

JUNIOR AND SENIOR INFANTS: USING BEEBOTS TO DEVELOP SPATIAL AWARENESS

BACKGROUND

Children are experiencing and learning about spatial awareness. They had worked on this theme for a number of weeks beforehand. They are also reading the book 'Where is Spot?', highlighting the use of language associated with position and spatial awareness.

They have built a 3-D maze from our classroom tables and each child has given directions to a blindfolded classmate to negotiate the maze and find our classroom Teddy.

Children had previous experience of working in groups and pairs.

TASK

Children are given lollipop sticks, and asked to build their own maze for a BeeBot to navigate at their desks or on the classroom floor.

Children work in groups of 3 with assigned roles (a programmer, a speaker who narrates the algorithm and a builder).

Children use lollipop sticks, as they are roughly the same length as one movement of the BeeBot going forward. This make it easier for the children to count the number of movements the BeeBot needs to make to complete the task.

CHILDREN'S WORK

Children built the path and voiced the algorithm.

The programmer programmed the algorithm using directional language (forwards, turn left, turn right) to get the BeeBot to move.

They then debugged the algorithm to explore why their BeeBot may not have followed the path built for it.

They later used different coloured lollipop sticks to build and write code (Red=forwards, Green=backwards, Yellow=left and Blue =right).

