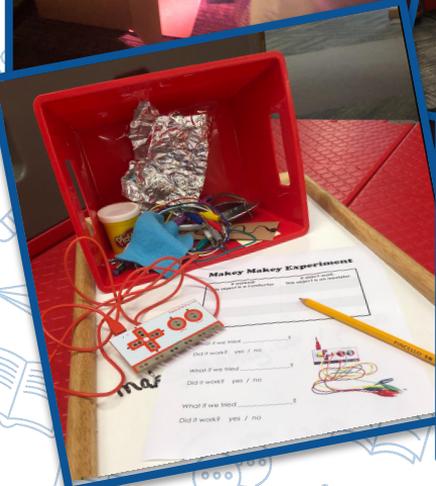


# Creating a Makerspace



Shift instruction,  
empower students,  
and transform  
your music classroom



**K-5 General Music in Northbrook, IL**  
**Co-author of Pass the Baton**  
**Full STEAM Ahead**  
**Everyone Loves a Story**

**Blog:** [www.ponderingsfromafinch.com](http://www.ponderingsfromafinch.com),  
[www.passthebatonbook.com](http://www.passthebatonbook.com)



**Hello!**

**#BlairFinchProject**



**PreK-5 General Music in Northbrook, IL**  
**Creator of Beat Blocks**  
**Full STEAM Ahead**  
**Everyone Loves a Story**

**Website:** [www.buildingmusicalminds.com](http://www.buildingmusicalminds.com)





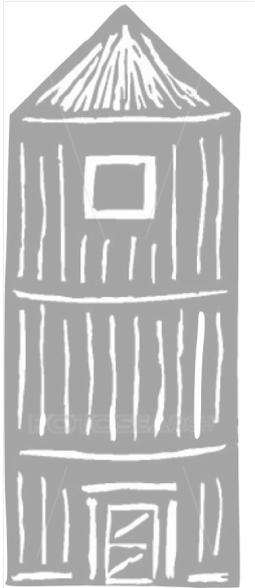
“STEAM creates a garden that will grow students who are problem solvers, who collaborate well with others, and who are creative and innovative self-starters.”

