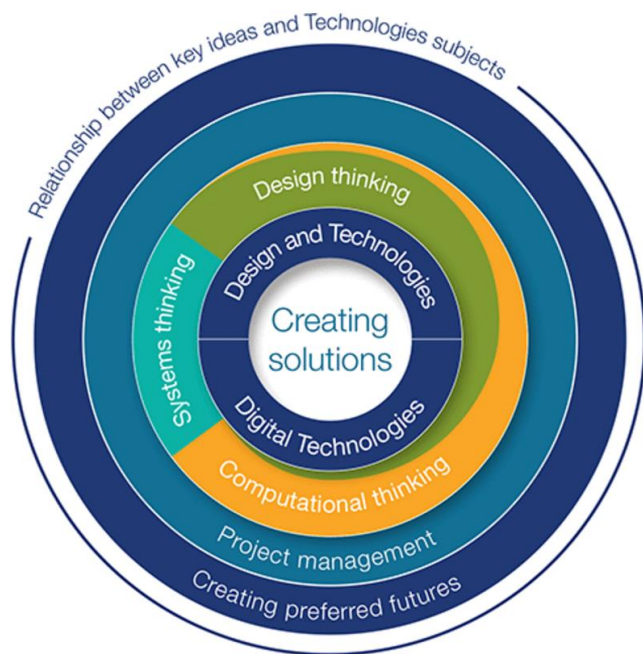


# Digital Technologies Curriculum

## Mapping - Finding Alignment and Connection within Curriculum



### CREATING SOLUTIONS

#### Learning Path for Schools

**ASK:** Why do we need this curriculum?

**ASK:** What does this curriculum mean?

**ASK:** What is it asking us to do?

**ASK:** What do we already do?

**ASK:** How can we find alignment?

**ASK:** How can we implement it so that we create connections for our learners?

**ASK:** What will project based learning look like across our school?

**ASK:** How will our students develop as creators of digital solutions?

**Creating Preferred Futures**

**Project Management**

**Types of Thinking**

Systems Thinking

Computation Thinking

Design Thinking

# Prep - Year 2 Digital Technologies

## *Examples of Alignment within Curriculum*

### Mt Cootha Cluster



### Oakleigh State School





If using a non-digital version of this document, many of the links will be available through [www.oakleigh.tech](http://www.oakleigh.tech)




# Digital Technologies Alignment - Mt Cootha Cluster


## *Prep, Year One and Year Two*

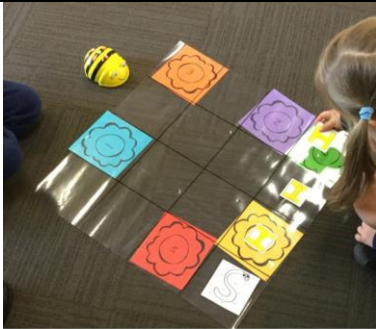
Task	Alignment	Tools	Description	Curriculum Content Descriptor
<b>Assessment Tasks - Prep</b>				
<b>Billy Goats Gruff</b>	English (C2C Unit 2)	<a href="#">Explain Everything</a>	<p>Students retell the story of “Billy Goats Gruff” using Explain Everything. They illustrate the scene and import the characters and add audio.</p> 	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>
<b>Rhyming Activity</b>	English (C2C Unit 3)	<a href="#">Scratch Junior</a>	<p>Students create a simple rhyme based on “Down by the Bay” and use Scratch Junior to animate. They create algorithms to control a characters movements and audio block to record their speech. Appropriate backgrounds and sprites are created.</p> 	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>

## Supporting Activities - Prep

<b>Drawing/ Typing activity</b>	<b>English</b> (C2C Unit 1)	<a href="#">Explain Everything</a>	Introduction of drawing tools, camera use, editing and typing through a range of activities. E.g. students sign in each morning by typing their name into Explain Everything. It can also be used for sight words, math tasks (photo of grouping objects) and art collages.	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> </ul>
<b>Chatterpix sounds</b>	<b>English Maths Science Geography</b>	<a href="#">ChatterPix</a>	Students take a photo of an object then create an animated picture and incorporate audio. Can also be used to explore sounds, non-standard measure, 2D objects, science (weather report), art (take a photo of an artwork and animate). 	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> </ul>
<b>Life Size Grid</b>	<b>Math</b> (C2C Unit 1)	Unplugged	Students physically explore position and movement with a life size bee-bot grid. Objects are used to create programming activities/games.	<b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>



