Designing and developing digital outcomes: Exemplar 2





Turning on the TV

Annotation

Lindy shows that she:

- · can identify the inputs and outputs of a system
- understands that when we give a digital device an input, the device processes it and produces an output.

Background

Lindy has been learning that digital devices receive inputs and produce outputs.

She has previously learnt that if she wants to use an image from the Internet, she needs to make sure the person who created the image allows other people to use it without charge.

Task

The students are given a brief to create a flowchart that shows the sequence:

- giving input to a digital device
- · the device processing the input
- the output of the device.

They work with Mr Hughes to each select an image of a digital device to work with, and find suitable images of an input, process and output for the device.

They then import the images into the Book Creator application on an iPad. They use the app to make their flowchart and briefly describe what is happening at each stage.

The task gives the students the opportunity to practise creating meaningful texts, using a particular layout and visual language features to communicate their understanding.

Student response

TV flowchart









We use the remote.

The TV turns on.

We can watch the TV.

Mr Hughes: Can you tell me which bit of the television system is the input?

Lindy: The remote is the input – it's how I switch it on.

Mr Hughes: Why is the remote the input?

Lindy: Because it's how I tell the television what to do.

Mr Hughes: Can you think of another digital device that has a different kind of input?

Lindy: Our microwave at home has a keypad.

Mr Hughes: So now you've used the remote to switch the television on, could you use

the remote in another way?

Lindy: I could turn the volume up or change the channel.

Mr Hughes: So which bit of your sequence is the output?

Lindy: It's what comes out of the television.

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