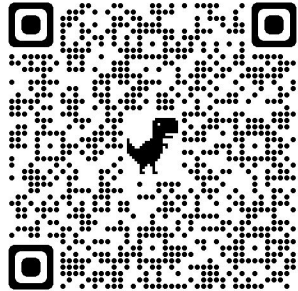
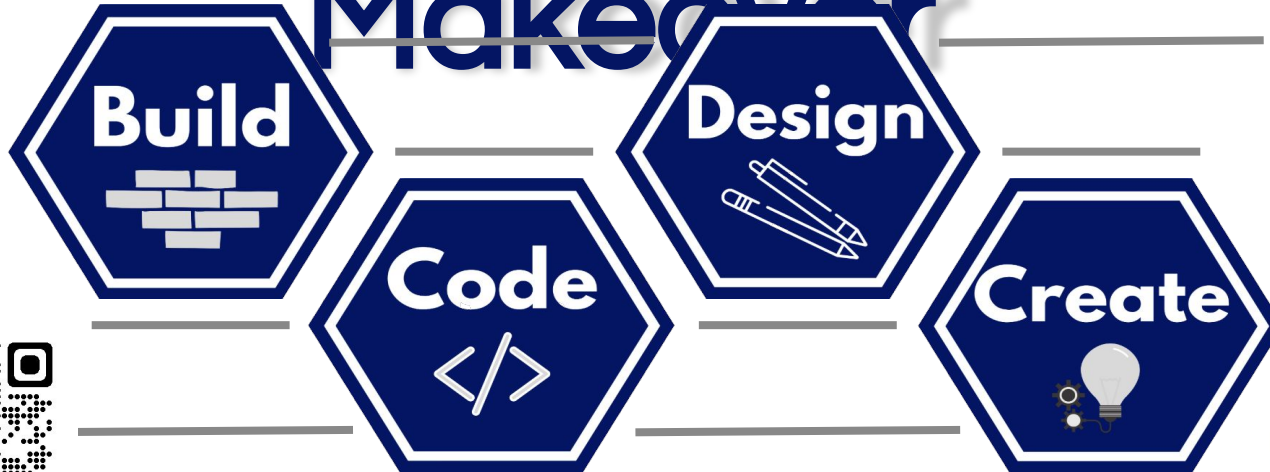



Makerspace

Makeover

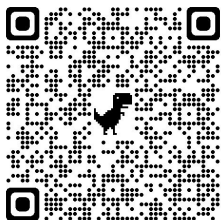


bit.ly/MakingOver

Planning Your Space: Planning Dashboard

Makerspace Mission & Vision 	
List your guiding ISTE Standards for Students here:	Summarize your makerspace mission in one statement here:
List your culture and climate key words here:	Summarize your makerspace vision in one statement here:
List the themes or commonalities emerged from the images you selected in the dot vote jamboard :	Helpful Resources for Writing Vision/Mission Statements: How to Write a Good Vision Statement A Guide to Writing the Perfect Vision Statement How to Write a Powerful Mission Statement That Resonates School Mission Statements: The 2021 Guide

See Tabs:
Mission & Vision
Student Roles
Digital Space
Physical Space
Wishlist
Potential Partners
Action Plan
Notes & Ideas

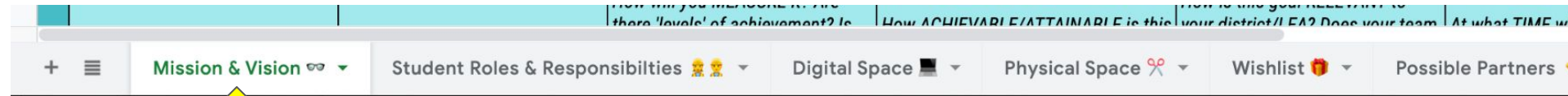


MAKE A COPY



bit.ly/MakingOver

Navigate Via Tabs at the bottom...



