

Getting Started with Makerspaces and 3D Printing

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Design

Make

Teach

Makerspace?

Makerspace is an idea.

Students can learn by
Making

MakerSpace
How it
Works

Design

Build

Share

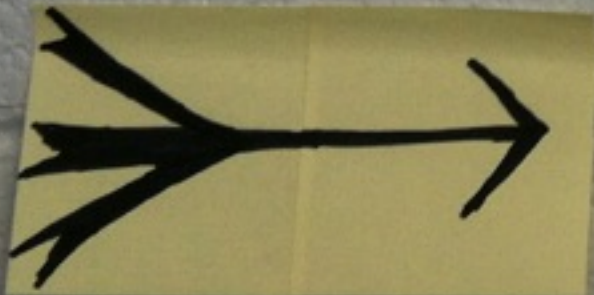
Solve a
Problem

Brainstorm

Make

Market

Answer a
Question



Hypothesize

Experiment

Publish

Fill a
Need

Think

Fab

Teach

Folding instructions at <http://www.pocketmod.com/howto/>

Mini Maker Notebook

Name: _____

Date: _____

Problem:

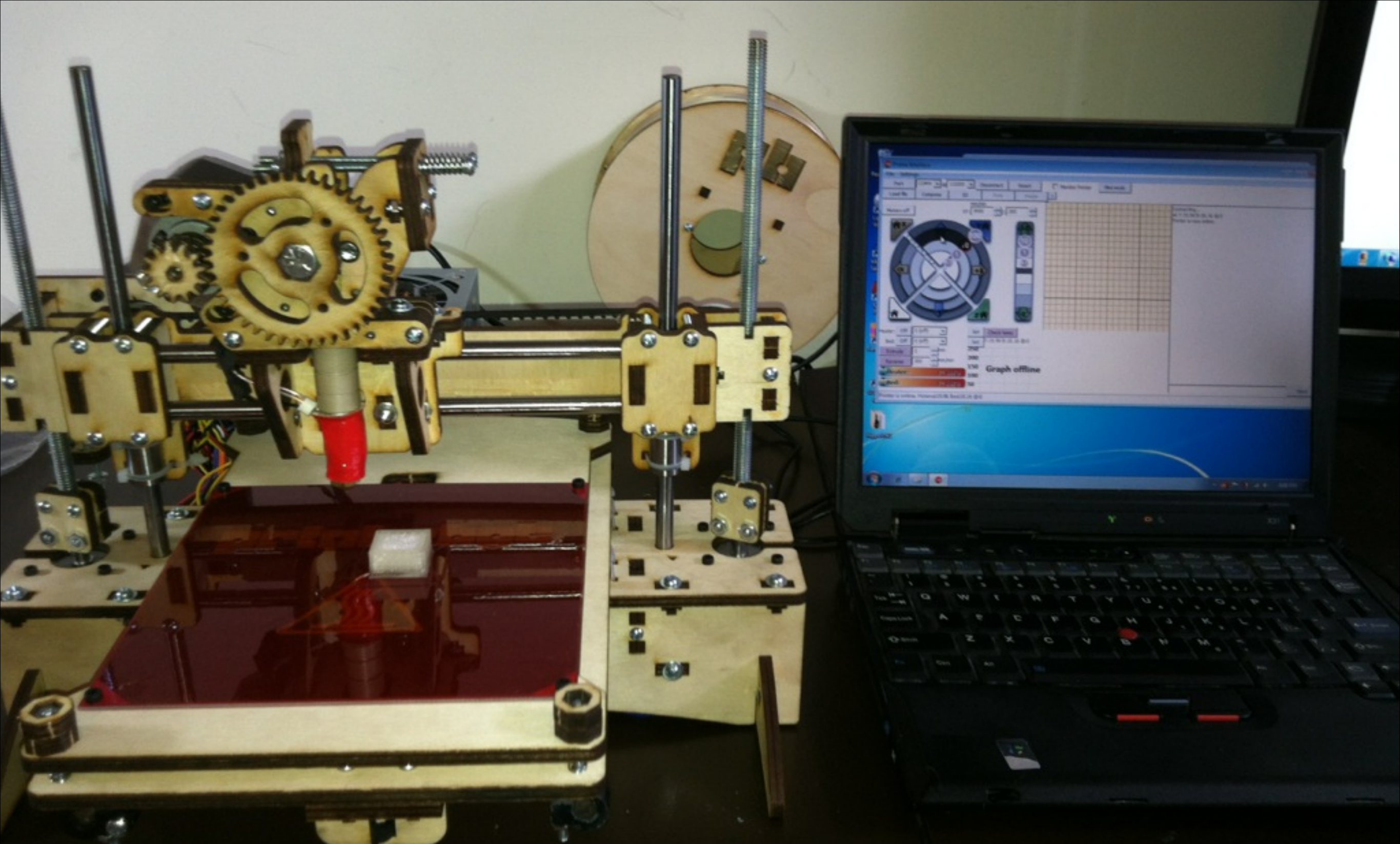
INVENT TO LEARN

The background of the book cover is a solid blue color. Overlaid on this is a faint, light blue illustration of a circuit board. On the left side of the circuit board is a directional pad (D-pad) with four arrows pointing up, down, left, and right. To the right of the D-pad are two circular buttons. The button on the left is labeled 'SPACE' and the button on the right is labeled 'CLICK'. Below these buttons, there is a horizontal bar with several small circular components, one of which is labeled 'EARTH'. A black cable with a connector is shown entering from the top left and connecting to the circuit board.

Making, Tinkering, and
Engineering in the Classroom

Sylvia Libow Martinez
Gary Stager, Ph.D.

