**EV3 Lesson Ideas**

**Lesson 2**

Materials: EV3 robots- 2 per robot, Core Competency Self Reflection resources and posters, intro to programming video: <https://youtu.be/IuHaIE-auLQ> and “Drive in a square using a loop block”: <https://youtu.be/1dZNr5eFeLA>

Objectives: Start to program robots, support students as they start to program.

Duration: 1hour

Lesson: Intro

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

**Activity**

* If they have not finished building, spend some time completing the builds.
* Once they have completed this, or most have, get everyone to watch the basic programming video above. Stop as you move through to explain or elaborate. You may want to break and move to laptops and get them to open the software and follow along with the video. Pausing when needed to try the next steps.
* Or, watch the entire video then have the pairs get a laptop or move to a computer, with their bot and the USB cable.
* Walk everyone through how to access the software, like the video did. Review the basic functions of the software.
* Next, review what all the buttons and ports are on the bot and what they do, to a point.
* Have the students try some basic programming, let them explore and learn about the software.
* Get them to move their bot in a straight line forward and then backwards to their starting position.
* If ready, provide them with the link to driving in a square, <https://youtu.be/1dZNr5eFeLA>

Students can watch this and try to program a perfect square. Set out a chair for them to drive around.

* At this point students may be working at different rates as some may have more experience than others. This is normal, let them work independently and have a working group that needs more support.

**Conclusion**

* Get the class to log off the computers
* Return their bots to their totes
* Complete a Core Reflection activity