Computing Unplugged: some practical ideas (proposal 25)

Facilitators:

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Objectives:

To demonstrate, explain, and share ways that "unplugged" activities can be used to teach computing concepts.

Methods:

This will be a hands-on workshop where participants will engage in some of the activities, then discuss their relevance and ability to transfer to different contexts.

Outline:

Many ideas and concepts in computing do not require a computer to understand, and the introduction of technology can sometimes distract learners and obscure the computational concepts being developed. Computing unplugged is a general approach to teaching computational thinking skills away from a computer. This workshop will illustrate a range of computing unplugged activities that can be applied to a range of learning settings and that develop a range of computational thinking skills.

The workshop will show how the computational thinking concepts of logic, algorithms, decomposition, pattern-finding, abstraction, and evaluation can be illustrated and explored through a number of physical and paper-based activities. The activities explored in the workshop are organised around the themes of robots, musicians, artists, explorers, codebreakers, magicians, gamers, cooks, and scientists.

Participants:

6–20

Space requirements:

One room, plus space outside, half a tennis court or so. Ideally somewhere we can draw on the ground with chalk and have people move along the lines.

Special equipment:

2 × flipchart and markers. We will provide string, chalk, etc.