Collaborative Lesson Planning Activity

Digital Technologies Content Descriptor
Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008)

NSW Syllabus Outcomes
- using a range of methods including tables and simple column graphs to represent data and to identify patterns and trends, using digital technologies as appropriate (ACSIS057, ACSIS068)
- using a range of methods including tables and simple column graphs to represent data and to identify patterns and trends, using digital technologies as appropriate (ACSIS057, ACSIS068)
- **identify and interpret the different forms of visual information, including maps, tables, charts, diagrams, animations and images NICT**
- **use visual representations, including those digitally produced, to represent ideas, experience and information for different purposes and audiences CCTICT**

Title and Introduction: Fonts, Pixels and Coding

(Ignition) How can computers display letters when they can only use electrical pulses (the display is made up of "yes or no")

(Activating prior knowledge) odds/evens, musical chairs, stand up sit down, heads or tails, (game with only two outcomes)

Metalanguage
Pixels   Branching
Binary   Coding
Pulse
Font
Decisions
Variable

Activity

(Model) Display the font code and show students how to interpret the code into a visual display

(Guided) Pair activity complete blank grid for new letter

(Independent Individual) Students create a font (letter) on grid paper and write code on separate sheet

(Reflection swapping activity) Partner interprets code in to a visual display. Feedback to class.

(Extension/Homework) student does personal initials/worksheet activity

Assessment and Reporting

(Reflection swapping activity) Partner interprets code in to a visual display. Feedback to class.

Resources
Grid paper
Pencils
Erasers
http://csunplugged.org/wp-content/uploads/2014/12/unplugged-02-image_representation.pdf