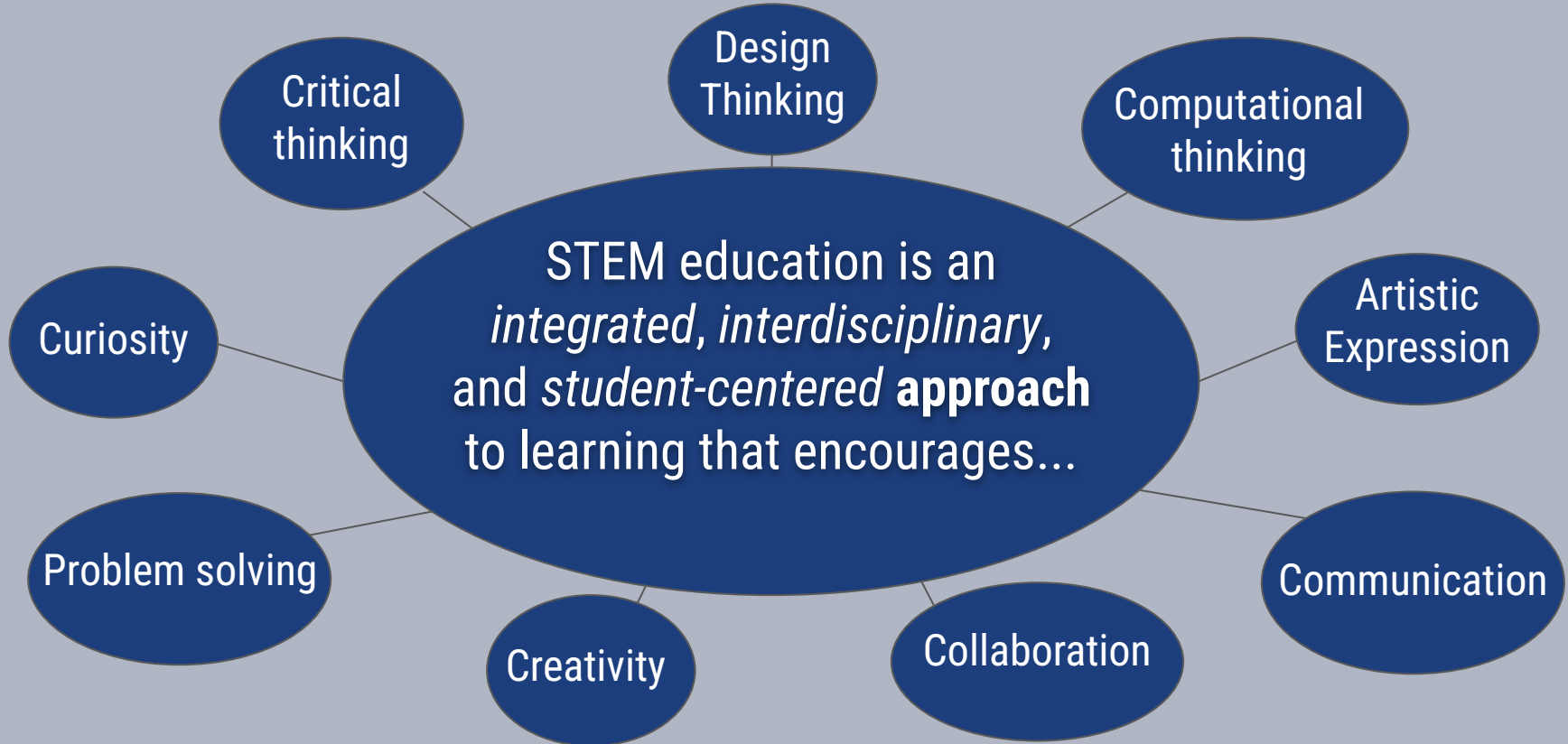
bit.ly/MakingOver

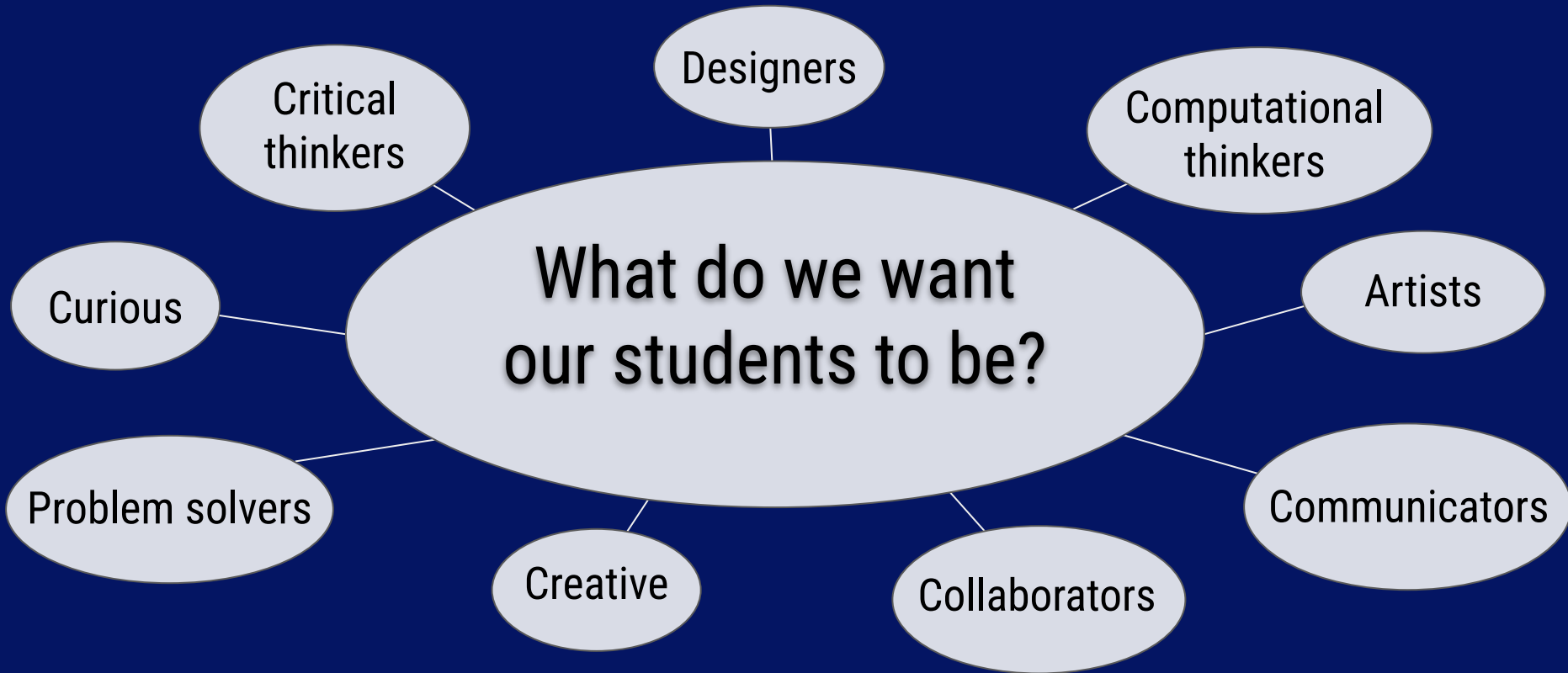
Mission and Vision

Why do you have/need a makerspace?

bit.ly/MakingOver

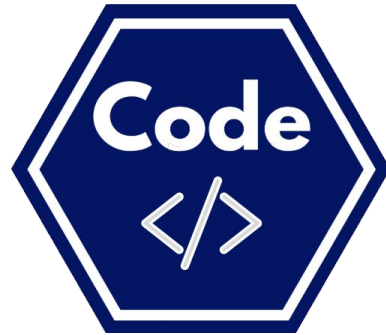
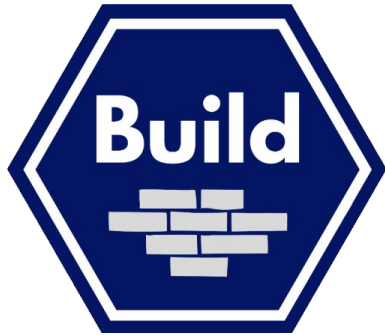
What is STEM?