Game Changers



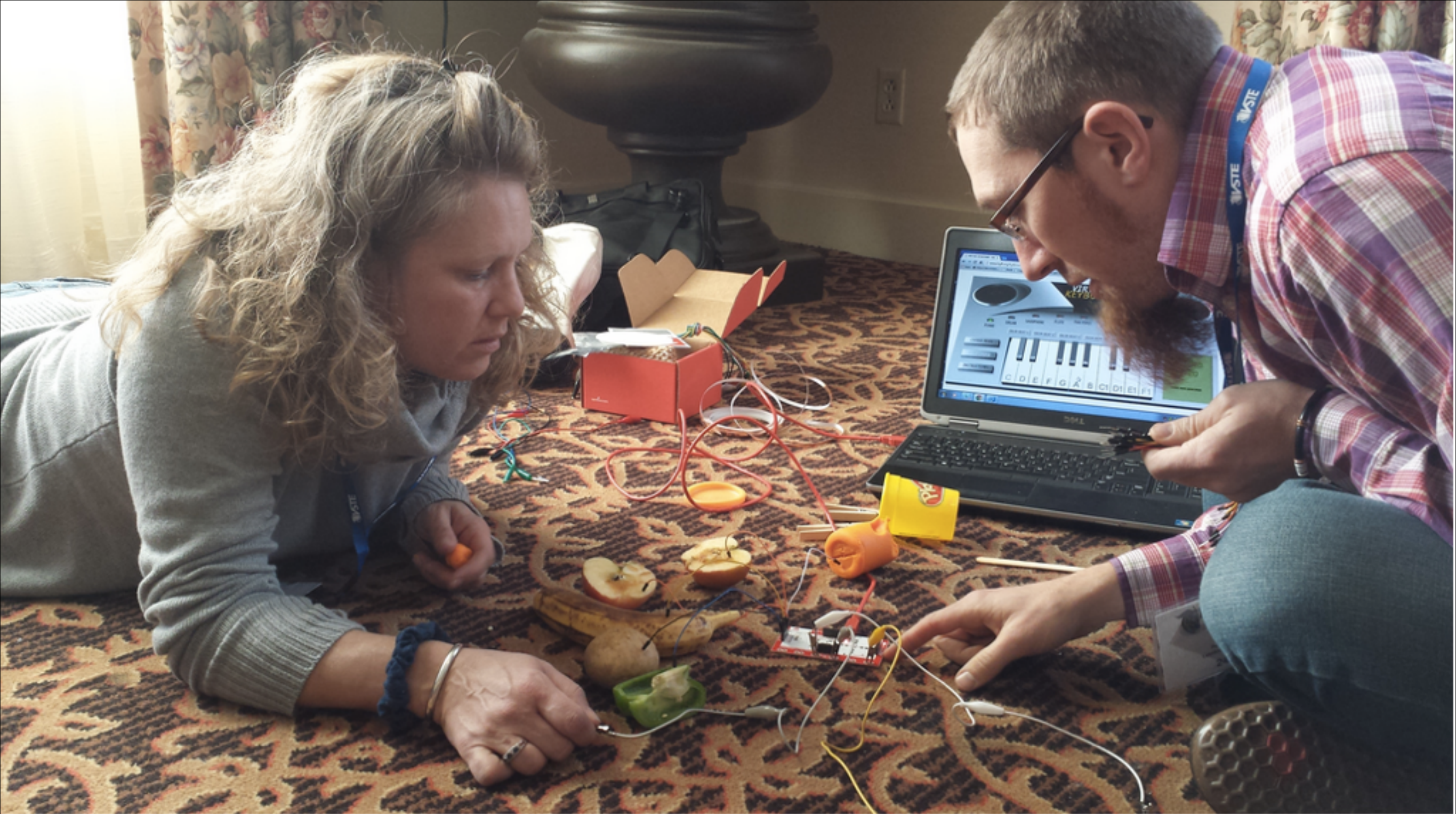
Fabrication

A photograph showing the interior of a 3D printer. A rectangular wooden block is positioned on the print bed, which is covered with a black grid pattern. A ruler is visible on the left side of the printer. A silver tool, possibly a pen or a small screwdriver, is resting on the printer's frame above the block. The printer's interior is dark, and the lighting is focused on the print bed area.

