

A text book to support ACARA Digital Technologies Curriculum Version 9.0

# Digital Technologies Years F - 6





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#### What is this book?

This book is designed to provide Primary Teachers with the relevant knowledge and process skills covered by the Digital Technologies Australian Curriculum. It also provides suggested applications of Digital Literacy General Capabilities with examples on how to integrate these skills into the other contexts. This textbook is not a classroom text book, but a resource to support teaching staff who are required to cover Digital Technologies and incorporate Digital Literacy.

The main sections of this book are organised into Year Level Bands F, 1-2, 3-4 and 5-6.

For each Band, it has been broken up into each of the Australian Curriculum Digital Technologies content description for that Band based on ACARA Version 9.0 published April 2022. For each content description, identified with a curriculum code, the section is divided into four sections:

- 1. Background Teacher Reading
- 2. Classroom Resource List
- 3. Student Learning Activities
- 4. Sample photocopy-friendly handouts to support learning activities.

At the end of each Band is the list of Digital Literacy General Capabilities. Sample tasks are outlined that cover the required level of Digital Literacy for that Band. These are what was previously known as ICT skills. Sample student learning activities are provided where the skills are integrated into other subject contexts such as English, Mathematics, Health and Human Physical Education, Art and Science.

A sample program has been provided for each Band which may assist teachers in developing an appropriate curriculum for their school.

For Bands F and 1 - 2, A Digital Technologies Rubic and a Digital Literacy Rubic has been provided at the end of the section. For Bands 3 - 4 and 5 - 6 some project-based rubrics have also been incorporated.

#### How to use this textbook

Select the section that covers content for your Year level.

Dip into the content and start reading.

Get excited!

Each content description is broken into Teacher Background Reading and Student Learning Activities.

There are plenty of ideas and suggestions that you can take into different directions. Not every idea is written out as a lesson plan, while others contain detailed step by step instructions.

Some ideas that are included could be expanded into larger lessons and projects.

Teach the computer skills as well as the content. That's why they are included in this book.

Check out the suggested planner and use it as a starting point to develop a Digital Technologies and Digital Literacy planner for your school.

Get your students to have a Digi-Tech exercise book to paste in their sheets and printed documents for evidence.











#### The Touch Screen Generation

I have been teaching Digital Technology since 1998 in many different schools. In that time, I was able to ensure that all middle school students were familiar with using laptops and desktop computers. In 2017, I began teaching at a larger private high school in Melbourne. Students come from all around Melbourne to attend this school so teaching Year 7 students (over 300 new students every year) in this situation gave us insight into the emerging effects of the reliance on "touch screen" devices in primary schools. Most students were coming into Year 7 with little to no digital literacy beyond using an iPad app. Among the IT specialist teachers, these students are the 'Touch Screen Generation' or as I like to call them "iPad refugees".

The Touch Screen Generation does not know how to create a file, save a file or search directories to retrieve a file. Relying on tablets for "Digital Technology" skills in the primary school years, has resulted in young people missing out on building the mental constructs required to understand how computer devices operate. People who are deemed "good at computers" have developed an understanding in their mind of how the computer functions through familiarity with the technology. It is not an innate talent. It is like any other skill, developed through practice and experience. It is learned and it needs to be expressly taught.

Unfortunately, the so-called "Digital Native" child has grown familiar interacting with easy-to-use touch-screen interfaces. When faced with an application interface, it is commonly observed that these children give up very easily. "It's not working", "I tried that, and it didn't work" are the common complaints when navigating Microsoft Word or any other ubiquitous application. Dealing with interfaces that incorporate pull-down menus and multiple screens, confuse students who have only used tablet applications. I have even had to support some Year 7 students in the most basic skill of using a mouse. The reliance on tablets, are limiting the development of Digital Literacy in our young people. All students need to develop Digital Literacy – not just from the IT teacher, but from all teachers. Students need to be taught how to browse file directories, save files, retrieve files, navigate menus and identify appropriate keywords for searching. Touch screen tablets make everything easier in the classroom because they omit the use of fundamental digital literacy skills.

All primary students need access to desktop computers or laptops so they can learn how to use the precision input devices: keyboard and mouse. Learning to type is a crucial 21st century skill. Using a mouse to access different dimensions of applications is a fundamental skill when using a computer. Students need to be familiar with application menus, so they are not helpless if they don't know how to find the functions they need. All students by the end of Year 6 should be able to:

- write a document in Microsoft Word and save it onto a local drive for later retrieval,
- retrieve a file they created from online or local storage.
- write and send an email,
- create a PowerPoint for a presentation,
- edit an image,
- change their password,
- demonstrate some typing skills,
- name a file appropriately,
- search online for information using Google keywords,
- write basic programming code,
- make a simple website,
- navigate Microsoft Office menus,
- store a file in the cloud to retrieve later. (One Drive, iCloud or Google Drive)

These are fundamental skills all students should have before entering high school. Please help our students come to grips with the use of Digital Technology.