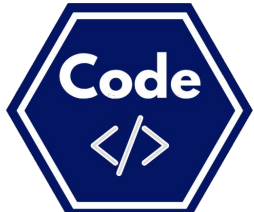


What learning experiences can we offer our students to allow them to practice and grow these traits?

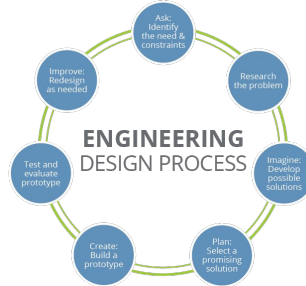
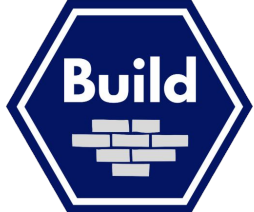
What do we want our students to be able to do?



The Four Strands

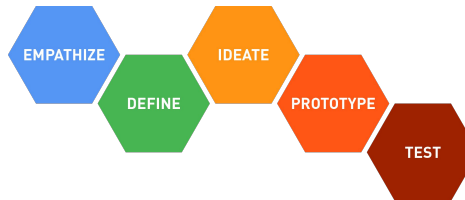


[K12 CS Framework](#)



[CSTA Standards](#)

[Engineering Design Process](#)

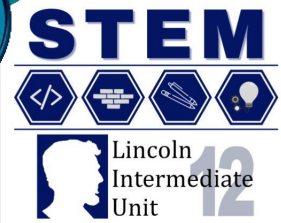
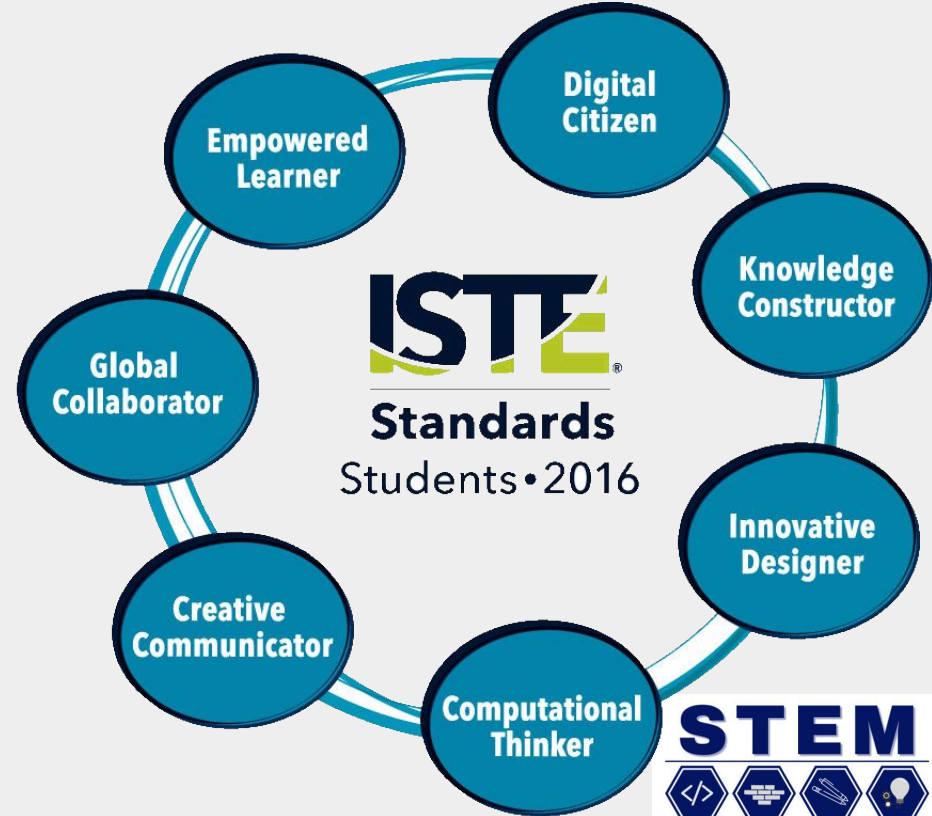