				
<b>Life Size Grid</b>	<b>Math</b> (C2C Unit 2)	Unplugged	Students use large arrows on the floor grid and plan an algorithm to explore position and movement.	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>
<b>Bee-Bot</b>	<b>Math</b> Position & Movement (C2C Unit 2 and 4) <b>Geography</b> (C2C Unit 1 and 2)	Bee-Bots	Students use the Bee-Bot robots to explore position, movement and plan an algorithm.	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>
<b>Bee-Bots</b>	<b>Math</b> (C2C Unit 2, 4) Directional language Measurement	Bee-Bots	Students use Bee-Bots to estimate which distances are longer or shorter. (Masking tape is used to represent the starting and stopping points).	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>
<b>Bee-Bots</b>	<b>Math</b> Recognise 2D and 3D shapes Directional language	Bee-Bots	Use grid overlays with assorted 2D and 3D shape picture cards and program the Beebots path and debug.	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>

				
<b>Mind mapping</b>	<b>Science</b> (C2C Unit 1, 2 and 4)	<a href="#">Popplet</a> /Unplugged	Students take photos of different materials or living things and movement then use Popplet to sort the data. Unplugged: Collect objects and sort using hoops.	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> </ul>

Task	Alignment	Tools	Description	Curriculum Content Descriptor
<b>Assessment Task – Year One</b>				
<b>Bee-Bot Maths</b>	<b>Math</b> Identify and describe half and quarter turns (C2C Unit 2) <b>Geography</b> Identify relative features on maps	Bee-Bot	Students use Bee-Bots to create an algorithm to solve a problem (eg. Finding their way through a maze to collect objects). A paper grid will be used to help assess student learning.	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b><i>Digital Technologies Processes and Production Skills</i></b> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>
<b>Pigeon Digital Book</b>	<b>English</b> (C2C Unit 8)	<a href="#">Book Creator</a>	Students use the drawing, typing and speech bubbles and audio to create a “Pigeon” iBook of	<b><i>Digital Technologies Knowledge and Understanding</i></b> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul>



their own creation.



### **Digital Technologies Processes and Production Skills**

- Explore how people safely use common information systems to meet information, communication and recreation needs (ACTDIP005)
- Create and organise ideas and information using information systems independently and with others, and share these with known people in safe online environments (ACTDIP006)

## **Supporting Activities – Year One**

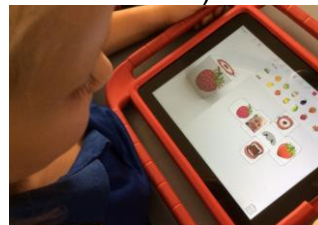
### **Creating nets**

#### **Math**

Recognise and classify familiar 2D and 3D object  
Describe corners, edges and faces

#### [Foldify \(app\)](#)

Students use the app foldify to explore the nets that create 3D shapes. Foldify allows students to add their own images to the faces of the 3D shape. These images can be linked to other areas eg. Geography (natural/managed environments)



### **Digital Technologies Knowledge and Understanding**

- Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)

### **Digital Technologies Processes and Production Skills**

- Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)

### **Cultural Story**

**English**  
(C2C Unit XX)

#### [Explain Everything](#)

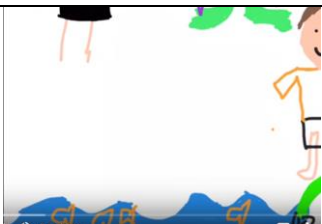

Students use Explain Everything to illustrate, animate and add audio to re-tell a cultural story.

