**Teachers Notes**

The following notes are a guide and suggestion that will assist you in delivering the lesson content, while also supporting students to achieve the intended learning outcomes.

**Alternate programmable devices that could be used if BeeBots were not available:**

LEGO Mindstorms

Robotics Dream

**YouTube Clip on how to use BeeBots:**

BeeBot: a class introduction- <https://www.youtube.com/watch?v=52ZuenJlFyE>

**YouTube clip of a BeeBot dance:**

BeeBot Box Tango Dance- <https://www.youtube.com/watch?v=WmlokmEtpMg>

**The following Websites and YouTube clips will assist you in teaching as accessing student prior knowledge on how to conduct a survey, count using tally marks and how to create a bar graph using the data collected and recorded using the tally marks:**

Counting Tally Marks 1-10- <https://www.youtube.com/watch?v=P_UZiA_oxaY>

Tally Charts and Bar Graphs- <https://www.youtube.com/watch?v=Cj6gvSCwoo4>

Bar Graphs for 2nd Grade Kids- Create your own Bar Graph- <https://www.youtube.com/watch?v=oYXmY5axC2I>

**Creating the Interactive Graph**

When class is up to creating their interactive graph show them one way they can create their interactive graph and then brainstorm with the students other ideas they could use to make the graph interactive.

**An Example of the Graph is:**On a piece of butchers paper the teacher will have a large grid drawn up that you can place your data on.  You will fill out the bottom of the graph with the dances names and then on the left side write 1-25 for the number of students that liked the dance. Using the BeeBots you might like to stick a piece of colour ribbon on the BeeBots and then program them to move up the column to show the number of students that liked that dance, leaving behind the BeeBots will be the coloured ribbon.

**The following digital resources and websites can be used if you decide creating the interactive Bar graph using the BeeBots is something you do not want to complete with your class:**

Make a Bar Graph- <http://www.mathsisfun.com/data/bar-graph.html>

Create a Bar Graph- <https://nces.ed.gov/nceskids/createagraph/>

**Reference**

Kauker, K. (2015, April 20). Tally Charts and Bar Graphs [Video file]. Video posted to <https://www.youtube.com/watch?v=Cj6gvSCwoo4>

Kids’ Zone. (2016). *Create a bar graph.* Retrieved 30th May 2016, from <https://nces.ed.gov/nceskids/createagraph/>

Math & Learning Videos 4 Kids. (2014, December 17). Bar Graphs for 2nd Grade Kids -
Create your own Bar Graph [Video file]. Video posted to
<https://www.youtube.com/watch?v=oYXmY5axC2I>

Math is Fun. (2014). *Make a bar graph.* Retrieved 30th May 2016, from <http://www.mathsisfun.com/data/bar-graph.html>

PicTrain. (2014, February 8). Counting Tally Marks 1-10 [Video file]. Video posted
to <https://www.youtube.com/watch?v=P_UZiA_oxaY>

TTs Group. (2012, September 15). Bee-bot: a class introduction [video file]. Video posted to <https://www.youtube.com/watch?v=52ZuenJlFyE>

UKAmyBaby. (2011, April 15). BeeBot box tango dance. [Video file]. Video posted to <https://www.youtube.com/watch?v=WmlokmEtpMg>