Case Study

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Grade 1

Matatalab Coding Set

How many kids are in a group

20

How was the Matatalab robot(s) used?

The students followed the Challenges within the books that came with the kit. We used all 3 activity books. We had x4 kits. So small groups of 4 to 5 worked on a table with a kit. Classroom teacher and myself rotated through thegroups to assist where needed. Matata Lab was a good natural progression from an initial intro to coding andcomputational principles with Bee Bots. Students had also done some 'Unplugged Coding ' with me. Students had 1x 50 min lesson a week for 5 weeks. Term was 10 weeks. First half of Term was Unplugged Coding and Bee Bots.

We also adapted the Matatalab kit for simple maths operations. (see attatched pic 1B). Milk bottle lids of variouscolours had either a multipli-cation, addition or subtraction sign placed on them. They acted as markers that could beplaced on the board. We created ten additional white lids with the numbers 1 to 10 on them. The code then needed to be written to visit the correct milk bottle lids to get the correct answer.

What skills did it develop?

Sequencing. Problem Solving. Pattern recognition. Understanding basic coding language such as Repeat and Loops. Writing and reading Algo-rithms.

What worked best and what was challenging?

Students understood the basic principles of finding the correct 'tile' and then placing it in the correct order. In each group of 4 or 5 we would get the students to take turns being the "banker" & the "code master".

The bankers role was to look after the tiles and keep them in order. The banker initially would lay out all the tiles in an array that made it easy to access the tile needed by the code master. The code master would ideally ask the banker for the tile they needed. We then tweaked this so a template was produced for the banker to simply place the tiles on. (see attached pic 1B & 6). Challenge Book 3. This book caught a few students out - who hadn't mastered the skill of using the Repeat blocks or Loops.

How did students respond?

Enthusiastic. Responsive. We had a review session at the end of each lesson. In this review session, students had their own min white boards. Teacher would ask

questions and present the question on the SMART board or sometimes just verbalise a True or False question. Questions mainly took the format of pictorial in nature due to language difficulties of Kindergarten.

Share your comments upon the class using Matatalab

The product has merit. Simple to operate and intuitive design saw children pick up on what to do very quickly.

Any others you would like to share

Now that the Pro Sets have arrived I am excited to have the Grade one students start exploring with the music add-on and the artist add-on. Can't wait to see what these students will create with purpose and passion!.