### **Digital Technologies Knowledge and Understanding**

- Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)


### **Digital Technologies Processes and Production Skills**

- Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)

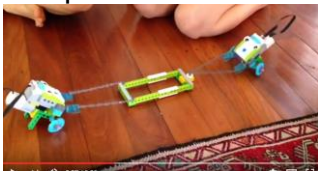
				
<b>Geography Scavenger Hunt</b>	<b>Geography</b> (C2C Unit 1)	<a href="#">Klikaklu</a>	<p>Students explore how people use spaces through a scavenger hunt app.</p> 	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> <li>Explore how people safely use common information systems to meet information, communication and recreation needs (ACTDIP005)</li> </ul>

Task	Alignment	Tools	Description	Curriculum Content Descriptor
<b>Assessment Task – Year 2</b>				
<b>Digital Citizenship</b>	<b>Digital Technology Science</b>	<a href="#">Survey Monkey</a>	Students complete multiple choice questions that test their knowledge and understanding of digital citizenship related to the science unit activity.	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Explore how people safely use common information systems to meet information, communication and recreation needs (ACTDIP005)</li> <li>Create and organise ideas and information using information systems independently and with others, and share these with known people in safe online environments (ACTDIP006)</li> </ul>
<b>Earths resources</b>	<b>Science</b> (C2C Unit 4)	<a href="#">Book Creator</a>	Students collect data about the water use at their school. They then use this data to create a iBook explaining the	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p>




			<p>possible practices to save water in their school. Students will share this iBook online.</p> 	<ul style="list-style-type: none"> <li>• Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> <li>• Explore how people safely use common information systems to meet information, communication and recreation needs (ACTDIP005)</li> <li>• Create and organise ideas and information using information systems independently and with others, and share these with known people in safe online environments (ACTDIP006)</li> </ul>
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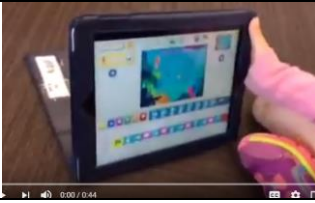
### Optional assessment task or supporting activity

<b>Push and pull</b>	<b>Science</b> (C2C Unit 2) <b>Design Technology</b>	<a href="#">Lego We-Do</a>	<p>Students build a simple robot that can push and pull. Students draw and label diagrams and answer some questions about the robot as they complete the task.</p> 	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>• Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>• Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>• Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> <li>• Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>
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### Supporting Activities – Year 2

<b>Class Profile</b>	<b>Digital Technology</b>	<a href="#">iMovie</a> and-or <a href="#">Tellagami</a>	<p>Students create an iMovie that introduces their classroom, teacher and other relevant features. This will be shared online.</p>	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>• Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>• Explore how people safely use common information systems to meet information, communication and recreation needs (ACTDIP005)</li> <li>• Create and organise ideas and information using information systems independently and with others, and share these with known people in safe online environments (ACTDIP006)</li> </ul>
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<b>Coding Dash</b>	<b>Math</b> Identify and describe half and quarter turns. Identify relative positions by receiving and giving directions.	Dash <a href="#">Path for Dash Blockly (app)</a>	Students program Dash to trace the path of various two dimensional shapes. They will need to use half turn and quarter turns and correct directional language in the app "Path for Dash" and "Blockly".	<b>Digital Technologies Processes and Production Skills</b> <ul style="list-style-type: none"> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>
<b>Lunch Box Project</b>	<b>Science</b> (C2C Unit 1)	<a href="#">Explain Everything</a>	Students create a lunch box in the science unit using selected materials. They take photos of the lunch box and use Explain Everything to label the materials and evaluate the lunch box design. 	<b>Digital Technologies Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> </ul> <b>Digital Technologies Processes and Production Skills</b> <ul style="list-style-type: none"> <li>Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> </ul>
<b>Math Game</b>	<b>Math</b> Computational skills Finding totals Number sequence	<a href="#">Scratch Junior</a>	Students create a game where they demonstrate their understanding of addition by moving a sprite to collect numbers to a given total or number sequence.	<b>Digital Technologies Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>Recognise and explore digital systems (hardware and software components) for a purpose (ACTDIK001)</li> <li>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002)</li> </ul> <b>Digital Technologies Processes and Production Skills</b> <ul style="list-style-type: none"> <li>Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003)</li> <li>Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)</li> </ul>



