## **Cooloongup Primary School**



## Year 6 Digital and Design Technologies Overview

Version 2 (13/12/2017) Craig Talbot

	Digital Technologies							ІСТ				DOE NAPLAN Online Ski	ills
							General Ca	apabilities Level	3		ICT Ski	ill Description	Tasks
Knowledge and Under	standings	T1 T2	Т3	T4	Base Skill Description	Skill 1	Skill 2	Skill 3	Skill 4	Skill 5	Type of Skill	What can the Student do	What tasks car achieve this
Digital Systems	Digital systems have components with basic functions and interactions that may be connected together to form networks which transmit different types of data.e.g. *Investigate how internal and external components keyboard, central process unit (CPU) and screens work *Programming robots such as Spheros, Lego Mindstorms or wearable technology, makey makey, electronics				Computer skills	Using printer queues, file servers, scanners, probes, digital cameras	Selecting specific graphics software or graphic tools in word processors.				ICT Skill 1: Locate and select an answer from a list	Student can: *locate a question, supporting information and possible answers. * click or tap once to select the correct answer. * change their answer or a list or a sequence. * recognise the answer icon will change when selected.	
Representations of Data	Whole numbers are used to represent data in a digital system e.g. Exploring binary representation, the use of binary values in games, and making the connection to binary code (whole numbers and letters).				Computer components and terms. (Digital	Spreadsheet Graphs – Pie, bar, column,	Desktop Publishing New documents	Desktop Publishing Using boxes				Student can: * accurately type 10 letters or numbers, without error. * identify and read questions and	
Processes and Production Skills		T1 T2	<b>T3</b>	3   TA	Systems)	line	Using templates	Text Pictures			ICT Skill 2: Type an	support material. * click a mouse or tap a screen to	
Collecting managing and analysing data	Collect, sort, interpret and visually present different types of data using software to manipulate data for a range of purposes. e.g. *Continue to use digital tools and software to acquire, save and present data although the software is now used to calculate, interpret and validate data.					Cell, column, row A1 vs R1C1		Indenting (bullets etc.) Line spacing			answer in a text box	set their cursor before typing. * type and edit answer.	
Digital implementation	<ul> <li>Design, modify, follow and represent both diagrammatically, and in written text, simple algorithms involving branching and iteration.</li> <li>Implement and use simple visual programming environments that include branching (decisions), iteration (repetition) and user input eg. Modifying and considering alternatives.</li> <li>Manage the creation and communication of information, including online collaborative projects, using agreed social, ethical and technical protocols. e.g.</li> <li>Create a blog or website and develop a set of rules (policy)</li> </ul>				Internet use Cybersafety	Use of Email and Connect messaging appropriately	Social Media Networking Facebook, Twitter etc. Safety implications.	Privacy of oneself and others. Phone numbers, addresses etc.	What is cyber- bullying? How do I know it is happening to me?	What to do about cyber- bullying.	ICT Skill 3: Read the screen and navigate web pages	Student can: * use a mouse or fingers to move around, zoom in and out, and min. and max. screen. * use scroll bars to open and close objects. * use arrows and icons. * read the screen and point out what different elements mean (e.g. timer, back and next buttons, flags and shaded boxes).	
	for online conduct including ways of managing privacy when using digital systems such as activating privacy settings.				Internet use Cybersafety	Use of passwords to	Use of encryption.					Student can: *drag an object and drop it in	
<b>Creating Solutions by:</b> Investigating and defining	Define a problem, and a set of sequenced steps, with users making decisions to create a solution for a given task Identify available resources	T1 T2	Τ3	T4		protect identity and personal information.	Why and when to use it.				ICT Skill 4: Manipulate objects on screen	correct place. *zoom in and out, and tap and hold to drag and drop objects. *turn objects around (e.g. to rotate a shape). *draw a straight line between two objects. *use tools: magnifier, calculator, protractor.	
Designing	Design, modify, follow and represent both diagrammatically, and in written text, alternative solutions using a range of techniques, appropriate technical terms and technology				Using Software	Using timeline software to plan processes Using concept mapping and brainstorming software to generate key ideas;	Using graphic and audio visual software to record ideas (OneNote, Evernote)	Manipulating and combining images, text, video and sound for presentations; Creating podcasts; applying purposeful editing and refining processes	Using a table, Design, Layout Insert Inserting tables and manipulate the row and columns to suit the task	Find and Replace function GoTo	ICT Skill 5: Read, comprehend and manipulate digital texts	Student can: *focus on digital texts with no screen clutter. * toggle between texts and answers. * locate and copy information or detail. * connect visual cues to images with ideas. * read digital texts to interpret ideas * identify a sequence of events and the purpose of digital texts. * infer writer's feelings in digital text. * use reading strategies to	



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							comprehend digital text.
Producing and implementing	Select, and apply, safe procedures when using a variety of components and equipment to make solutions	Using Software	Collect and record data on a spreadsheet. Edit cells Columns and rows	Create an appropriate graph. Graph Labels X & Y axes, titles, colour use Use simple functions (Sum and Average)	Understanding the use and role of system and application software.	ICT Skill 6: Plan and compose text using keyboarding and word processing	Student can: *draft, edit and revise texts digitally * type using all characters on a keyboard. * use correct fingering on the keyboard or device. * select text, delete/move words and phrases. * type quickly enough to retain thoughts & ideas * use a range of modelled or shared/interactive digital writing sessions. * use digital planning tools
Evaluating	Develop collaborative criteria to evaluate and justify design processes and solutions	Hardware Design and Structure	Understandin g the uses of standard input, processing, output and storage components	Input – keyboard, microphone; process – central processing unit;	output –monitor, speakers, projector; storage – cloud, USB, hard drive;	ICT Skill 7: Listen using a headset	Student can: * listen to a word via a headset: sound it out, picture it in their mind, type it correctly and check and edit if needed. * open and close an audio item or stimulus from the toolbar. * listen to audio without being distracted. * understand slightly different accents and intonations, and male and female voices.
Collaborating and managing	Work collaboratively, considering resources and safety, to plan, publish and manage projects, including sequenced steps.						

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