Collaborative Lesson Planning Activity – Group #3

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

Digital Technologies Content Descriptor

ACTDIP010: Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (Stage 2)

NSW Syllabus Outcomes

(N) S2 Data Strand - Maths
Working Mathematically
Position - grid points, x, y axis, compass directions

(L) Informative texts - procedures

(S&T) Developing & applying a plan & sequence for production that considers time & resources.

Title and Introduction An Introduction to Coding.

Metalanguage Position, grid points, procedures, loops,

Activity

(L) Write a detailed procedure for a set problem (eg walking to the office).
(N) Computer Science - unplugged - Black & white position activity.
(S&T) Lightbot - a) 2 lessons introduction to basic coding.
b) Follow a sequence using the fewest number of steps.

Scratch - 1) Model - Moving L, R, U, D, change background
2) Add a sound, add a sprite,
3) Start a dance & use repeat function
4) Speech
5) Say something
6) Green Flag

Assessment and Reporting

- Can identify and solve simple problems using a sequence of steps.
- Follow a sequence in the smallest number of steps.
- Assess saved Scratch creation.

Resources Computers (or lab) / ipads
Scratch apps installed.
CS unplugged - Binary numbers sheet.
Scratch instruction manual

Potential Challenges - computer/ ipad access