

Silly Walks Outline

Things to bring:

- Laptops (our own)
- over head projector images to show programming steps
- how to program worksheet

Vocabulary

- program
- loop
- run (as in running a program)
- motors

Intro (On the Rug) 10-15 mins

Last week we discussed thinking like a robot and how programming takes very specific instructions. Today we are going to start with simple programming using robots that you get to build. You are going to build and make your robots move forward.

(Go Back to desks)

Show kids the basic forward-forward brick programming using slides/overhead projector. Make sure the motors are plugged into port B and C!

The Challenge: Build a robot that uses something other than wheels to propel itself forward.
(Draw EDP on Board)

Show kids example video of silly walks on computers

<https://nxt.dreschallenges.com/?p=2145>

Plan in groups for a couple minutes

Hand out kits. From now on, they will have the same kits in the same groups so make sure that you are keeping pieces organized and not exchanging pieces with other groups. Repeat programming instructions.

Have kids program the brick and turn on the motors. Make sure both partners get a chance to do this. What part of the motors move? What will that mean for our challenge?

Be creative! No two groups should have the exact same robot. Try something new. If it doesn't work, that's okay!

Allow students to build and test as many times as they want. Have them show us during/after they tested it. What worked? What didn't work? What could you add to make it better/more stable? Do you want to make it better or a different one?

Wrap Up (Back to the Rug)

Have some volunteers show how their robot moves to the class. Bring it up to the front. What is different about their idea? What worked? What didn't work?

Next week we will be talking about programming our robots, but using computers instead of simple brick programming.