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# Making Our Way to Equity: Designing Makerspaces for All Students



Boston Public Schools • Lesley University

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**Hello**  
**你好**

**Bonjour**  
**Hallo**

**Ciao**

**こんにちは**

**Hola**

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What does  
equity in  
making look  
like to you?



[bit.ly/18LesleyBPSEquity](https://bit.ly/18LesleyBPSEquity)

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# Making in an Education Context

## Here is what we notice:

- A new sense of wonder about learning
- An increase in students' ability to describe their thinking (metacognition)
- An increase in communication & collaboration skills
- A positive change in student engagement with a corresponding increase in identity affirmation

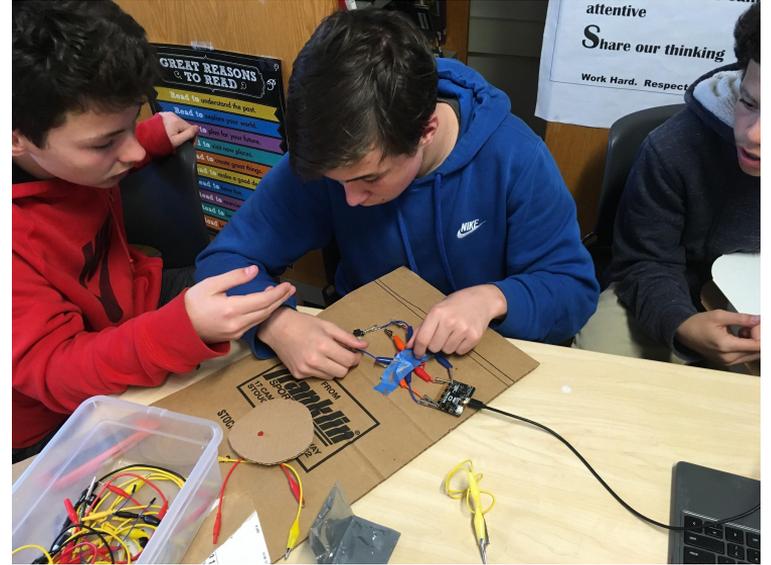


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# Implications for Equity & Access

When making is integrated into the curriculum . . .

*All students have an opportunity to engage in the curriculum in a ways that fosters critical thinking, problem-solving, and 21st century competencies.*



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**Hear the stories of Boston  
teachers.**

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# Van

I Am Poem

*Artifact from the  
Lesley/Boston  
Maker Mindset  
graduate course*



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## Alicia

Culturally  
Responsive

*“Making sure the  
environment reflects  
back to who the  
children are”*

<https://youngsteaminventors.com/>



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# Morgan

## Gender Equity

*“The best thing I've witnessed is that both the boys and girls are using these materials together.”*



# Morgan

Little pig little pig  
let me come in

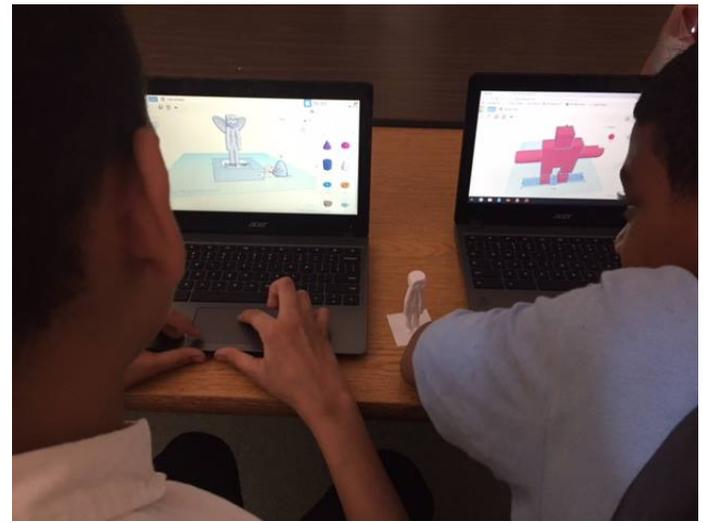
*Not by the hair of my  
chinny chin chin*

Then I'll huff and I'll  
puff and I'll blow  
your house in

*Not by the hair of my  
chinny chin chin*



# Paula



## Basketball 2.0

designed by Kamaiya and Lailanna

### Rules

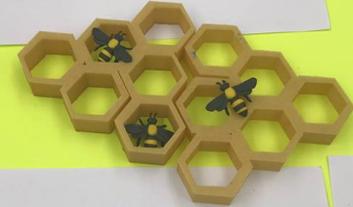
1. The first rule is to try and get the ball into the hoop.
2. If you get the ball in you get a point.
3. No cheating.
4. Each time you make a shot go back further.
5. In order for you to get a point the ball has to stay in the box.
6. You could pick any color to play with.
7. There can only be two people playing at a time

## Beehives

Beehives are consisted of hexagonal prismatic cells of beeswax.

### Beehive cells

They store their honey in these cells. A hive contains around 100,000 cells. They also store larvae in the cells.



Bee Fair  
Be kind to bees.  
Visit a bee garden.  
We all need bees.



### What are beehives made of?

They use a sticky glue-like substance called propolis as a way to make the hive stronger. They collect it from tree buds and plant resin. It is used to seal small cracks and gaps in the hive.

What types of  
Worker bees  
in a hive also

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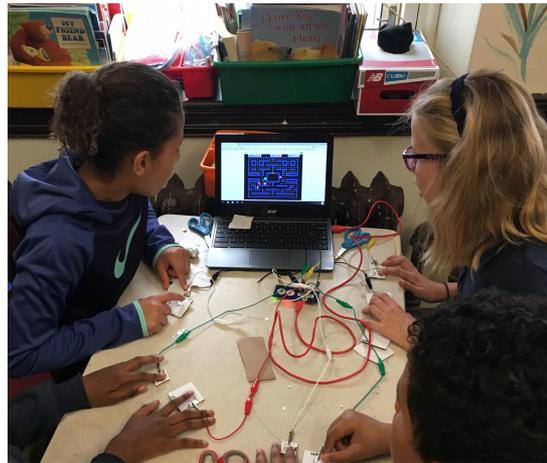
## Paula

### Inclusivity

“Making is a way for students to demonstrate their learning, to work with their peers and, in a lot of cases, to become leaders.”



# Jeff



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## Jeff

### Supporting Language Learners

*“I have students who don’t speak English as a first language but their ideas just come to life.”*





# Guidelines for Making

Let's Play:  
Learning as "Hard Fun"<sup>1</sup>

Let's Think Out Loud:  
Learning as Social

Let's Ask the Room: Learning  
as a Network of Thinkers

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# LED Lightning Clouds

Digikey (3v Coin Cell Batteries) <https://www.digikey.com/>  
Lighthouse LEDs (Blinking LEDs) <https://lighthouseleds.com/>



## CAN YOU:

- Make your make a simple circuit with the battery and LED?
  - Is there a right and wrong way to make this circuit work?  
How do you know?
  - Can you make a necklace with your simulation of a lightning cloud?
  - Do you have a strategy to help your battery last longer?
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## Debrief & Share



[bit.ly/18LesleyBPSDebrief](https://bit.ly/18LesleyBPSDebrief)

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