



Finalist 'Best Coding Project'

Name: Sarah Burnett

School: Upper Harbour Primary School, Auckland

Name of coding project: Game Design

1. Describe the coding project that you want to be considered for the award?

Our inquiry concept for Term 3 was Design. I decided to use this concept as an opportunity to learn coding with my Year 3/4 class. We explored Game Design. We started off by completing the Hour of Code (code.org). Then we moved on to using the resources from Google's CS First. Each week we used the video's and Scratch platform to design different types of games (maze, platform, escape and racing) To supplement the idea of 'game design' we have also been designing physical games using resources from the Institute of Play.

2. Why did you choose to use this project?

Coding was something I had always wanted to teach but had been a bit apprehensive about due to my lack of knowledge of it. I am 3/4 of the way through a Postgraduate Certificate through The Mind Lab and one of my assignments was on how I could introduce coding to my school. I decided to put my words in to action. My students are also big consumers of games - we use a lot of game websites in class to supplement learning. I wanted them to become creators of games as we as learn something I was not an expert in because it meant they couldn't rely on me to help them!

3. How did you implement and use this project?

We are not a 1:1 school so I set about booking every spare laptop and iPad we had available in the school every Tuesday afternoon. This meant we nearly had enough for 1:1 and if not, 1:2. I set up usernames for the Hour of Code as well as issuing them with their 'passports' from CS first. Each Tuesday we would watch the first instructional video together then they were off and left to their own devices. We shared the games we've made with our families at our Sharing Our Learning evening.

4. What outcomes has it achieved for you and your class?

My students were immediately hooked on completing their Hour of Code and I was amazed at how good they got at helping each other, rather than seeking support from me. There were a few initial technical difficulties (mainly my students' inability to spell logins and passwords correctly!) but by the end of the term, they were pretty good at solving their problems independently. I even managed to make my own game in the last session because not one student needed my help! One of the best outcomes was seeing the growth mindset of some of my students.

One girl in particular (who was naturally a high achiever) really struggled with coding. I gave her some tips to make it easier for her and after our 4th session she came up to me and said 'Last week I

needed your help but this week I did it all on my own. I'm so proud of myself I think it was great to learn alongside my students and they enjoyed working on projects together, rather than fighting to have a device all to themselves. Here are some of the games my students made -

<https://scratch.mit.edu/projects/77947506/> <https://scratch.mit.edu/projects/77943610/>
<https://scratch.mit.edu/projects/75681084/> <https://scratch.mit.edu/projects/74828660/>