Cooloongup Primary School

Year 4 Digital and Design Technologies Overview

Craig Talbot Version 2 (13/12/2017)

Digital Technologies						ICT General Capabilities Level 3						DOE NAPLAN Online Skills		
Knowledge and Understandings		T1	T2	T3	T4	**Base Skill Description**	Skill 1	Skill 2	Skill 3	Skill 4	Skill 5	**ICT Skill** Type of Skill	**Description** What can the Student do	**Tasks** What tasks can achieve this
Digital Systems	Digital systems and peripheral devices are used for different purposes and can store and transmit different types of data e.g. use a mobile device, interactive whiteboard/data projector to present information *Use coding programs such as Scratch, Hopscotch, Kodable or Tynker to create stories, games or interactive cards. *Introduction to robots such as Sphero, Edison robots.					**Computer skills**	Using cut, copy and paste to move files into a folder.	Undertake basic work station safety check e.g. chair height.	Combining tools to solve problems.	Confidently using font adjustments to typeface, size,colour, backgrounds and borders.	When to use which tool to complete a task.	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	Different types of data, and the same data, can be represented in different ways e.g. Recognising data by using a table to reorganise information and recognising that there is different types of data.					**Computer components and terms. (Digital Systems)**	Using built in help.	Checking printer properties before printing.	Use of spell and grammar checker.			ICT Skill 2: Type an answer in a text box	Student can: * accurately type 10 letters or numbers, without error. * identify and read questions and support material. * click a mouse or tap a screen to set their cursor before typing. * type and edit answer.	
Processes and Production Skills		T1	T2	T3	T4									
Collecting managing and analysing data	Collect and present different types of data for a specific purpose using software e.g. Use different software to create or calculate data (Excel) and use different techniques /software to present the information or findings (Keynote, word or PowerPoint													
Digital implementation	Use simple visual programming environments that include a sequence of steps (algorithm) involving decisions made by the user (branching) e.g. Creating and implementing simple interactive digital solutions that involve the user inputting or making choices such as guessing game, a Keynote choose your own adventure, PowerPoint hyperlinks, or Scratch question and answer.					**Internet use Cybersafety**	Different browsers Firefox, Internet Explorer, Google Chrome, Safari	Considering being safe when searching. Using Safesearch and other tools to ensure appropriate access to images etc.	Finding relevant information from reputable sources	Using OneNote to record clips, research / notes.	Using emails and online discussion boards to read and post electronic messages	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).	
						Using Software	Take photos using a digital camera or iPad. Consider lighting, distance, type of shot and orientation (portrait / landscape)	Connect camera and download photos to computer. Email photos for iPad to self. Connect backpack app.	Creating a slideshow or presentation from photos to tell a story.	Add music to add atmosphere.	Applying editing strategies	ICT Skill 4: Manipulate objects on screen	Student can: *drag an object and drop it in 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.	
Creating Solutions by:		T1	T2	T3	T4									
Investigating and defining	Define a sequence of steps to design a solution for a given task Identify and choose the appropriate resources from a given set													
Designing	Develop and communicate design ideas and decisions using annotated drawings and appropriate technical terms.					**Using Software**	Research: Using Google from the Intranet. Attributing sources in own work.	using tables, photos and sketches in planning documents	locating information by typing in simple URLs; saving text and images; collecting data from a simulation environment	Resolution and picture size 640x480 pixels v.s 1280x1024	Publisher: Demonstrate ability to combine skills to produce a required piece of advertising or other work.	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 safely use, appropriate components and equipment to make solutions					**Hardware Design and Structure**	Consolidate Electronic Circuits	Low voltage (safe) vs, high voltage (unsafe).	Components of electronic circuits.	Explain ICT safety precautions e.g. turn off in electrical storm.		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	Use criteria to evaluate and justify simple design processes and solutions.											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 to safely plan and publish a sequence of steps.													