Day 4: Finish Teaching Your Robot To See and Make a Course

(4 of 6 of the Robotics Club Module)

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# Summary

Students will work more on the ultrasonic sensor challenges from the previous day and if they finish they will start designing their own challenge course to show their parents. Some students may still not be done with the movement challenges also, depending on how much they struggled with them.

# Engineering Connection

Engineers often do not get things right on the first try. They have to use trial and error to get things work, just like getting the robocar to work as expected requires trial and error.

# Grade Level

4-6

# Duration

60 minutes

# Cost Per Group

~$1

# Materials List

Each group needs:

* Lego NXT robot - $279
  + including the ultrasonic sensor for the NXT robot
* A computer with the Lego NXT software installed

To Be Shared By All:

* Some paper, tape, markers, and other similar material for the students to use to make their challenge courses.
* A projector or something similar for displaying the presentation slides.

# Learning Objectives

After this activity, students should be able to:

* Work with a technology design
* Apply their understanding about science and technology
* Demonstrate abilities of a technological design
* Use troubleshooting as a problem-solving method used to identify the cause of a malfunction in a technological system.
* Use information provided in manuals, protocols, or by experienced people to see and understand how things work.

# Procedure

The procedure of the lesson, including assessments, is embedded in the presentation slides. See the slides and slide notes for more.