An Introduction to the Program

Coding & STEAM 2019

Mr Daniel Hickmott & Dr Elena Prieto-Rodriguez

Week 1: An Introduction to Scratch

1st August 2018

Welcome!

- We acknowledge and respect the Pambalong clan of the Awabakal people, traditional custodians of this land.

Logistics & Admin

- Logging on

- Bathrooms

- Fire Alarm

- Security

  - 4921 5888

Introductions

- I'm Mr Daniel Hickmott

- Finished Bachelor of Software Engineering in 2014

- PhD Candidate @ School of Education since 2016

- Currently researching how K-12 teachers:

  - Learn Coding and Computational Thinking

  - Teach these skills in different KLAs

Introductions

- I am Dr Elena Prieto-Rodriguez

- I studied a Bachelor of Mathematics

- I studied a PhD in Computer Science at UoN

- I subsequently work in Bioinformatics for a number of years

- Since 2012 I have worked in the School of Education

Introductions: **And You?**

Program Context and Research

- Global push to bring Coding into K-12

- In K-6 NSW: the Digital Technologies strand of the Science and Technology includes Coding

- This project investigates how Stage 3 teachers learn and teach Coding

- The findings could help other educators and researchers improve PL in this area

Surveys

- We will ask you to complete two surveys during program (should take 10-15 minutes to complete)

  - Pre-program survey today

  - Post-program survey in Week 8

- Completely optional

- We will give you time to complete the first survey now

NESA Accreditation

- 8 after-school sessions here in the lab

- NESA Accredited for 32 hours:

  - 8 x 2 hour sessions

  - 8 x 2 hour weekly homework tasks

- We can help with homework tasks during session or through email

The Website

- cs4s.github.io/steam-2019

- Has all program materials, homework, links...

- We will use this website every week!

The Website: Essentials

- Materials

  - Presentations

  - Activities

  - Homework

  - Links

The Website: Extras

- Related Research

- Session Outcomes:

  - Stage 3 Syllabus Outcomes

  - AITSL Professional Teacher Standards

  - ACARA General Capabilities

  - ACARA Digital Technologies Content Descriptors

Schedule: Part 1/2

Session	Date and Time
Week 1: An Introduction to Coding with Scratch	Thursday 1 August 5:30pm - 7:30pm
Week 2: Teaching Coding with Scratch	Thursday 8 August 5:30pm - 7:30pm
Week 3: Coding and the Creative Arts Part 1	Thursday 15 August 5:30pm - 7:30pm
Week 4: Coding and the Creative Arts Part 2	Thursday 22 August 5:30pm - 7:30pm

Coding & STEAM 2019 Program

Schedule: Part 2/2

Session	Date and Time
Week 5: Coding and English Part 1	Thursday 29 August 5:30pm - 7:30pm
Week 6: Coding and English Part 2	Thursday 5 September 5:30pm - 7:30pm
Week 7: Coding and Mathematics Part 1	Thursday 12 September 5:30pm - 7:30pm
Week 8: Coding and Mathematics Part 2	Thursday 19 September 5:30pm - 7:30pm

Today's Session

- A presentation about Coding and Computational Thinking

- An introduction to Scratch

- Scratch activities that involve applying Coding concepts

- Wrap-up in the last 5 minutes