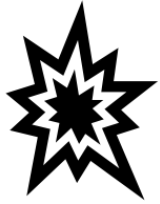
[Design Thinking Process](#)



[ISTE Standards for Students](#)

**Set a clear
vision of what
we aspire to be.**





**STEM is a *culture* that requires an
accommodating *climate*.**



- What shifts need to occur in our current classroom *culture* if we aspire to this vision of STEM?
- How do we create the conditions for the *culture* and *climate* to endure?

Culture & Climate Key Words

Select 3-5 keywords to focus the direction of the culture and climate you want to achieve in your classroom - these are just a few suggestions:

Accountability	Achievement	Adaptability	Authenticity	Belonging	Caring
Collaboration	Community	Compassion	Confidence	Cooperation	Creativity
Curiosity	Efficiency	Excellence	Growth	Honesty	Inclusion
Independence	Initiative	Optimism	Order	Perseverance	Resourcefulness
Respect	Responsibility	Risk Taking	Self-Discipline	Self-Expression	Self-Respect
Success	Teamwork	Understanding	Uniqueness		

Makerspace Mission & Vision

List your guiding [ISTE Standards for Students](#) here:

List your culture and climate [key words](#) here:

List the themes or commonalities emerged from the images you selected in the dot vote [jamboard](#):

Summarize your makerspace mission in one statement here: (Why does your Makerspace Exist?)

Summarize your makerspace vision in one statement here: (What do you hope to ultimately achieve?)

Helpful Resources for Writing Vision/Mission Statements:

[How to Write a Good Vision Statement](#)

[A Guide to Writing the Perfect Vision Statement](#)

[How to Write a Powerful Mission Statement That Resonates](#)

[School Mission Statements: The 2021 Guide](#)

bit.ly/MakingOver

Alignment

Does it align with your district/school mission/vision?

What is guiding you? Standards? Values? Goals?

What do you really want this space to look or feel like?

How will you communicate this to students, fellow educators, administrators, families, & community?

bit.ly/MakingOver

Defining Student Roles

How are they a part of your makerspace?

bit.ly/MakingOver

Student Roles and Responsibilities

Rapid Brainstorm

Imagine your ideal Makerspace in full swing and full of students. Set a timer for 1 minute, list all of the things you hope to see students doing in the space. Use quick phrases or single words.

Now, review your rapid brainstorm input and prioritize words or phrases that align with your mission and vision by highlighting or ordering them.

Answer the following consideration questions in as much detail as possible. Think about whether or how students might be involved.

How will students know what is expected of them and what behavior is appropriate in this space?

What processes can student help manage? (Consider inventory management, clean up, use of space, organization, etc)

How will students know what to do with the space/tools/resources?

How will teachers support your vision and mission and how will they know what is expected of them in this space?

Student Expectations

List student expectations. If there is time, convert these into digital or physical posters to display in your makerspace.

Teacher Expectations

List student expectations. If there is time, convert these into a draft email or other communication form to send to teachers.

Roles and Responsibilities

Who determines them?

Who communicates them?

How will they be communicated?

Who follows them?

Why are those rules and responsibilities there?

bit.ly/MakingOver

Physical Space

bit.ly/MakingOver

Physical Space

What tools, seating arrangements, or other items do you need to consider?	Where will you put your tools and resources? How will they be stored?	How will students be able to access and help manage the space? Educators?	How do you envision this space will be used?

Link Visuals and other resources for building and organizing the physical space here:

bit.ly/MakingOver

What is the intention of the room?