**—Abigail S Blair and Kathryn Finch**

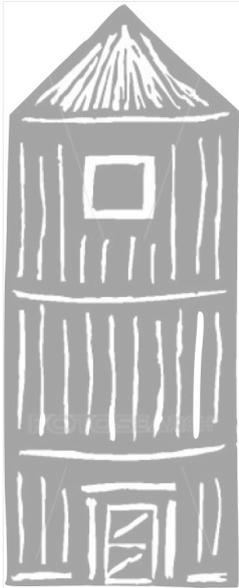


# BREAKING DOWN THE SILOS

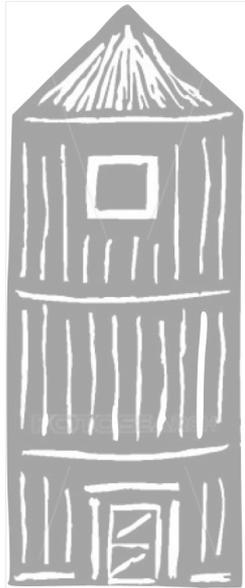
**Science**



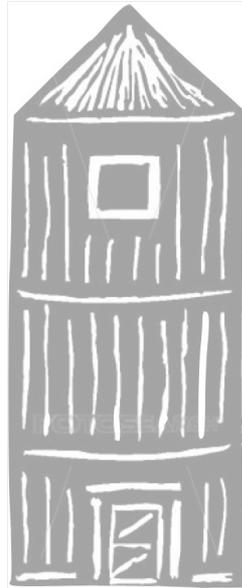
**Tech**



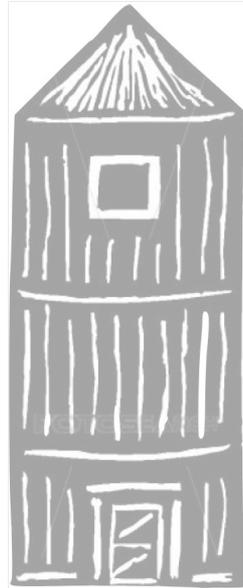
**Engineering**



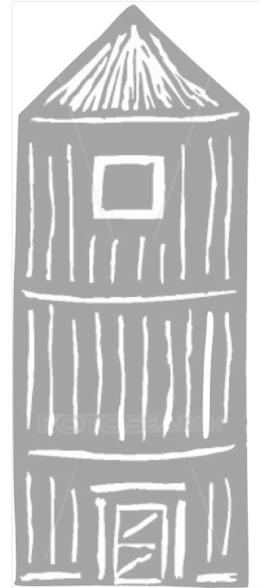
**Music**

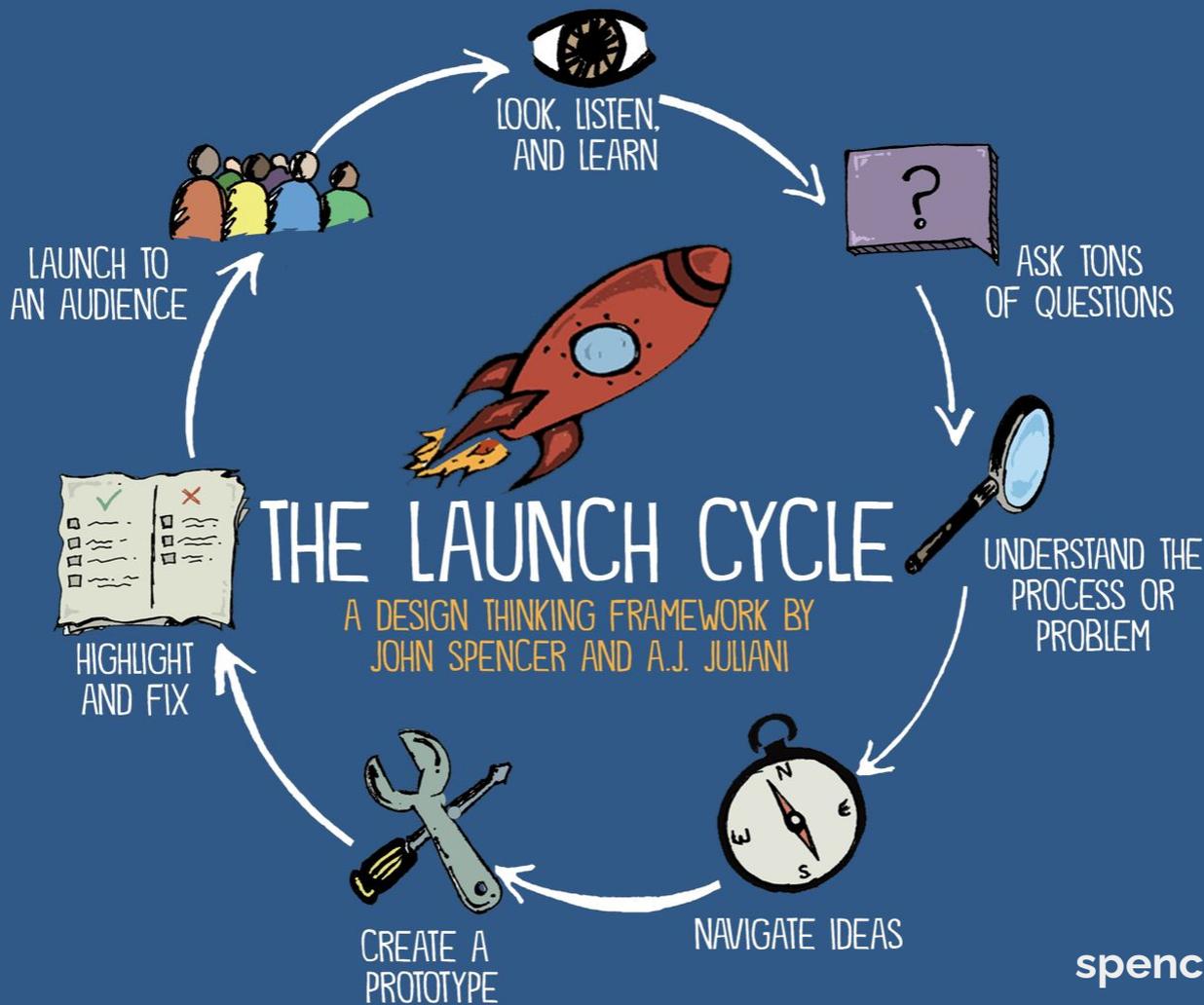


**Math**



**Art**





# ENGAGEMENT to EMPOWERMENT

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**ITERATION**



**CREATIVITY**



**EMPATHY**



**INQUIRY-BASED**



**STUDENT-LED**

# Aligning Standards

## Build Peter and the Wolf Shadow Puppets

*Connecting to Classical Music*

### Grades 2–4

**Focus:** Students will identify and interpret the musical themes of *Peter and the Wolf* by Sergei Prokofiev.

### Aligning the Standards

- |             |  |
|-------------|--|
| <b>NGSS</b> | Developing and using models.                                       |
| <b>ISTE</b> | Innovative Designer  |
| <b>Math</b> | Attend to precision.   |
| <b>NCAS</b> | Responding: Construct meaningful interpretations of artistic work. |



# Ideal Groupings

## Ideal Grouping



### 1:1 project

Each student works individually on their shadow puppet and records their own performance to share.

