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| **Digital Sandpit Grade 1 2018 3 Lesson Rundown**  **Dash & Dot** |
| **General Information:** |
| This set of three lessons have been put together specifically for Terms 1 and 2, 2018, as the groups you will have, did not get to use Dash last year during Foundation Sandpit activities. Feel free to modify or adjust the lessons, depending on how the students go with them, you could also get a copy of the Foundation or Grade 2 versions of this doc for differentiation ideas. In 2018, there should be more structure and less ‘free play’ with the Digital tools.  *For these lessons, you will be using these apps:* ***Wonder*** *and* ***Blockly****. Check they are downloaded on the iPads you plan to use with the students. It can help if students work with the same partner each week and use the same numbered iPad as work done in Blockly is saved to the iPad, and if need be, is there the next week for them to go on with.*  If you get a chance, it would be helpful to borrow one of the Dash robots, and have a play with it using the Blockly app, so you can see what sort of things the students will be doing, and where they might have problems / difficulties.  If you need more ideas / activities / suggestions – look for the Dash and Dot display folder that should be stored in the big Dash & Dot tub – there are lots of ideas in the folder. There are also a few pages labelled ‘trouble shooting’ – great place to start if you encounter problems. Plus, if you find and print out any activities, please leave a copy in the folder for other teachers to use. Look on Pinterest – heaps of great stuff!!!!  *Please keep everything in the tub neat and tidy. If you use the last of the masking tape, could you let Chris / Lisa know or replenish it yourself. Also let us know if you need specific things added to the tub in order to complete some of the activity cards (as I have not checked every card). Please don’t let students take / keep any of the toys / things form the tub!!!*  *Lisa Connell* |
| **Session One:** |
| **Learning Intentions:** *To be able to get a Dash robot turned on and linked to an iPad*  *To be able to make Dash move around the room like a ‘remote control car’.*  **Success Criteria:** *I can turn on and unlock the iPad.* *On the iPad, I can find and turn Bluetooth on, I can turn Dash on, I can connect the iPad to the correct Dash robot, using the Controller section of the Wonder app, I can control the movement of Dash around the room,*  **I Inspire:** 2mins Teacher directed, a quick intro: Ask them if they have ever seen these ‘robots’ before? Have you used them before? What did you do with them? Do you know what they are called? Does anyone know what they can do? How to turn them on?  **T Try:** 2-3mins Students work with a partner (2 kids to 1 Dash robot), see if they can turn the Dash robot on. What happens when you do? What does he say / do? Show someone else how to do it if they can’t. Teacher observes, without getting involved in the student process, watch for any errors or misconceptions.  **E Expand:** About 10mins ‘Tech Talk’, Specifically teach the following things:  Give each pair an iPad (record who they worked with and iPad number – so they can use the same one each week). Students might not have used the school iPads yet, so show them (I usually demo with one of the iPads, and get them to copy me, doing each step slowly).   1. How to look after the iPads – use 2 hands at all times when carrying them, share with your partner – equal turns etc – Show them the laminated sheets about how to look after them. 2. Turn iPad on – press home button, password is 5055. Go to settings – Bluetooth – make sure it is on. 3. Go to the Wonder app (pre check that the app is on the iPads!!!) and open it. 4. Up in the top RH corner – click on the + button (to connect to the Dash robot). 5. The Dash robots are numbered with texta, and the app will pick up the closest Dash robots – make sure they select the right one they are using. If there is a problem with this, get the students to move a bit further away from each other.   The above steps can take a bit of time, but kids well get better and faster each lesson.  D:\Users\lisac\Desktop\IMG_2787.JPGWhen Dash is connected and the Wonder app is open, demo selecting  Controller (in the middle of the screen).  D:\Users\lisac\AppData\Local\Microsoft\Windows\INetCache\Content.Word\20180206_202315.jpg**T**  **Try:** 5-10 mins Without giving them too much info, ask the students to spread out around the room, and ‘have a go’ at seeing if they can use the app to move Dash around on the floor, can you work out what the different controls do? Teacher to walk around, observe students, let them ‘figure out’ problems (don’t jump in too early with the answers).  **H Huddle:** 5mins Come back together as a group, share something you learnt / discovered / had trouble with. What do the different parts of the app control? (big circle on the left moves Dash around, big circle on the right moves his head around, rainbow line on far left – changes his ‘eye’ colour, far right line – changes his speed, left of microphone lets you play a pre recorded sound, numbers on the right of microphone lets you play sounds that other students have recorded).  **T Try:** 10mins Send students back off to have more exploration with Dash and the app. If you hadn’t tried any of the controls that were discussed in the ‘Huddle’ – have a go now.  Remember to take in turns – 2 or 3 mins each then swap over. If students have got the ‘hang’ of controlling Dash accurately around the room, a suggestion for extension – is to give each pair 3 or 4 plastic cups – they can use them to make ‘obstacles’ to move Dash around – to make it a bit harder.  Teacher to rove around, see how the students are going, if they need any help.  **H Huddle:** 5mins Come back together as a group, Did you enjoy playing with Dash? What was the best / hardest thing? Share 1 thing you learnt with the group. Teach students specifically how to close the app, turn Dash off, close cover on iPad. |
