Egg Bot Lesson Plan

Amount of time Demo takes: 3-4 mins.

Try this at home!

Materials

- Egg-Bot
- Ping pong ball
- Ultra fine point sharpie

Set-up instructions

1. Position ping pong ball between 2 arms of egg-bot
2. Place sharpie wood holder on top
3. Plug everything in
4. Open inkscape on laptop
5. file> templates > eggbot > create from template
6. Go to extensions > eggbot > eggbot controls > setup
7. change pen up position to 58 and pen down position to 45

SAFETY! -- Safe demo

Lesson’s big idea

- the EggBot is a compact, easy to use open-source art robot that can draw on spherical or egg-shaped objects.
- You can control the EggBot through Inkscape software.

Background information

- This type of technology is used when working with objects or materials
that are impossible to print on.

**Instructional Procedure**
1. Use text tool to type in name and edit font (should be around 144pt for size)
2. Use select and transform objects (mouse pointer) tool to move and change size of text
3. At the top click Text > Put on Path, then click on text and then go to the top and click on Path > object to path
4. At the top click extensions > eggbot > eggbot controls > plot > click apply
5. Make sure the tip is wet enough by testing it on paper

**Assessment/sample questions you can ask**
- What kind of transformation do you do to make a flat picture fit into a sphere?
  - We start with a rectangular drawing area, which is mapped over the surface of the object. You can think of this as the way a flat map of the earth corresponds to a globe.
- How could we have multiple colors on one picture?
  - Layer the picture according to the different colors then replace the marker between each layer

**Clean Up**
- Put eggbot and extra ping pong balls back in bin.
- **Careful with the EggBot and computer. They are extremely fragile.**
- Make sure sharpie cap is on and place in bin

**References**
- http://egg-bot.com/faq/