Fabrication



Physical Computing

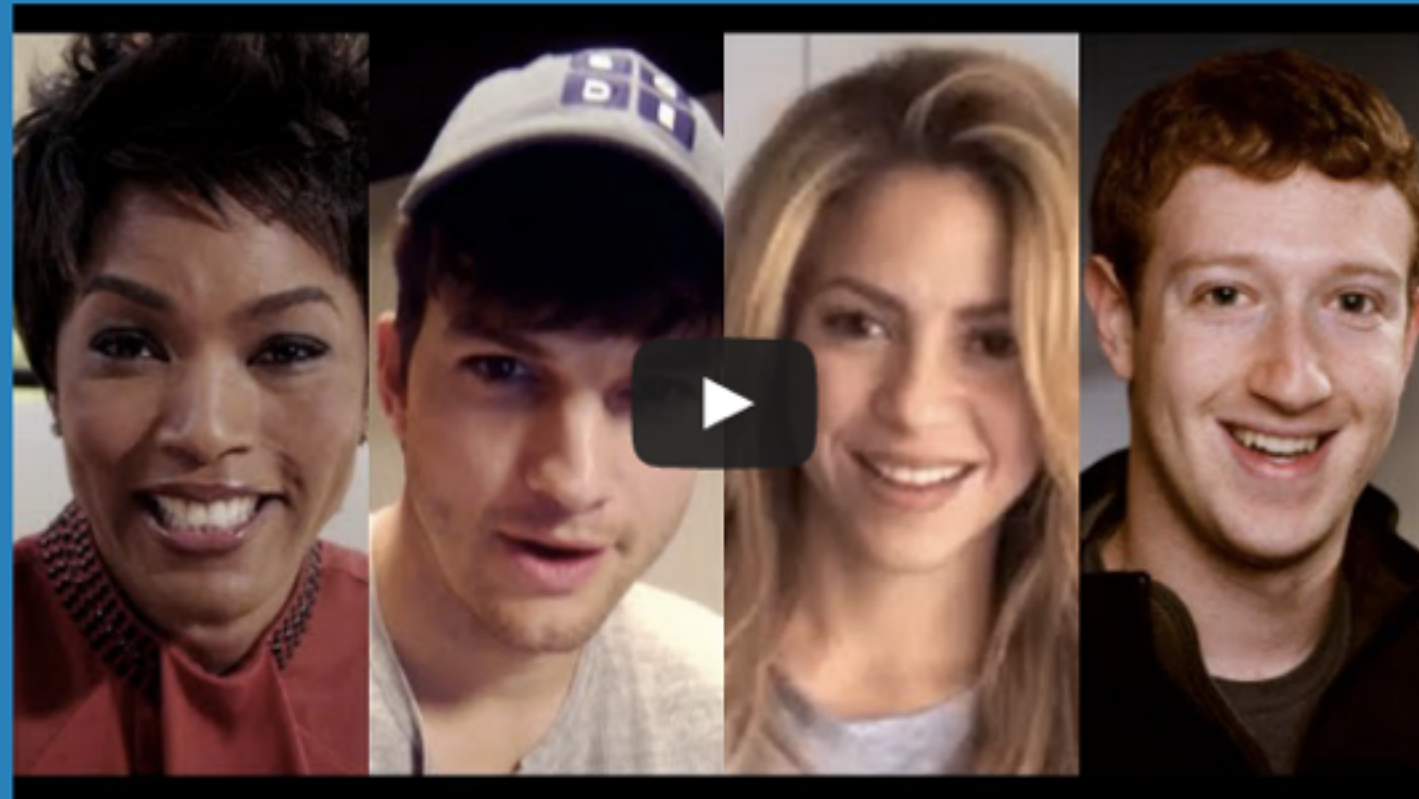


Physical Computing

Photo by @aliharper20



120,522,587 LINES OF CODE WRITTEN BY STUDENTS



4,215,024
have learned an
HOUR of CODE

Anybody can learn.

Start

Beyond an HOUR OF CODE >

 Share on Facebook

 Share on Twitter



Sign your name if you think every student in every school should have the opportunity