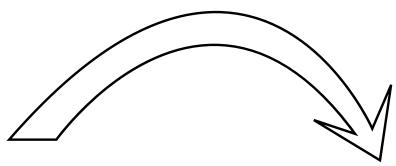
Vic Farrell





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#### What's the difference?



#### DIGITAL TECHNOLOGIES Curriculum

Knowledge and understanding of Digital Systems and how they are used.

This is an area of study.

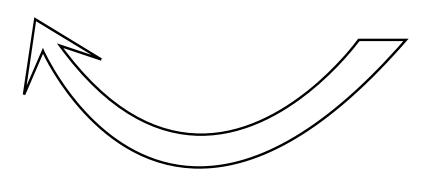
**Example:** Following a algorithm to code or program a software solution. Processing data to create information.

**DIGITAL LITERACY General Capabilities** 

How to use digital technology to solve problems.

This is a collection of skills that are to be integrated throughout all key learning contexts.

**Example:** Using an application like MS Word to create a document for a Science assignment so it can be submitted online.





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**Algorithm** - a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

**Analog** - relating to or using signals or information represented by a continuously variable physical quantity such as spatial position.

Binary - a numbers system based on the number 2, used by computers.

**Brainstorming** - group discussion to produce ideas or solve problems.

**Browse** - the process of looking for a file or a website.

**Collaboration** - the action of working with someone to produce something new.

**Communication technology** - Email, Short Message Services (SMS), commonly referred to as texting, Video conferencing and chat services, like Skype, Blogs and wikis, like WordPress and Mediawiki, Microblogging services like TwitterDocument and calendar sharing services like Google Docs.

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CPU - Central Processing Unit - the brains of the computer.

**Data** - facts and statistics collected together for reference or analysis.

**Decision structures** - A statement or set of statements that is executed when a particular condition is True and ignored when the condition is False is called Decision Control Structure.

**Design criteria** - Design criteria are the explicit goals that a project must achieve in order to be successful. In recommendation and feasibility reports, especially, the design and decision criteria determine the document's final recommendation for action.

Digital - made of numbers.

**Digital literacy** - the ability to use digital tools to solve problems.

**Digital solutions -** an application that solves a problem.

**Digital Systems** - hardware or software that manages digital data.



**Email** - messages distributed by electronic means from one computer user to one or more recipients via a network.

**Encryption** - Encryption involves converting human-readable plaintext into incomprehensible text, which is known as ciphertext.

**Evaluating** - assessing the solution created in design.

**File explorer** - operating systems allow for users to browse for the files stored. Windows uses File Explorer and MacOS uses Finder.

**Files** - A computer file is a computer resource for recording data in a computer storage device, primarily identified by its file name.

**Folder** - In the Windows, MacIntosh, and some other operating system s, a folder is a named collection of related file s that can be retrieved, moved, and otherwise manipulated as one entity. The folder and file terms were chosen to be consistent with the metaphor that the user interface is a desktop.

**Hardware** - the machines, wiring, and other physical components of a computer or other electronic system.

**Heat sink** - hardware that draws heat away from the central processing unit on the motherboard.

**Input** - In computer science, the general meaning of input is to provide or give something to the computer, in other words, when a computer or device is receiving a command or signal from outer sources, the event is referred to as input to the device. Typing test via the keyboard is a common input.

**Interface** - An interface is what the user uses on an operating system to make the computer do tasks, like writing a document, or loading a web page. There are two types of interfaces, a command line interface (CLI for short), or a graphical user interface (GUI for short).

**Iteration** - Repetitive control structures, also referred to as iterative structures, are groupings of code which are designed to repeat a set of related statements. This repetition (or iteration) can repeat zero or more times, until some control value or condition causes the repetition to cease.





**Loops** - is used to describe repetition in algorithms otherwise known as iteration.

**Motherboard** - a hardware component that connects all the other hardware together to create a computer device.

**Menu** - a list of link, usually across the top of the screen in an application that provice access to a range of processes and tools.

**Networks** - A computer network is a set of computers sharing resources located on or provided by connections.

**Online Safety** - Internet safety or online safety or cyber safety and E-Safety is trying to be safe on the internet and is the act of maximizing a user's awareness of personal safety and security risks to private information and property associated with using the internet, and the self-protection from computer crime.