How many types of spaces/seats do you see?

How many do you need for your students?

What is the intention in this space?



bit.ly/MakingOver

What is the intention in this space?

Spark Labs



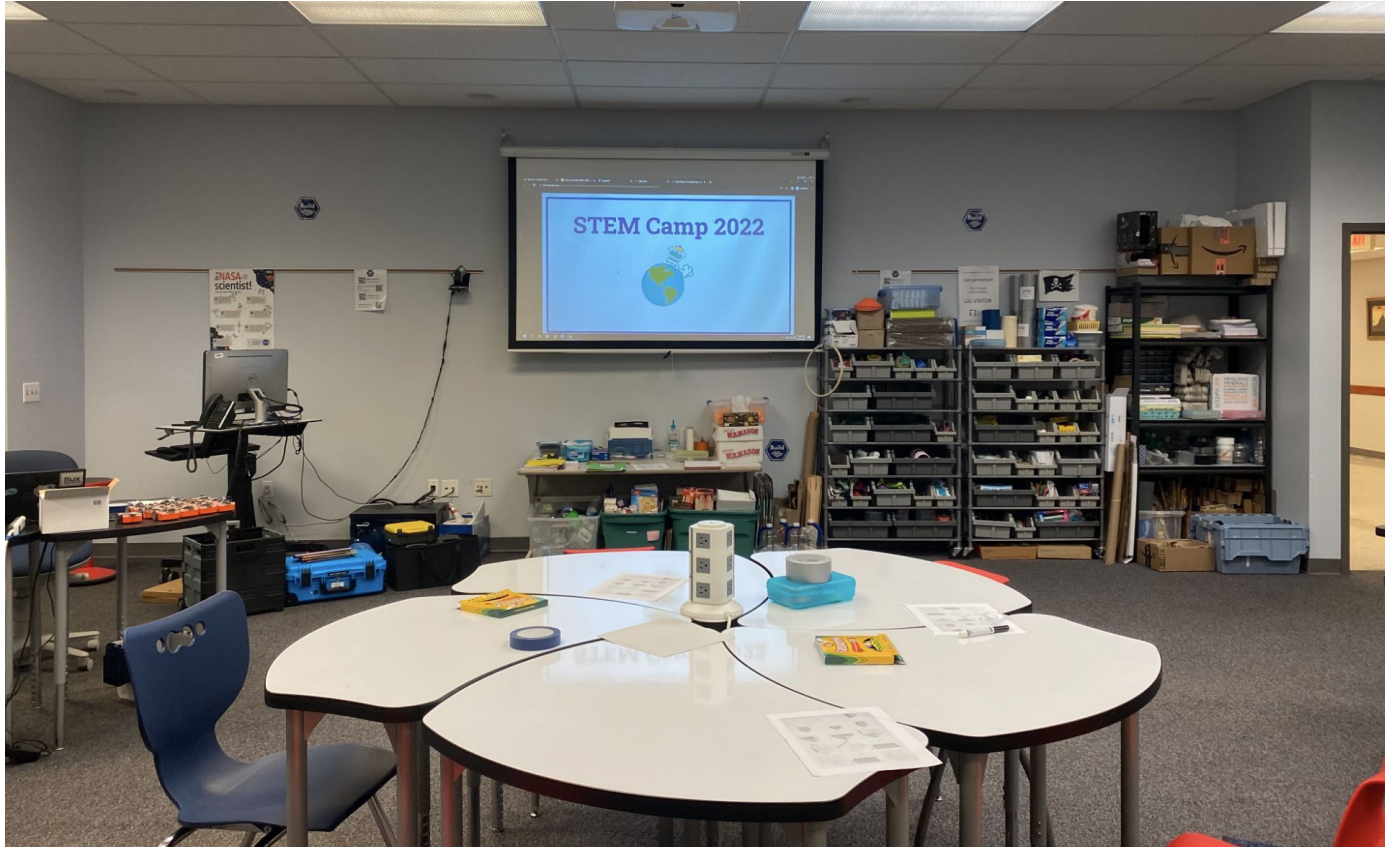
Tuscarora
Intermediate Unit 11



Lincoln
Intermediate
Unit 12

Leadership • Expertise • Innovation

What are you doing for storage?