### ▷ Small Group

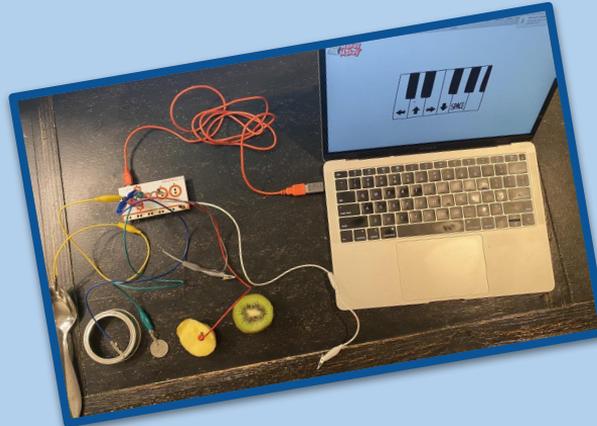
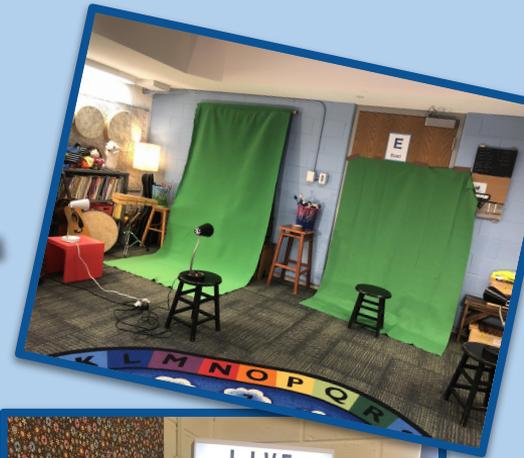
Students working cooperatively can assign roles such as videographer, lead designer, puppeteer, or similar. They should work together on a single product that is recorded and shared.

### Whole Class

Students work individually on their shadow puppet and the teacher records each performance to share.

# Start Small

- Use what you have to meet the needs of your classroom.
- Try ideas with a small group or on an extra day.



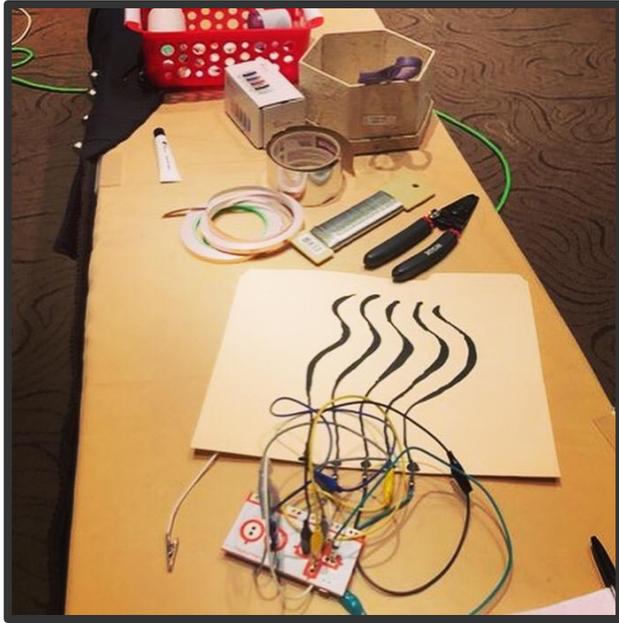
# Ideas of materials to store

## Basic Supplies:

Boxes of all shapes and sizes  
Cardboard, paper, adhesive-backed craft foam sheets  
Scissors, markers, pencils, rulers  
Recycled containers (with lids), plastic easter eggs  
Glue, stickers, tape  
Beans, rice, and other fillers  
Pipe cleaners, popsicle sticks  
Small toys: people, animals, doll house furniture, blocks



# Ideas of materials to store



## **Conductive Materials:**

Copper tape, HVAC aluminum tape  
Electrical wire, wire cutters  
Conductive paint, conductive fabric  
Play-Doh  
Aluminum foil  
Metal cans, lids, spoons, paperclips

## **Makerspace Additions:**

Background and backdrops: green fabric,  
Table cloths, or bulletin board paper  
Mattress Pad, egg crate, or other foam  
Picture frames