# Year 3 and 4 Digital Technologies

## *Examples of Alignment within Curriculum*

**Mt Cootha Cluster**





**Oakleigh State School**



# Digital Technologies Alignment - Mt Cootha Cluster

## Years 3 and 4

Task	Alignment	Tools	Description	Curriculum Content Descriptor
<b>Assessment Task – Year 3</b>				
<b>Digital Retell</b>	English (C2C Unit XX)	<a href="#">Scratch Junior</a>	Students create a visual setting and program a traditional story.	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)</li> <li>Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)</li> <li>Explain how student solutions and existing information systems meet common personal, school or community needs (ACTDIP012)</li> </ul>
<b>Supporting Activities – Year 3</b>				
<b>Plant Growth</b>	Science (C2C Unit 1)	<a href="#">iMotion</a> Time Lapse  <a href="#">Pages –</a> Graphing  <a href="#">Numbers -</a> Graphing  <a href="#">Lego We Do</a>	<p>Students create a time lapse/stop motion of plant growth. They record and display data.</p> <p>Students build a flower and bee with Lego We Do and simulate the pollination process.</p>	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> <li>Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009)</li> <li>Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)</li> <li>Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input</li> </ul>


				<p>(ACTDIP011)</p> <ul style="list-style-type: none"> <li>Explain how student solutions and existing information systems meet common personal, school or community needs (ACTDIP012)</li> </ul>
<b>Graphing</b>	<b>Maths</b> (C2C Unit 1 onwards)	<a href="#">Pages</a>	Students create a variety of tables and graphs.	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> <li>Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009)</li> </ul>
<b>3 D shapes</b>	<b>Maths Geometry</b>	<a href="#">Foldify</a>	Students use the app <i>Foldify</i> to create nets of 3D shapes	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> </ul>
<b>Directional Language</b>	<b>Maths Geometry</b>	Probots	<p>Students use probots to explore directional language and angles in shapes</p> <p><a href="#">Link 1</a> <a href="#">Link 2</a></p> 	<p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)</li> <li>Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)</li> </ul>



## Year 4 Digital Technologies

Task	Alignment	Tools	Description	Curriculum Content Descriptor
<b>Assessment Task – Year 4</b>				
<b>Infographic</b>	<b>Geography</b> (C2C Unit 2)  <b>History</b> (C2C Unit 2)	<a href="#">Excel</a>  <a href="#">Canva</a>  <a href="#">Pictochart</a>	Students collect data about rubbish around the school ground and display in an infographic. They evaluate and share this data with our community.	<b>Digital Technologies Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> <li>Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008)</li> </ul> <b>Digital Technologies Processes and Production Skills</b> <ul style="list-style-type: none"> <li>Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009)</li> <li>Explain how student solutions and existing information systems meet common personal, school or community needs (ACTDIP012)</li> <li>Plan, create and communicate ideas and information independently and with others, applying agreed ethical and social protocols (ACTDIP013)</li> </ul>
<b>Erosion Animation</b>	<b>Science</b> (C2C Unit 1)	<a href="#">Scratch</a>	Students create an animation that simulates the erosion process.	<b>Digital Technologies Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> </ul> <b>Digital Technologies Processes and Production Skills</b> <ul style="list-style-type: none"> <li>Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)</li> <li>Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)</li> <li>Explain how student solutions and existing information systems meet common personal, school or community needs (ACTDIP012)</li> </ul>

## Supporting Activities – Year 4

<b>Minecraft Fantasy World</b>	<b>English</b> (C2C Unit 6)	<a href="#">Minecraft</a> <a href="#">Minecraft PD</a>  <a href="#">Weebly</a> or <a href="#">Edublogs</a> - blog	<p>Students create the “Rowan of Rin” world in Minecraft and re-enact the story (screen casting this). Students reflect and build on comprehension of characters in a blog.</p> <p><a href="#">Link 1</a>  <a href="#">Link 2</a></p> 	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Plan, create and communicate ideas and information independently and with others, applying agreed ethical and social protocols (ACTDIP013)</li> </ul>
<b>Story Re-tell</b>	<b>English</b> (C2C Unit 3/4)	<a href="#">Scratch</a>	<p>Students create an animation of a traditional story.</p>	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p> <ul style="list-style-type: none"> <li>Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)</li> <li>Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)</li> </ul>
<b>Math Coding</b>	<b>Math</b> (C2C Multiple Units)	<a href="#">Tickle</a> <a href="#">Sphero</a> <a href="#">Hopscotch</a>	<p>Students use visual block coding to explore angles, measurement, time and algebra</p>	<p><b>Digital Technologies Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</li> </ul> <p><b>Digital Technologies Processes and Production Skills</b></p>