| **Session Two:** |
| **Basically, the first 15 – 20 mins is a repeat of part of last week’s lesson – so they can have second go at getting iPad and Dash ready, get to Wonder app, and drive Dash around the room.**  **Learning Intentions:** *To be able to get a Dash robot turned on and linked to an iPad*  *To be able to make Dash move around the room like a ‘remote control car’. To try out the Blockly app with Dash.*  **Success Criteria:** *I can turn on and unlock the iPad.* *On the iPad, I can find and turn Bluetooth on, I can turn Dash on, I can connect the iPad to the correct Dash robot, using the Controller section of the Wonder app, I can control the movement of Dash around the room (all as per last week).*  *I can use the Blockly app to control Dash. I can share what I have learnt with other students*  **T Try:** 10-15mins Give out iPads and Dash robots. Ask students if they can remember all the beginning steps from last week: unlock iPad, check that bluetooth is on, turn Dash on, get to the Wonder app, go to Controller, plus sign – link iPad to Dash. If you and your partner can get that far, you can have a few mins taking turns driving Dash around. Teacher to rove, watch and assist pairs if they are having trouble remembering or completing the steps. Get students work with same partner as last time  **E Expand:** 5-10mins ‘Tech Talk’, Show students the **Blockly** app (make sure it is on the ipads! Open it, connect your Dash to it again. Find and click on **Create New** – then click on **Blank Project** – first one on the top row. Show them the list of categories on the left hand side of the screen, and when you click on them, you can see different ‘blocks’ that you can select from – click on one of them and then you need to drag it into position – make sure it ‘clicks’ underneath the When Start block. I would demo a simple one like (Drive) forward 50cm, then (Sound) Say Hi, and then click the play button (green, with an arrow on it – down the bottom LH corner). To get rid of blocks, click and hold on them and a little rubbish bin appears in the bottom RH corner – drag and drop the blocks you don’t want on the bin and they will disappear  **C Create:** 15mins Set students off to go and have a try with the Blockly app. Rove and see how they are going; are they trying lots of different things? Do they need help? A prompt?  **H**  **Huddle:** 10mins Come back together, share with the group something you did / learnt / tried – maybe show it to everyone.  If there is enough time at the end, you could try some of the Activity Cards (in the box in the tub). Firstly try from Set A Sequences cards; 1.1, 1.2, 1.3 and then 3.1 (introduces the loop block). I would show the students the card, explain it, and then get them to work with their partner to see if they can copy the instructions on the card.  Don’t worry if you don’t get time to try these – students might work slower than what I have planned, or you might need longer with some of the activities listed above. Also if you don’t get to them, they can be attempted next lesson. |
| **Session Three:** |
| **Learning Intentions:** *I can work cooperatively with a partner to solve Dash coding puzzles*  **Success Criteria:** *I took turns with my partner, made suggestions and we worked together cooperatively.*  **I Inspire:** 2-5mins Use the box – Dash & Dot Challenge cards – Set A Sequences (light blue)  Teacher directed, a quick intro: show students card **1.1 Ready, Set, Go!** Read out and show them the back of the card. I would probably use my own iPad (or one of theirs) and actually complete the task – show them what it looks like.  **T Try:** 3-5mins Show students next card: **1.2 Ready, Set, Dance**! Read through the instructions, show them the back of the card – then send them off to see if they can complete the sequence with their partner.  **E Expand:** 5-10mins Come back together as a group – who got it done? Show the rest of the group. Show the students the following cards: **1.3 Ready, Set, Rainbow!, 2.4 Dash Saves the Day! 2.5 Dash the Guard, 2.6 Dash Guards again 3.1 The Forever Light Show, 3.2 Dance, Dash, Dance!** (these last 2 introduce loops). Explain how the cards will be set up around the room as ‘stations’ – go to one, see if you can solve it with your partner, when you have – show it to me – then go to another station that is free. So how many you can do in the time available. See how they go, they might need some cards read to them or explained – if this format is too difficult, stick to doing one card at a time – you read it out, then they all go and try doing it.  **C Create:** 20mins Set students off to attempt some of the Challenge card stations around the room. Encourage them to read the back of the card carefully – as it has lots of hints on there. Remind students to work together cooperatively, taking in turns, sharing ideas to solve the challenges. When successful, they can move on to another free station. Teacher to rove around, see how the students are going, if they need any help. When students are doing one of the activities that use loops, point it out to them, and see if they can explain what the terms mean.  **H Huddle:** 5mins Come back together as a group. How did you go with your partner? Work together? Listen to each other’s ideas? Which challenge cards were the hardest? The easiest? Overall, how did you enjoy your 3 weeks using Dash and Dot? Any suggestions for improving it for the next group? Favourite activity? |