# Non Tech Activities

Glass Xylophone

DIY Diaphragm

How to Make a Thumb Piano

PVC Pipe Xylophone

DIY Rainstick

Shadow/Sock Puppets

Splinter Shaker



MAKERSPACE



## Develop the Splinter Shaker

*Creating Instruments with Purpose*

**Grades K-2**

**Focus:** Design and create a musical instrument that meets specific criteria.

**Aligning the Standards**

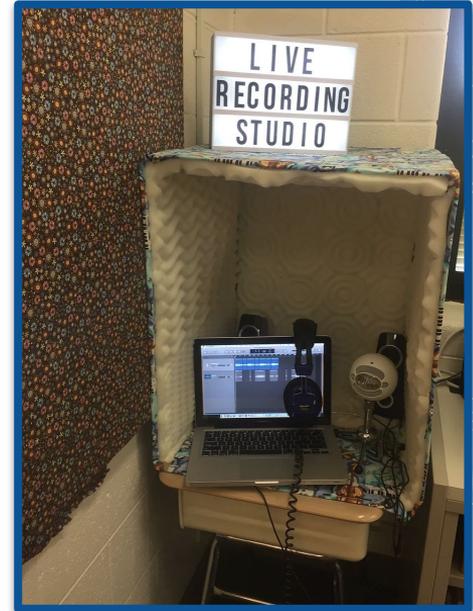
**NGSS** Developing and using models.

**ISTE** Innovative Designer

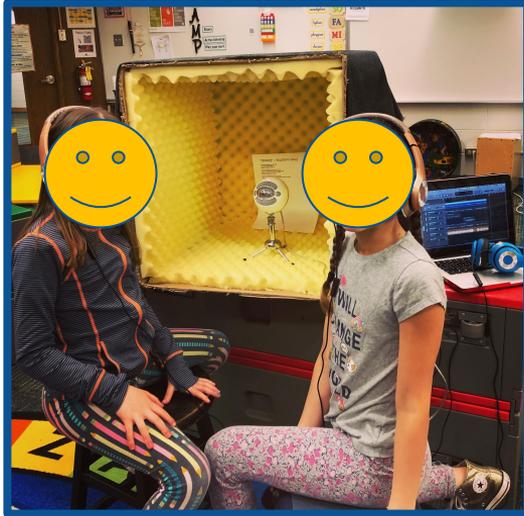
**NCAS** Creating: Generate and conceptualize artistic ideas and work.

# Recording Studio

1. Find a box that's just the right size.
2. Measure the sides of the box, mark the measurements on the foam and cut.
3. Staple the foam inside the box.
4. Duct tape the sides together once all of the foam is stapled inside the box.
5. Duct tape the fabric around the box. Leave a little bit of fabric over the edges for a nice finish.
6. Fold the fabric over the front edges onto the foam and staple.
7. Cut a small hole on the side of the box for cords.
8. Put together the DIY light box LED sign. It needs AA batteries. The box comes with letters so you can design the perfect message for your recording studio.
9. Supply your recording studio with a microphone, headphones, speakers, laptop, etc.



# Recording Studio Ideas



- A work space
- A group recording, singers near the studio
- Exit ticket
- Final recordings
- Using copy boxes, create multiple recording studios for a class

The kids will show you!

# Express yourself!

Collapsible 5x7 backdrop - It is easy to hold or hang on the wall but a little small.

Green Screen 8.5x10 with stand - It has a stand so it doesn't require wall space.

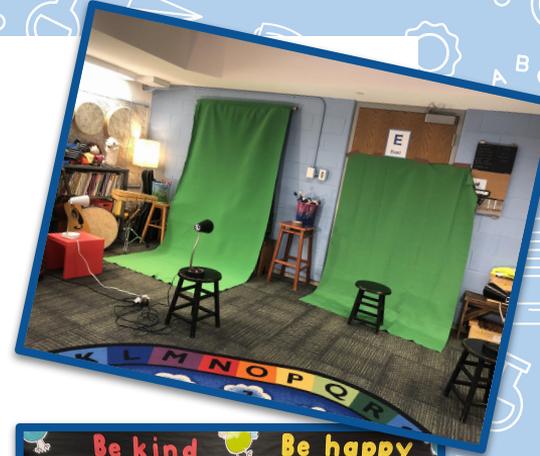
Green Screen fabric 10x20 - This one is great if you want full-body shots.

Green Table Cloth - It's cheap and works great!

Disposable tablecloths - The shine from lights can be an issue, but this is a very cost-effective option.

Green construction paper - Yes it works! Set a toy in front of a green piece of paper.

[How to Make a Green Screen Blog Post](#) by PonderingsFromaFinch.com



# Green Screen Ideas

X-ray Machine

Invisibility Cloak

Mountain Pose

Teleport

Puppets



# DAWs: Digital Audio Workstation

Extend musical concepts with real-life projects and compositions that are easy to share.



