expert Nicholas Provenzano will share with you the many different ways to create an inclusive, meaningful and accessible makerspace that will allow students to explore and learn in the ways that matter most to them. Another important part of making is supporting the mindset that goes along with it. This Maker Mindset is what drives students and teachers to make, fail, learn and grow. Not all makerspaces are created equal, and this webinar will helv out place you cape to the needs of your students and your teachers.

After a brief introduction of what a makerspace in your school can look like, the conversation will shift to the different ways that educators can create meaningful opportunities for learning in the space. Different approaches to inclusion of all students and content areas will be explored as well as supporting students through failure and helping them understand that making is about the journey and the destination. Nicholas will also answer your specific questions at the end of the webinar to help you find ways to nurture the long-term growth of your makerspace.

#### You will learn:

- 1 The different ways you can implement a makerspace and what it can look like at your school.
- What "meaningful making" actually means in a makerspace.
- 3 How to create an inclusive making environment and support the Maker Mindset for all students and staff.
- 4 Different ways to diversify your makerspace to support all students and staff.

### Makerspace Resources - Available at Demco.com

## YOUR GUIDE TO EVERYTHING MAKERSPACE

Explore flexible furniture and organization solutions, as well as learning and technology tools that fuel the mind, encourage collaboration, and facilitate meaningful, accessible making.





Shop All Makerspace Products











Technology Arts & Crafts

TEM Furniture

Demco.com features a <u>Makerspace landing page</u> with a curated collection of all things maker, including furnishings, technology and learning resources.

Make sure to download the <u>Getting Started Making</u> <u>Guide & Checklist</u> - full of prompts to help you're planning.



## Démco

## Getting Started With Making: Your Guide & Checklist

### Introduction

Over the past several years, the concept of creation spaces, or makerspaces, has found a home in libraries. With the learning opportunities and equitable access libraries have always offered, makerspaces are a perfect fit.

This guide was created to help you identify your goals and objectives and bring focus to how you will meet the needs of your students or community.

The answers may not be clear right away, and your decisions may change as you go — and that's okay. This is your planning tool — make it work for you. Check anything that applies today and highlight ideas for the future.



### Start With Your "Why"

What are the driving forces or needs motivating you to build your makerspace?

For schools, makerspaces offer project-based and collaborative learning opportunities, encourage design thinking and perseverance, and are the perfect place to help students develop critical 21°-century skills.

For public libraries, it may be that your community members need a resource for developing job skills, access to technology for personal or business use, or free and educational STEM opportunities. A makerspace can help you provide an access point to innovative learning resources and engage with patrons in new ways.

Before diving into the details of your new space, take a moment to think about your makerspace mission



### Grants Search Database - Available at Demco.com

