

Circuits - Create an Automated Device Animation

Topic: Computer Science; Programming and Control



Curriculum Objectives:

- Use all their knowledge to create an automated device that will assist a modern day problem

Timing:

2 or 3 lessons

Resources and Planning:

- Steam Little Bits Set - for testing
- iPad / Camera

Task:

To Create a device that they could sell that would help a certain aspect of a person's life.

Learning Structure:

Now that students have the knowledge of creating circuits and how they can be triggered, they can start designing theoretical solutions to problems.

Splitting the class into small groups, they will be tasked with coming up with an idea that they would like to address and then invent their own solution to this using technology.

Once the group have agreed their problem, they need to agree on how this can be triggered and how that assists the problem that they face.

Students should not only create a diagrammatical representation of their solution but should think about how they can market this product/solution in the future. This means that they will need to come up with a name, slogan, advertising campaign etc explaining how this wonderful invention can solve the problem.

Greater Depth Learning:

Students adapt the learning that they are using here to creating apps for the mobile phone as the skills that have been learnt are transferrable. This will fit neatly into the computer curriculum and future coding sessions.