**M E L O D I C O S T I N A T O**



Splash Splash chirping bird

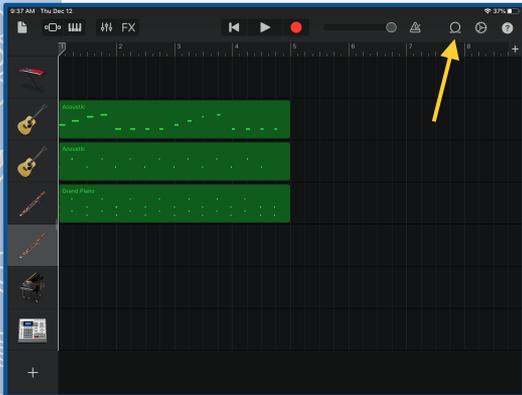
(→) Soundtrap®



# DAW Ideas

Practice song form by composing with loops  
Play chord progressions on Smart Guitars  
Sequence a beat  
Compose a melodic ostinato

Record soundscapes  
Compose a jingle  
Build a synthesizer  
Record a blues composition

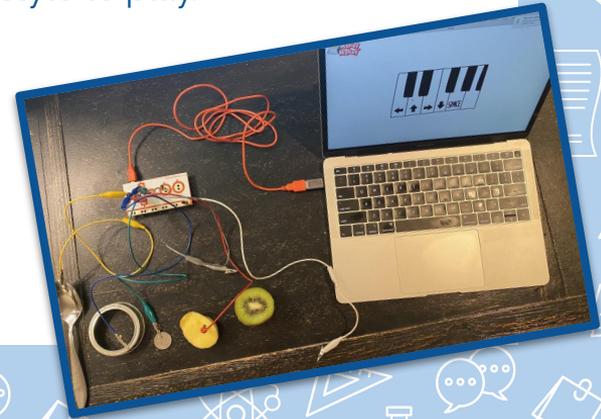
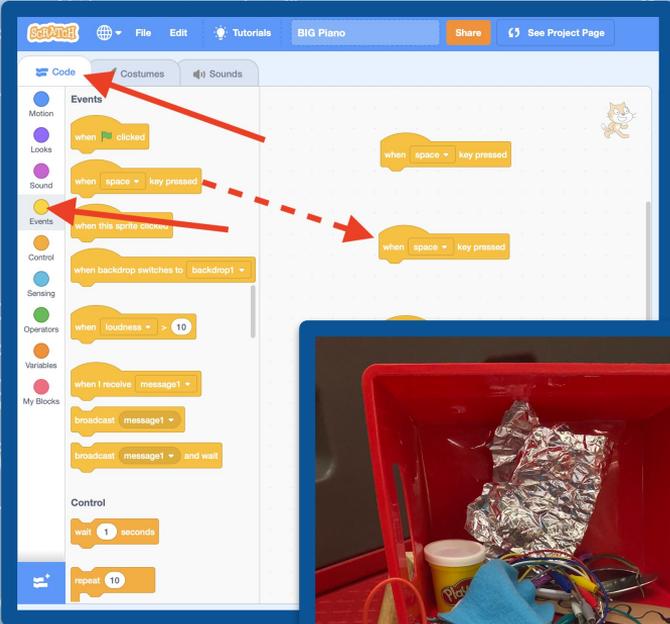


# Coding

Coding is a series of commands essentially telling the computer what to do. A first look at programming can be intimidating but really it's very similar to music notation in the sense that every note tells you what to do--the length, pitch, dynamic, and even style to play.

[MakeyMakey.com](http://MakeyMakey.com)

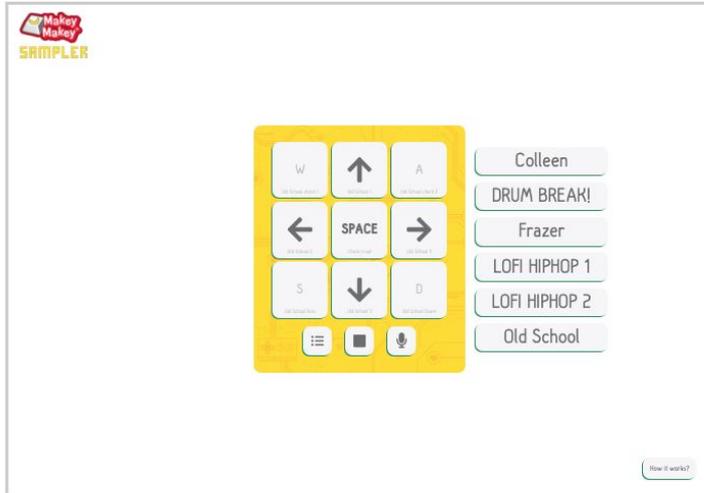
[Scratch.mit.edu](http://Scratch.mit.edu)



# Makey Apps

## Makey Makey Music Sampler

We know that kids (and adults!) love our piano and bongo app. So we wanted to make a sampler to get more kids interested in sound engineering and using digital audio workstations like Garageband and Ableton.



