

PTkau: 03: Intro: What is Designing and developing digital outcomes?

Video Name: eTextiles with Y9

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Another project that we did with the same group of students was to create an eTextiles garment. This culminated in a fashion show of all the garments. The students had been learning about electronics and a little bit about programming and we wanted to see how can we combine that with other areas of technology and show the creative side of electronics and programming.

We learned about the LilyPad Arduino. There is LilyPad components in here, there is conductive thread behind here, LEDs, different elements. The girls worked in teams. They came up with their design for their garment. They had to come up with their theme and their design. They had to sew the circuit in. They had to do some costing. I gave them a budget and they had to look up how much it would cost for each one of the components that they needed. So they had to do some designing, some sketching to see how many components that they might need and they had to stick within their budget. In this particular example the girls used some different textile processes (tye dying, screen printing), and then they put in their electronic components.

This other one [another garment], because we were working with LilyPad Arduino, they decided to come up with a whole theme around lily pads. They did all of the felting. The felting bits they designed so that they could sew in their components as well.

Each team came up with a unique dress idea. They were all quite spectacular. They also came up with some promotional materials. We had an end of year fashion show in the hall and put them on display for all of the students to see.

One of the things that was really nice about this in context is that we were actually discussing how the world is moving to wearable technology and the impact that wearable technology will have on us. That was a nice way to build in part of DDDO about digital technologies in society. There were a range of different ideas. Some girls had, just like we do with our fitbits, things working based on motion. We had magnetic reed sensors so one team had it so that when you put your hands in pockets it activated a magnet and turned the lights on.

They learned different ways that wearable technology is actually impacting our society and then brought that into a creative stream.