

Piloting Makerspaces in Lynnfield

Link to presentation:

gg.gg/lpsmakes



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Overview

- What are Makerspaces
- Piloting Makerspaces in our schools
- Reflections after year 1



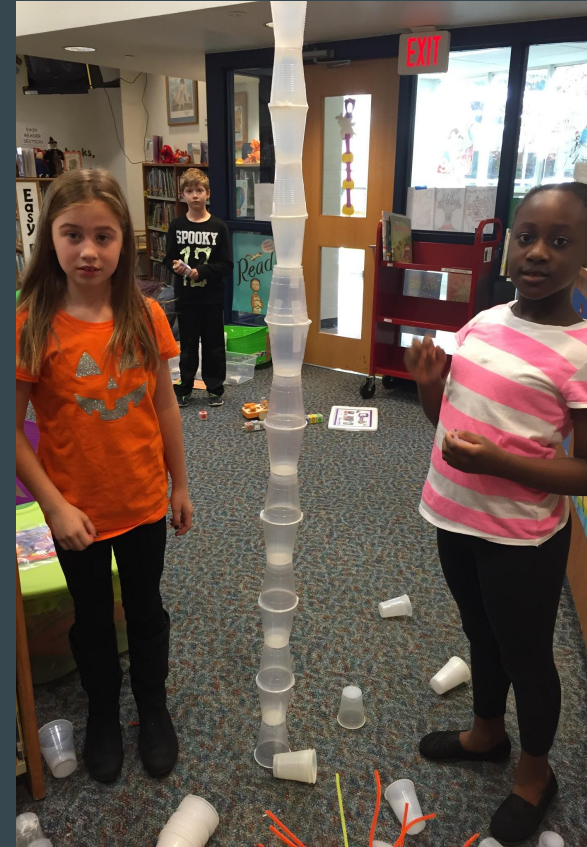
What is a Makerspace?

- Makerspaces are centers for creative play
 - **Student-Centered**
: Kids create something of their own design
 - **STEAM-Focused:**
Focus on the design process



Why pilot Makerspaces in Lynnfield?

- Supports our Vision to...
 - “...create intellectually curious learners”
- Fills a Need
 - Purposeful exploration
 - Empowers students to make decisions about their own learning
 - Creates stronger / better thinkers
 - Kids learn through trial & error



It's Not about the "Space"

- Designate a "Space"
 - Shows you value it
 - Central location / lots of activity
- Size does NOT Matter!
 - Activities flow beyond designated space



It's Not about the "Stuff"

- Start with what you have
 - Science Materials
 - Recycled Items
 - "Take apart station"
 - Recycled crafts



Getting Started

- Two Pilot Locations
 - LHS & SSS Media Centers Fall 2015
 - Rollout district-wide Fall 2016
- Funding sources
 - District funds, Grants, PTO, Donations, Community Schools
- Access to Spaces
 - Drop-in during school day
 - Materials can be brought to classrooms



High School Makerspace

- Printing Station
 - 3D Printer
 - Silhouette Cameo Paper Cutter

- Students Learn
 - Computer-Aided Design (CAD)
 - Troubleshooting



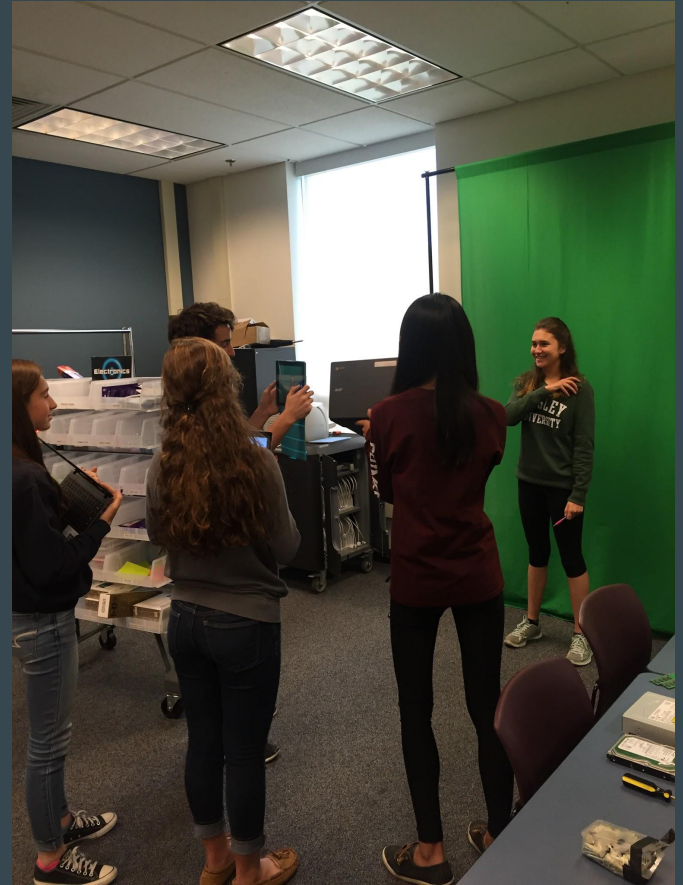
High School Makerspace

- Robotics Station
 - Sphero Robots
 - WeDo Lego Robots
- Students Learn
 - Computer Programming
 - Designing / Constructing