to learn computer science

Programming



Getting Started



Makerspace

Date: _____

Problem: Hurricane slowly
Badges

For Hurricanes
Has 2 photos to
turn into badge

36 Kids

40 total if possible
Don't need until
Wednesday

- Natural
Color

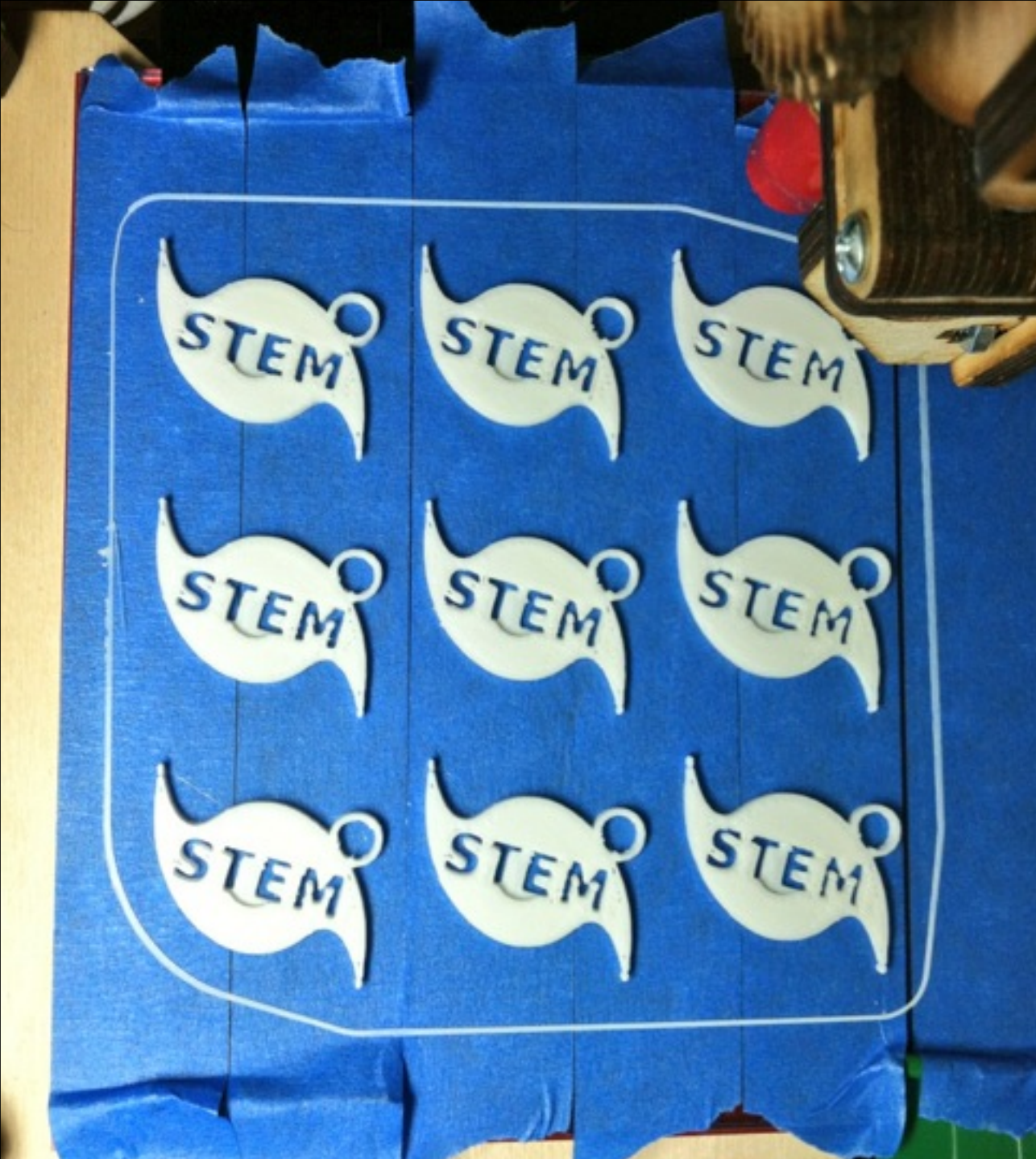
- wants to
snail-like Hurricane

~~snail-like~~ :

