Designing digital solutions using the BBC micro:bit

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The BBC micro:bit is a compact, codeable computer bursting with features. The micro:bit can be used by students from primary to secondary to create all sorts of solutions across many learning areas. School gardens are a popular activity in Australian schools, and an excellent resource for the teaching of biological science and food and fibre production. Micro:bit technology can allow students to build digital devices to collect data about the garden, measure pH or sunlight and even create a device to regulate the watering.

Micro:bit can allow students the creative freedom to design digital solutions to real world problems.

Participants will:
- review the Digital Technologies curriculum (presentation)
- become familiar with the BBC micro:bit
- investigate options and extension opportunities
- design a working fruit detector
- identify professional learning needs for themselves and their school (brainstorm activity)
- use the UNESCO Sustainable Development Goals to identify opportunities to create ‘real’ solutions
- engage with a variety of existing BBC micro:bits projects to identify opportunities