**Bongos:** Play some bongo drums with the space bar and left arrow. Turn anything into a drum!



## Piano

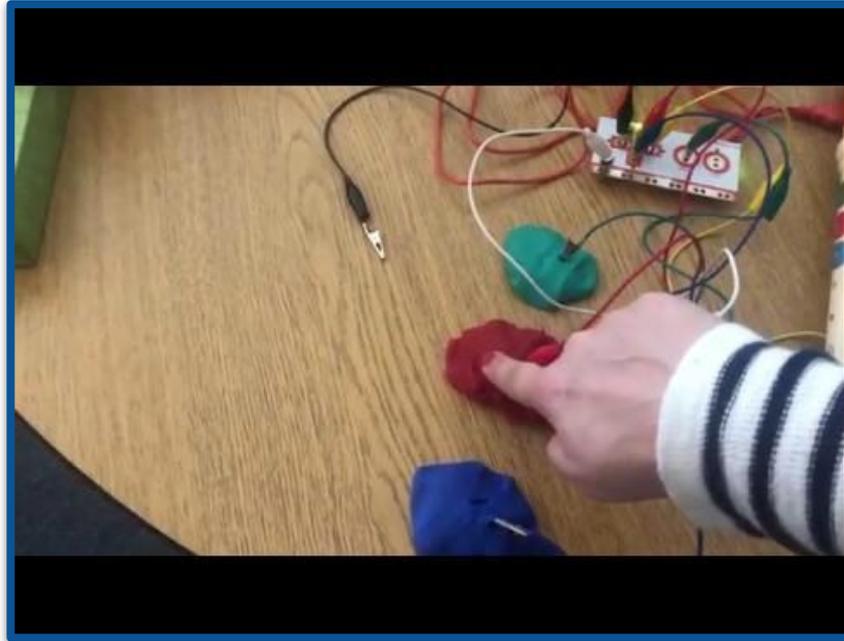
A piano designed for Makey Makey. Play a melody with the arrow keys and space bar (and click, too).

