**EV3 Lesson Ideas**

**Lesson 4**

Materials: EV3 robots- 2 per robot, Core Competency Self Reflection resources and posters, Ultrasonic sensor video <https://www.youtube.com/watch?v=W4has2MySCs>

Objectives: Support students as they take their next steps in programing with the ultrasonic sensor.

Duration: 1hour

Lesson: Intro

* Get students back into their pairs and ask them to get their robot kits out.

**Activity**

* Next, show the video on the ultrasonic sensor (10min or 16min)
* Get students to pull out their build books and attached the sensor, they are going to have creatively problem solve how to mount the sensor on their robots to be able to sense objects form the side. The build book mounts the sensor on the front, which is not the challenge for today.
* Once on, students are free to explore coding using the ultrasonic sensor. Challenge one: can you get your robot to follow a wall?
* Once they have played around with the bot and coding give them another challenge.
  + Challenge two: can you get your robot to follow a wall and if it hits a wall, back-up, turn and keep going?