What tools are you adding to the space?

CS/Robotics?

Microwave?

Library?

Recyclables?

Oven?

Padcaster?

Technology?

3D Printer?

Cameras?

Green Screens?

Esports Lab?

Laser cutter?

Production Studio?

Glowforge?

Sewing Machines?

Cricut?



Tuscarora
Intermediate Unit 11



Lincoln
Intermediate
Unit

12

Leadership • Expertise • Innovation

Makerspace Resources to Design and Develop



Makerspace Resources to Design, Develop and Implement Your Own Space for Students

Learning environments rich with possibilities, Makerspaces serve as gathering points where communities of new and experienced makers connect to work on real and personally meaningful projects, informed by helpful mentors and expertise, using new technologies and traditional tools. ([Makerspace Playbook 2013, p.1](#))



Making is about the active role construction plays in learning. The maker has a product in mind when working with tools and materials.

Tinkering is a mindset – a playful way to approach and solve problems through direct experience, experimentation and discovery.

Engineering extracts principles from direct experience. It builds a bridge between intuition and the formal acts of science by being able to better explain, measure and predict the world around us.

Collection of ideas and resources to help you design, develop, and implement your space.



Tuscarora
Intermediate Unit 11



Lincoln
Intermediate
Unit

12

Leadership • Expertise • Innovation

Digital Space

How is it accessible? How do students connect and contribute?

bit.ly/MakingOver

Digital Space

<i>What key information, tools, resources, must be included in the digital space?</i>	<i>What tools will you use to create your digital space?</i>	<i>How will students be able to access the space? (Provide as many access points as possible)</i>	<i>How do you envision this digital space will be used?</i>
Link your Digital Space here:			

bit.ly/MakingOver

Digital Examples

[Digital Makerspace](#)

[Conservation X Labs](#)

[The Library Voice: Virtual Makerspace](#)

Who is the audience?

What is the goal/purpose?

Why digital?

What will you include?

All asynchronous?

bit.ly/MakingOver

How will you build it?

Google Slides?

Google Sites?

Wix?

Wakelet?

In your Learning Management System?

bit.ly/MakingOver

Online Simulations & Resources

PhET - <https://phet.colorado.edu/>

Ck12 - <https://www.ck12.org/section/simulations/>

Jamboard Projects from [GiftedTawk](#) - [Design a Pet Vehicle](#), [Toy Reconstruction](#),
[Build a Rube Goldberg Machine](#)

Prompts from John Spencer: <https://videowritingprompts.com/author/admin/>

bit.ly/MakingOver

More Resources

[CoBuild at Home](#) - Variety of Building Activities

[Community Science Workshop Network](#) - Variety of Engineering Projects

[Exploratorium](#) - Hands-on Science Activities

[MakerEd Resources](#) - Variety of Projects for online or face-to-face



Tuscarora
Intermediate Unit 11



Lincoln
Intermediate
Unit

12

Leadership • Expertise • Innovation

Finding Partners



Possible Partners

Consider Potential Partners to Help You Build Resources for Your Makerspace: Libraries, Business, Industry, Vendors, Parents, and/or Other Community Members