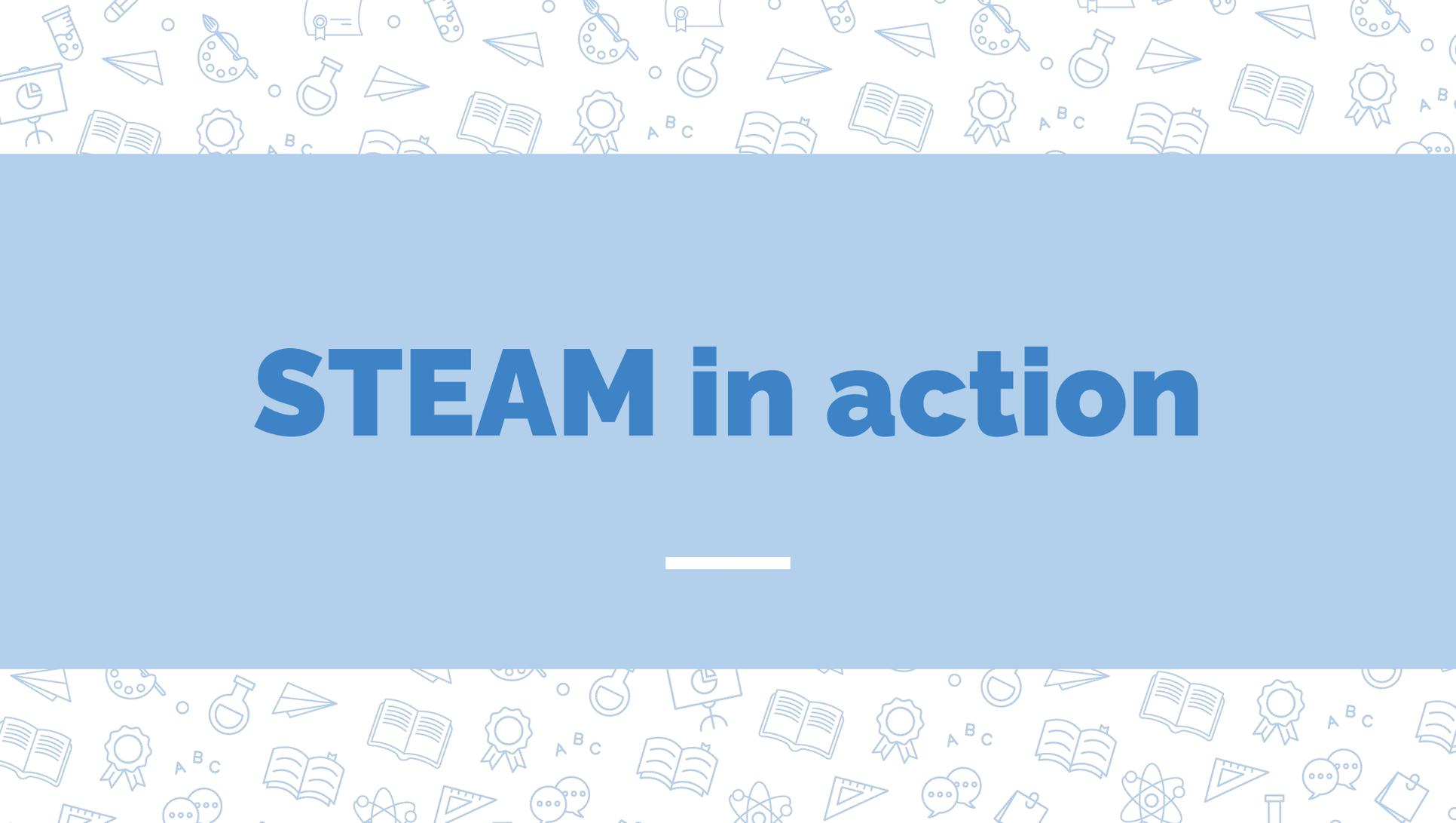


<https://makeymakey.com/blogs/how-to-instructions/apps-for-plug-and-play>



# Coding Ideas

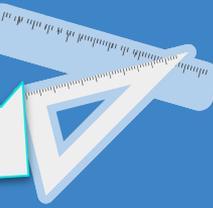
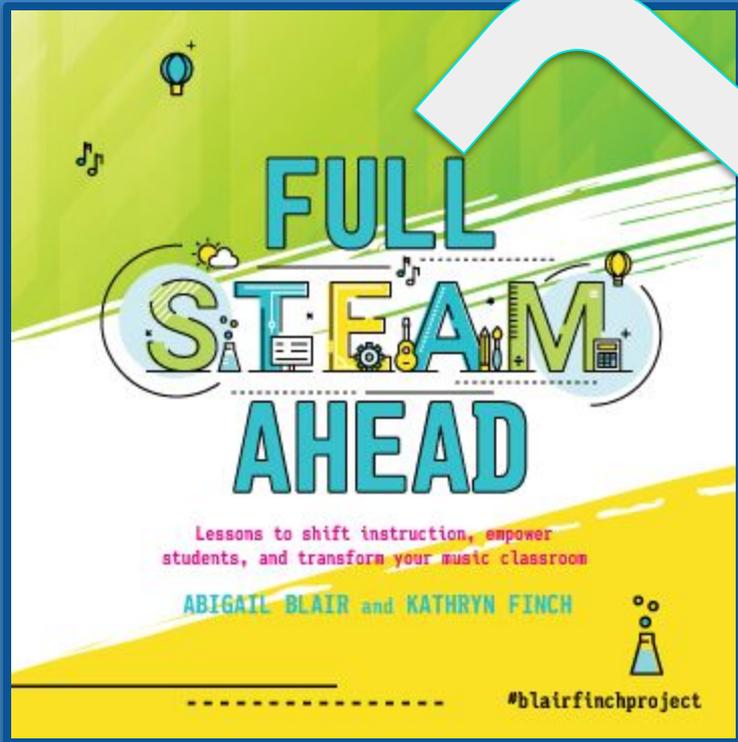




# STEAM in action

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#BlairFinchProject



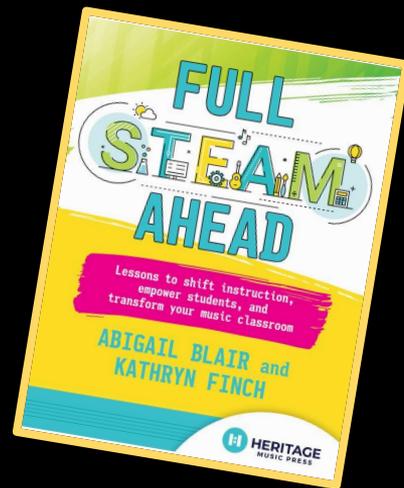
# OUR CHALLENGE:

Provide a musical theater experience for all students in 5th grade (4 schools) that allows them to learn all aspects of theater **from home with no budget.**

# OUR SOLUTION:

Let students learn the basics of each aspect of theater through STEAM experiences. Students will study professionals and meet experts in the field to help make their own projects.

Use of **GAMIFICATION** to engage. The game is like the Tony Awards and the kids are the “academy”.