				<ul style="list-style-type: none"><li>• Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009)</li><li>• Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)</li><li>• Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)</li></ul>
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# Year 5 and 6 Digital Technologies

## *Examples of Alignment within Curriculum*

**Mt Cootha Cluster**


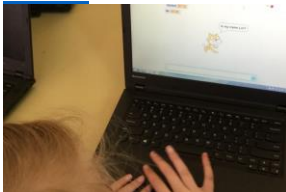


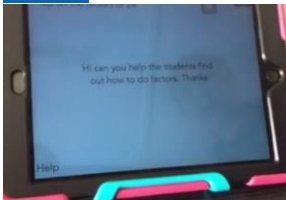
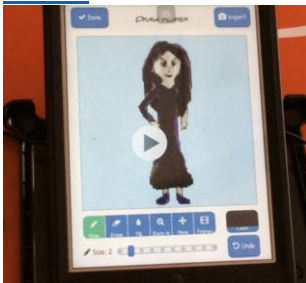
**Oakleigh State School**



# Digital Technologies Alignment – Mt Cootha Cluster


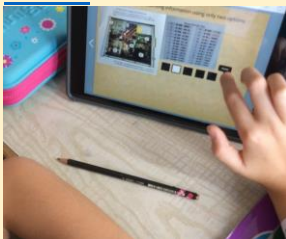
## Year 5 and 6

Task	Alignment	Tools	Description	Curriculum Content Descriptor
<b>Assessment Tasks – Grade 5</b>				
<b>Preparing for disaster with a digital solution.</b>	<b>Geography</b> (C2C Unit 2) HASS Skills	Chose from: Scratch, Hopscotch, Tickle, Robotics Etc. Survey Monkey	Students create a digital solution (game, quiz, animation or robotic prototype) to assist the community in a natural disaster. <a href="#">Link 1</a> 	<b>Digital Technologies Processes and Production Skills</b> Acquire, store and validate different types of data, and use a range of software to interpret and visualise data to create information (ACTDIP016) Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017) Design a user interface for a digital system (ACTDIP018) Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) (ACTDIP019) Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input (ACTDIP020) Explain how student solutions and existing information systems are sustainable and meet current and future local community needs (ACTDIP021) Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols (ACTDIP022)
<b>Supporting Activities – Grade 5</b>				
<b>Digital Systems</b>	<b>Digital Technologies</b>	<a href="#">Scratch</a>	Students create a quiz using scratch about digital systems components and networks. <a href="#">Link 1</a> 	<b>Digital Technologies Knowledge and Understanding</b> Examine the main components of common digital systems and how they may connect together to form networks to transmit data (ACTDIK014)

<b>Moral Dilemma Animation</b>	<b>English</b> (C2C Unit 2)	<a href="#">Scratch</a>	Students write a script and then create a scratch animation of a moral dilemma.	<b>Digital Technologies Processes and Production Skills</b> Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017) Design a user interface for a digital system (ACTDIP018) Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) (ACTDIP019)
<b>Math Game</b>	<b>Math</b> (any unit)	<a href="#">Hopscotch</a>	Students program a math game to assist the learning of others using Hopscotch. <a href="#">Link 1</a> 	<b>Digital Technologies Processes and Production Skills</b> Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017) Design a user interface for a digital system (ACTDIP018) Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) (ACTDIP019) Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input (ACTDIP020)
<b>Fantasy Game</b>	<b>Art English</b> (C2C Unit 3)	<a href="#">Sketch Nation</a>	Students design and paint a good or evil character in art. They then take of photo of this character and import it into a Sketch Nation game. The students then create a game in the Fantasy Genre. <a href="#">Link 1</a> 	<b>Digital Technologies Processes and Production Skills</b> Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017) Design a user interface for a digital system (ACTDIP018)
<b>Blogging</b>	<b>Cross Curricular</b>	Blog platform	A class blog where each students has their	<b>Digital Technologies Processes and Production Skills</b>



