3RD AND 4TH CLASSES: EXAMINING THE LOCAL BUILT ENVIRONMENT

BACKGROUND

The class is looking at the local area in both History and Geography lessons. The school is located near the Grand Canal in Dublin and have been investigating about how the canal worked.

They visited the local lock gate and discussed the process of opening and closing the gates. They then spent time discussing the history of canals and researched canals that are still important today, such as the Suez and Panama canals.

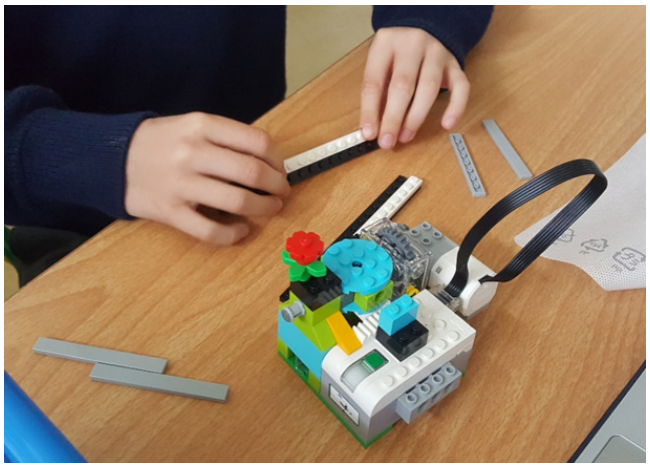
Conversations then moved to boats passing through the lock gates and under bridges. The children began to look at how technology could help to make it easier for this to happen.

TASK

The children are broken into groups are given two tasks;

Task 1: To use Lego WeDo 2.0, design a bridge using motors and code to raise as a boat approaches and then lower, when the boat has passed through.

Task 2: Using Lego WeDo 2.0, build a boat using motors and code that move the boat to the bridge, stop until the bridge has risen, and proceed underneath the bridge.



CHILDREN'S WORK

The children spent time researching various types of bridges online. When they had decided on a suitable bridge, they sketched out what they intended to make. When this was complete, they began to build their bridges.

The children worked in groups of three, alternating their roles between builder, programmer and lego piece finder.

The children worked to debug their designs incorporating timers and sensors during trials to problem solve collaboratively.