#BlairFinchProject

# SET CRITERIA & CREATE

## BEST LIGHTING



**What is the mood? Where did the designer focus the lighting?**

**Designer: Peter Mumford,  
KING KONG**

THE  
**JOEY**  
AWARDS

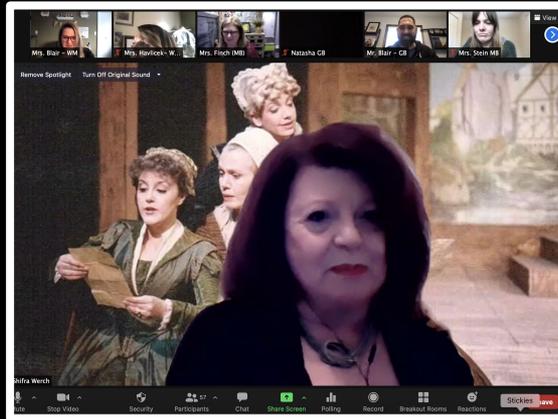
# BRING IN EXPERTS



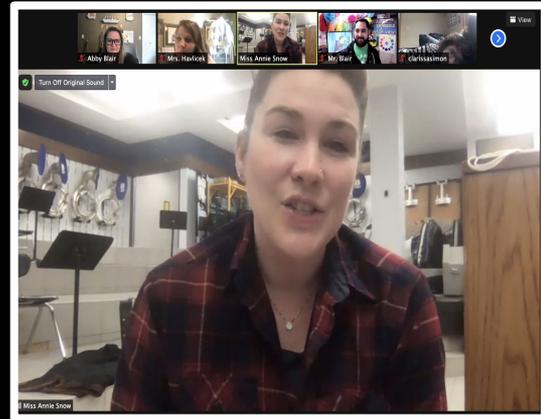
Call up a friend, parent, or former student to share!



broadway actor



costume designer



choreographer

# AWARDS SHOW



BEETLEJUICE

The Musical. The Musical. The Musical.

David Korins



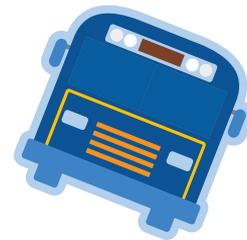
THE JOEY

AWARDS

Click here when  
the video ends



# STEAM TAKE-AWAYS



#BlairFinchProject



## BREAK DOWN THE SILOS

Teach the whole child.  
Collaborate with other  
subjects and experts.



## ARTS ARE THE GLUE

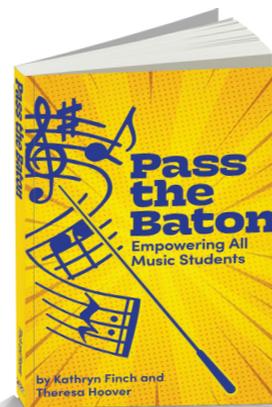
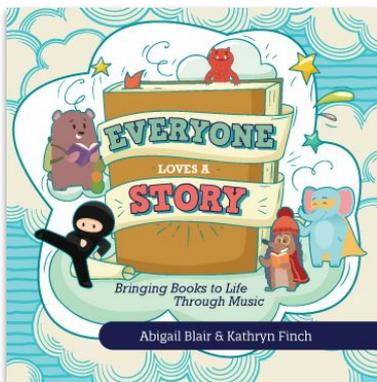
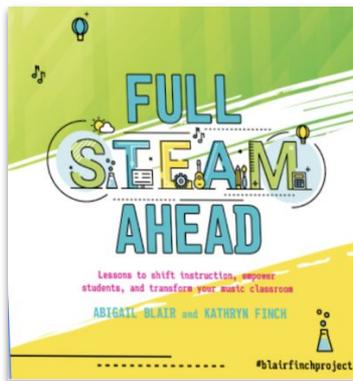
Arts are connected  
to all subjects.  
Get kids creating  
and problem solving  
with art.

## EMPOWERING LEARNERS

Give students voice &  
choice, let them ask  
questions and seek  
answers, have them  
connect with experts  
in the field, create and  
iterate, and  
own their learning.



# Related Resources



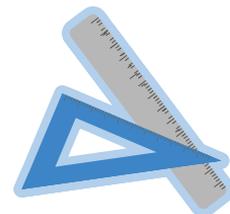
[blairfinchproject.wixsite.com/samr](http://blairfinchproject.wixsite.com/samr)

#BlairFinchProject

[Youtube: Blair Finch Project](https://www.youtube.com/channel/UC...)

[PasstheBatonBook.com](http://PasstheBatonBook.com)

#PasstheBatonBook





**Twitter, IG:** @Singingfinch1  
@Music\_Room\_253

**FB:** Kathryn Carmony Finch,  
Pass the Baton Book

**Blog:** [www.ponderingsfromafinch.com](http://www.ponderingsfromafinch.com),  
[www.passthebatonbook.com](http://www.passthebatonbook.com)

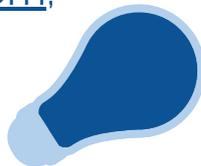


**Twitter, IG:** @AbigailSBlair @musicwestmoor

**FB:** Beat Blocks

**Website:** [www.buildingmusicalminds.com](http://www.buildingmusicalminds.com)

**Youtube:** Blair Finch Project



**Thank you!**

#BlairFinchProject