		(there are a number of platforms)	own page. Students are required to blog various tasks regularly throughout the year. Eg. Students post a piece of writing each week and receive peer feedback towards editing. <a href="#">Link 1</a>	Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols (ACTDIP022)
<b>Spelling Spread Sheet</b>	<b>Math</b> (C2C Unit 1, 4)  <b>English</b> (Spelling)	<a href="#">Numbers</a>	Students create a personal spreadsheet with pre spelling test and post spelling test results for each week of the term. They can explore the various graphs available through this program and track spelling trends.	<b><i>Digital Technologies Processes and Production Skills</i></b> Acquire, store and validate different types of data, and use a range of software to interpret and visualise data to create information (ACTDIP016)

Task	Alignment	Tools	Description	Curriculum Content Descriptor
<b>Assessment Tasks – Grade 6</b>				
<b>Infographic</b>	Geography (C2C Unit 2)	<a href="#">Canva</a>	Students research a country and create an infographic. <a href="#">Link 1</a> 	<b>Digital Technologies Processes and Production Skills</b> Acquire, store and validate different types of data, and use a range of software to interpret and visualise data to create information (ACTDIP016)
<b>Binary test</b>	Maths (C2C Unit 4)	Unplugged	Students learn about binary language and how to calculate the pattern of 0's and 1's. <a href="#">Link 1</a> 	<b>Digital Technologies Knowledge and Understanding</b> Examine how whole numbers are used to represent all data in digital systems (ACTDIK015)
<b>Supporting Activities – Grade 6</b>				
<b>Scratch Quiz about Australia</b>	Geography (C2C Unit 1)	<a href="#">Scratch</a>	Students create a quiz to teach younger year levels about Australian facts. <a href="#">Link 1</a>	<b>Digital Technologies Processes and Production Skills</b> Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017) Design a user interface for a digital system (ACTDIP018) Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) (ACTDIP019) Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input (ACTDIP020)



<b>Circuitry</b>	<b>Science</b> (C2C Unit 2)	<a href="#">EV3</a>	<p>Students explore electric circuits in EV3 robots. They also explore input and output with sensors and collect data.</p> <p><a href="#">Link 1</a></p>	<p><b>Digital Technologies Processes and Production Skills</b></p> <p>Acquire, store and validate different types of data, and use a range of software to interpret and visualize data to create information (ACTDIP016)</p> <p>Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017)</p> <p>Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) (ACTDIP019)</p>
<b>Children's Story Book</b>	<b>Art Citizenship English</b> (C2C Unit 7)	<a href="#">Book Creator</a>	<p>Students create a storybook for younger students about a social issue. These are shared in an online environment (iBook store).</p>	<p><b>Digital Technologies Processes and Production Skills</b></p> <p>Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols (ACTDIP022)</p>
<b>Computational Thinking</b>	<b>Math</b> Problem solving	<a href="#">Grok Learning</a>	<p>Students progress through the levels of this online coding platform at their own pace.</p>	<p><b>Digital Technologies Processes and Production Skills</b></p> <p>Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) (ACTDIP019)</p> <p>Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input (ACTDIP020)</p>

*Please note that this document reflects ‘a point in time’ during the Early Launch Year of Education QLD Schools in 2016. This document is not meant to represent a definitive collection of ideas for implementing the Digital Technologies Curriculum. Rather, it is a document that represents our community’s response to this curriculum and to our individual context in the year 2016.*

*We expect this document to further evolve and to include assessment guides by the end of 2017.*

Full acknowledgement to the Mt Cootha Cluster and the eLearning Leaders of Karyn Hume, Damien Green, Sandra Gardner, Troy Metcalfe, Cindy Stocks, Andrew Collins and Roger Hallmond for the collaborative work that created the opportunity for this document to be created.

Special thanks to the Oakleigh State School teachers who contributed to the design and content of this document:

Heather O’Connor - Digital Literacy Teacher  
Chantelle Sansness, - Year 5 Teacher and Digital Literacy Champion  
Heather Mercer – Head of Curriculum  
Carolyn Fisher – Year 1 teacher  
Christine Spencer – Year 3 teacher  
Miranda Thompson – Year 4 teacher  
Zac Bayliss – Year 6 teacher

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On a final note:

*“Digital technologies deserves its place in the sun, as well as supporting other learning areas.” Julie King, 2016*

Julie King is the Curriculum Lead, Technologies at the Australian Curriculum, Assessment and Reporting Authority (ACARA). Julie led the development of the Australian Curriculum: Technologies F-10 comprising two subjects: Design and Technologies and Digital Technologies.