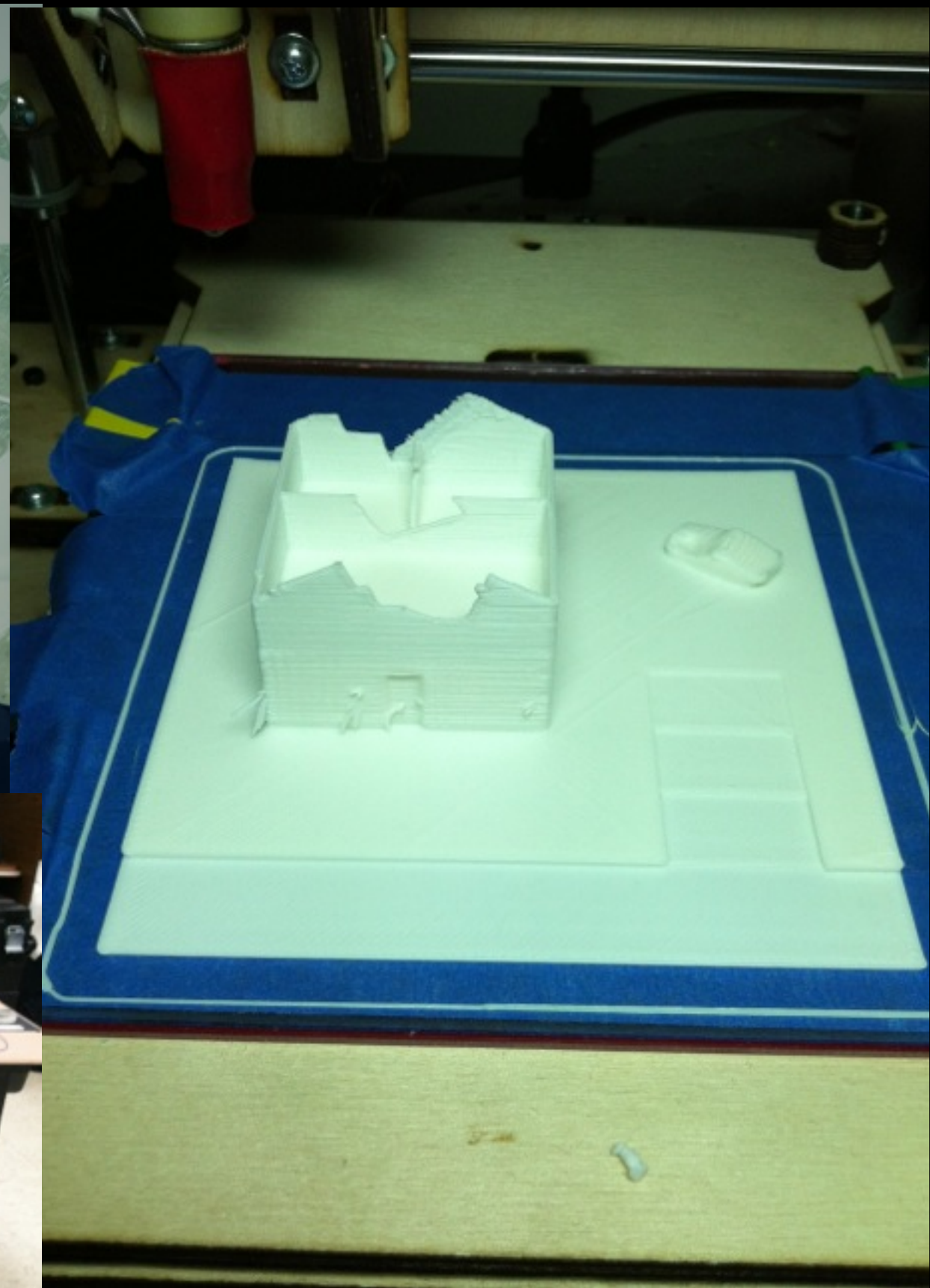
- wants eye of
hurricane



STEM Camp



STEM Camp



STEM Camp



Library Makerspace



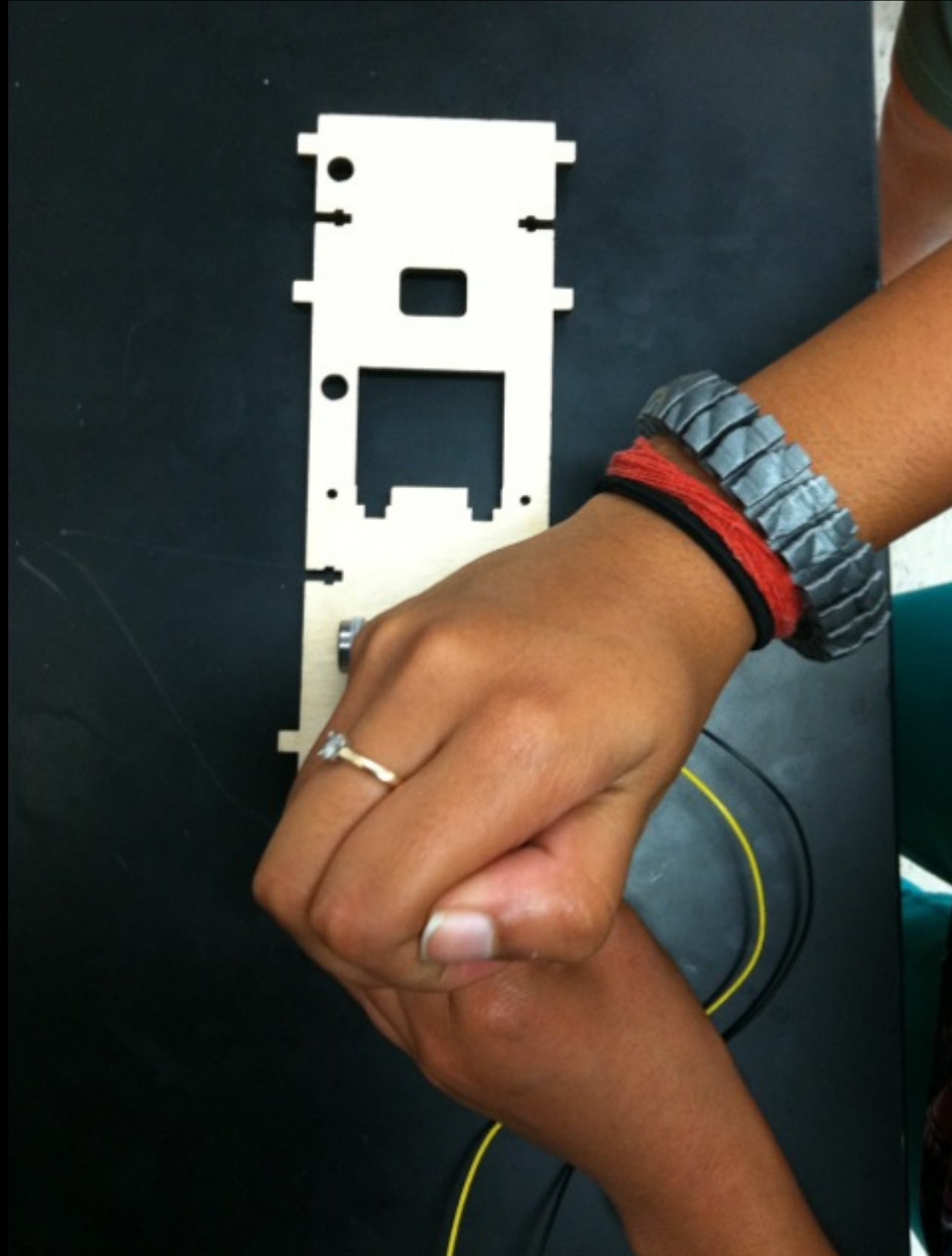
Library Makerspace



3D Printer Club



3D Printer Club



3D Printer Club



Maker PD

Learn More

- InventToLearn.com
- <http://makerspace.com/>
- <http://www.makered.org/>
- #makered Twitter chat Tuesday 9PM
- DesignMakeTeach.com