

Making Your Way to Mathland



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Lesley University

**“The role of the teacher is to create
the conditions for invention rather
than provide ready-made
knowledge.”**

Papert, 1998



Top 10 skills

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility



Mathematical Practice

- 1. Make sense of problems and persevere in solving them.**
- 2. Reason abstractly and quantitatively.**
- 3. Construct viable arguments and critique the reasoning of others.**
- 4. Model with mathematics.**
- 5. Use appropriate tools strategically.**
- 6. Attend to precision.**
- 7. Look for and make use of structure.**
- 8. Look for and express regularity in repeated reasoning.**

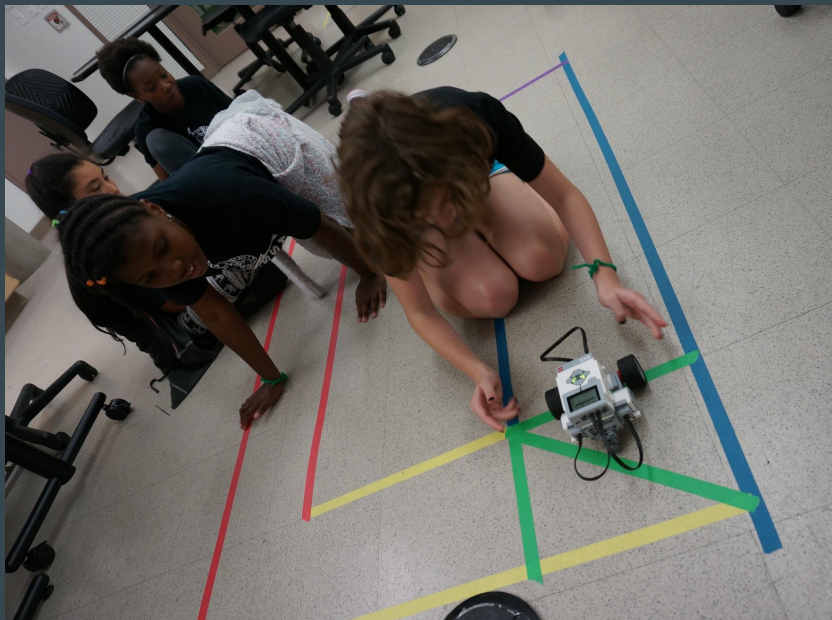
What is Making?

Making is social -
through play, tinkering,
creating, debugging,
and remixing, we build
community

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Making Thinking Visible



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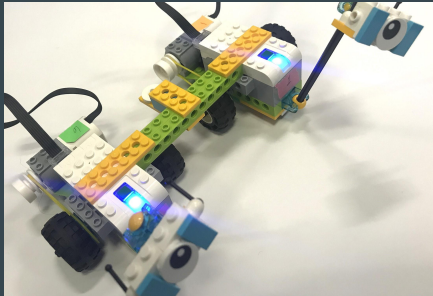
Let's Take a Tour of Mathland



Math stories
with ScratchJr



Geometry
City
With
TinkerCAD



Mars Rover &
LEGO WeDo



Bee-Bot
City

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Objective

You will reflect collaboratively on how you, as learners, used the practice standards to engage in the inquiry-process by answering the guiding questions as your tinker.

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Guiding Questions

Refer to handout

1. What did you notice about this process?
 2. In what real-world situation would programming a robot be relevant?
 3. What would you do differently next time?
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Share & Debrief

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