**EV3 Lesson Ideas**

**Lesson 2**

Materials: EV3 robots- 2 per robot, Student workbook, intro to programming videos: Dawn’s video- <https://youtu.be/UC5Bqo4b3LU> YouTube videos- <https://youtu.be/IuHaIE-auLQ>

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 and get a laptop or desktop open.

**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 – the one by Dawn explains how to access. 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. Students can open their EV3 workbook (not the build book) to page 10 (this is the first page) and try “Task One” up to “Task Nine”. In this, students will learn about two-wheel turns and one-wheel turns (Pivot turns). Please note, to do a pivot turn they will only need to use the single wheel move block. This is to the left of the “Move steering block” that they have been using.
* 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