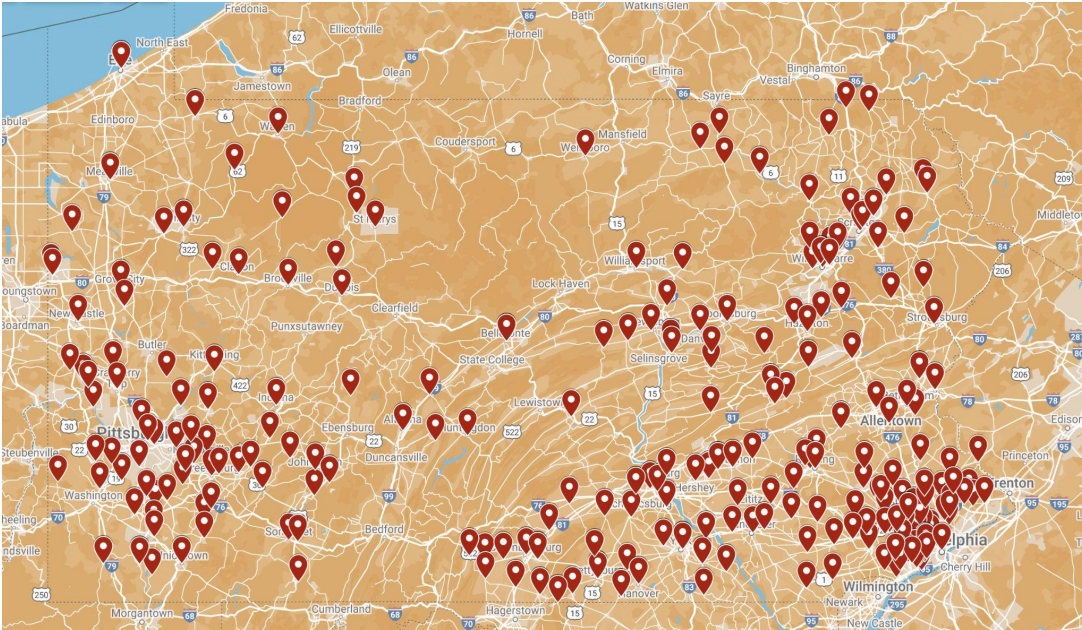
<i>Contacted</i>	<i>Name of Organization/Person</i>	<i>Area of Specialty Connecting Them to Your School/Space</i>	<i>Contact Person</i>	<i>What's Next</i>
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

bit.ly/MakingOver

Local Libraries



Local Libraries



Use Local Libraries as after school makerspaces to provide access to students.

Who else?

Local Businesses?

Community Organizations? YMCA? YWCA? Community Centers?

Families?

bit.ly/MakingOver

Action Plan

bit.ly/MakingOver

Action Plan

Mission Statement:

Vision Statement:

Goals:

Outline the major goals that will help you achieve your vision. In other words, what major changes need to occur to make this vision a reality?

Action Items

What can you do immediately to set this plan in motion? Action items can be updated and adjusted overtime as they become completed and listed under "Progress" to the right.

Core Resources

What resources will keep you grounded in your vision? This could be quotes, personal belief statements, articles, examples, strategies, etc.

Progress Tracker

Date	Progress Summary

Challenges & Solutions

Challenges	Solutions

Notes / Comments / Reminders

What is next?

To-Do Lists

Who needs to be brought on board?

What do you wish you had? What do **MUST** you have?

How will you fund it?

Where are you going to find what you need?



Nicole Bond

Supervisor of Educational Technology



@LIU12_EdTech, @msbondsgotclass



nabond@iu12.org

And a little help from:



Tuscarora
Intermediate Unit 11



Abbey Hathaway

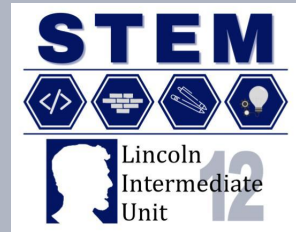
Supervisor of Educational Technology



@LIU12_STEM, @Abbey_the_Lich



alhathaway@iu12.org



Brought to you by PAIU

The logo for the Pennsylvania Association of Intermediate Units (PAIU) features the acronym "PAIU" in a large, bold, dark blue sans-serif font. To the right of the text is a vertical gold bar. A thin gold horizontal line is positioned below the acronym.

PENNSYLVANIA ASSOCIATION
OF INTERMEDIATE UNITS

WHAT IS AN
INTERMEDIATE UNIT?



Tuscarora
Intermediate Unit 11