Designing and developing digital outcomes: Exemplar 5





Video of a system

Annotation

In writing their script and filming, editing and exporting their film, the students show that, when given criteria and tools, they:

- can independently make decisions about creating, manipulating, storing, retrieving and sharing content that has been developed for a specific purpose
- understand the particular roles of components in an input-process-output system and how they work together
- understand that inputs are transformed into outputs within a system and the "control" role that humans have in this
- are able to use a software application and a range of file types to meet a specific purpose.

Background

The students have been taking multimedia classes once a week during their Special Interests time. In these classes, they have been working on script writing, filming with iPad mobile digital devices and digital cameras, and editing film using different software applications.

In their technology class, they are learning about computers and how digital devices contain a central processing unit (CPU) that carries out instructions from computer programs and processes data.

Task

In groups of 4-5, students are asked to create a video that shows the role of components in an input-process-output system and how people can interact with these. They are able to choose the type of video they will make (e.g., filmed people with props, stop-motion), how they film it and how they edit it.

The task gives the students the opportunity to practise working collaboratively to achieve a specific outcome.

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Student response

Together a group of five students write a script for their video. Rhiannon, Ruby, Shakira and Zoe act out the script, and Ben films it using an iPad. They work together to edit their video clips and add sound effects using the application iMovie.

In the film, Shakira, Ruby, and Rhiannon give a computer (played by Shakira with a box on her head) inputs to process and receive outputs from it.



Ruby writes a message and says, "Give the computer this as an input." Rhiannon puts it into the "computer" by handing it to Computer-Shakira.



A dial-up Internet sound effect plays while Computer-Shakira takes the piece of paper and pushes it into the box.



Computer-Shakira says, "Scanning ... scanning ... processing ... processing. The message says, 'Ruby is cool.'"

The students gasp in amazement.



Zoe asks Ruby to find some colouring-in pages online. She wants a picture of a cat. Ruby says, "I'll use the keyboard to input that. C-A-T, enter."



Computer-Shakira beeps and says, "Processing ... sending to output. Here is your picture of a cat. Have a nice day." She pulls a piece of paper out and hands it to Zoe.



Ruby and Rhiannon also each search for a picture and receive an image from Computer-Shakira.

The project containing the students' film can only be viewed in iMovie, so when they complete their video they export it as a MOV file. This enables them to share it by email with Ms Ramirez and to import it onto the school's computers.

Downloaded from http://technology.tki.org.nz

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ISBN: 978-1-77669-215-6