High School Makerspace

- Video Production Station
 - Green Screen
 - Video Editing Workstations
 - Video Cameras & iPads
- Students Learn
 - Storytelling / Planning
 - Speaking Skills



Elementary Makerspace

- Construction
 - Legos, K'Nex, Kapla Blocks, Cups
- Students Learn
 - Teamwork
 - Design
 - Perseverance



Elementary Makerspace

- Electronics & Coding
 - Makey Makey kits, Snap Circuits, LED Craft Projects
 - Chromebooks & iPads + Coding Sites



- Students Learn
 - Electric Circuits
 - Creativity
 - Computational thinking



Elementary Makerspace

- Crafting
- Students Learn/Use:
 - Independence
 - Creativity
 - Collaboration
 - Play
 - Engineering

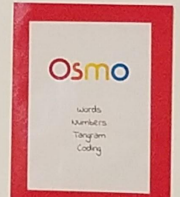
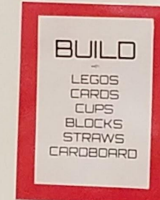


Reflecting on Year 1

- Purposeful activities / Structure
 - Monthly Design Challenges
 - Shift mindset → Design Thinking
- Partner w/ community & Classroom Teachers
- Roll out district-wide

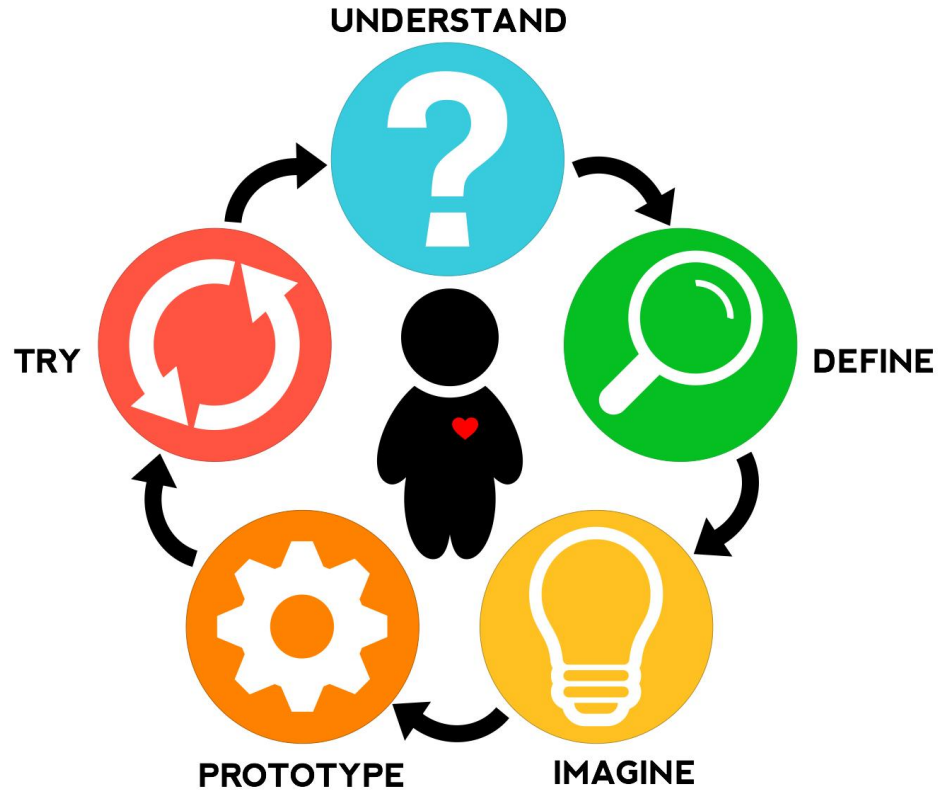
Challenges of The Month!

Lego | Maker | Tech



Design Thinking is..

- A process
- Iterative
- User-centered
- Empowering
- Everywhere
- ...a Mindset



Design Thinking

- Engineering Design Process + empathy
- Project-Based Learning + set within a process
- Tinkering + with a process & purpose
- Problem-Based Learning + versatile learning styles



EMPATHY



DEFINE



IDEATE



PROTOTYPE



FEEDBACK



REFLECT

Visit Us!

- Contact:
 - judkinsj@lynnfield.k12.ma.us
 - Twitter: [@jennjudkins](https://twitter.com/jennjudkins)
 - Website: www.teachingforward.net
- Roundtable discussion
 - “Promoting a Maker Mindset in Schools”
[@MASS/MASC](https://twitter.com/MASS/MASC) Nov. 4th @ 4:15pm
- Connect Online
 - #MakerEd
 - <http://makered.org/>



Resources

- Book: [Launch by John Spencer & A.J. Juliani](#)
- Article: [Creating a Makerspace on a Limited Budget](#)
- Blogs:
 - [Renovated Learning @DianaLRendina](#)
 - [Colleengraves.org @GravesColleen](#)
 - [Worlds of Learning @LFlemingEDU](#)
- Websites:
 - [Design Thinking for Educators](#)
 - [HLFI Rapid Design Cycle Template](#)
 - [MIT Edgerton Center](#)
 -
- [Lynnfield Makerspace Station Cards](#)