**Output** - In computer science, the general meaning of output is what is produced by the processing on inputed data. Output can be sound, video, printed documents or displays on the screen.

**Passwords** - A security measure to ensure only one person has access to a device or system.

Personal Data - data that describes you as a person but does not need to be private.

**Ports** - connections to devices that allow other devices to share data.

**Privacy** - keeping information or data from being shared with others.

**Private data** - any data that can identify you, your family or where you are.

RAM - Random Access Memory is the short term memory of a computer that stores what you are ding until you save it permanently to a drive.

**Save** - the process of keeping a permanent record of data on a drive so it can be retrieved later.

**Search keywords** - word entered into a search engine like Google to ensure you find the information you are looking for.



**Security** - processes and technology that keep you and your data safe from viruses and other people.

Sequence - A list of instructions that a programmer creates for a computer to follow.

**Shared data** - files that are able to be accessed by more than one person over a network.

**Software** - the programs and other operating information used by a computer.

**Solution design** - a visual representation of an application in the process of being designed.

**Storyboard** - a sequence of drawings, typically with some directions and dialogue, representing the shots planned for a film or television production. In computer science a storyboard shows each screen in order as the user encounters them.

**Symbols** - a visual icon that is clear in meaning to most people to make communication fast and meaningful. A symbol represents something else.

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**Variables** - variables are names given to computer memory locations in order to store data in a program. This data can be known or unknown based on the assignment of value to the variables. Variables can also be considered as 'containers' which are used to hold more than one value.

**Word Processing** - using a program that assists in writing text documents for print or sharing online.



# Digital Technologies Program Band 1 - 2

#### **Year One**

Digital Literacy	Digital Technologies	Pages
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	Investigating software	p56 - 60
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Using Files and Folders		p56 - 60
	What is data?	p61 - 67
	Colour and symbols	p61 - 67
	Designing solutions for everyday problems	p68 - 74
Understanding digital systems at the school		p68 - 74
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	Collaborating on a document	p91 - 96
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	Online discussion rules	p97 - 103



#### Year One

Digital Literacy	Digital Technologies	Pages
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	Private & Personal Information	p104 - 110
	Website Safety	p104 - 110
Editing MS Word		p112 - 113
Editing Excel		p114 - 116
	Screen Time vs Green Time	p117 - 122



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	Investigating computer hardware	p49 - 55
Saving and Retrieving files		p56 - 60
	Investigating software	p56 - 60
Using PowerPoint		p56 - 60
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#### **Year Two**

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	Private & Personal Information	p104 - 110
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Editing MS Word		p112 - 113
Editing Excel		p114 - 116
	Screen Time vs Green Time	p117 - 122



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#### **Year Three**

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#### **Basic Windows Commands**

**Undo your last action** 

ctrl + Z

**Switch between applications** 

alt + tab

Take a screenshot

alt + print screen

**Open Windows Task Manager** 

ctrl + alt + del

Close a tab, window, or file

ctrl + W

Refresh current web page

F5

Open "save as"

F12 + I

Close an open window

alt + F4

Right-click a selected item

shift + F10

Select all

ctrl + A

Select file, press to delete

shift + del

Copy

**Paste** 

ctrl + C

ctrl + V

**Cut (delete and copy)** 

ctrl + X

**Bold text** 

ctrl + B

**Italic text** 

ctrl + I

**Underline text** 

ctrl + U

#### **Windows Key Shortcuts**

**Open Start menu** 

 $[\mathfrak{H}]$ 

Switch to previous window

# tab

See desktop

**岩 + D** 

**Snap window to the left** 

₩ + <

Snap window to the right

# + ▶

Lock your computer

₩ + L

**Open Windows settings** 

第 + 1









# Band Foundation Digital Technologies

#### **ACARA Version 9.0**

#### **Band level description**

Learning in Digital Technologies builds on the Early Years Learning Framework and each student's prior learning and experiences.

By the end of Foundation students should have had the opportunity to experience computational thinking by experimenting with different ways of representing an idea or action with a symbol, object or picture that is understood by others, such as a sun indicating fine conditions in a weather forecast.

Through Digital Technologies and Mathematics (Statistics), students have opportunities to explore different ways that data can be acquired and recorded, for example using a tablet to take photographs of plants in the school garden. Students have opportunities to develop their confidence with using digital systems by creating content such as simple messages. They become familiar with the difference between data that is owned by them, such as a photo of themselves, and data that is publicly available, such as a photo of their school. Through guided play experiences and tasks, students develop systems thinking by exploring how digital systems, such as tablets, smartphones and laptops can be used for different purposes, at school and at home

In Digital Technologies, students should have frequent opportunities for authentic learning by making key connections with other learning areas.

#### Digital Technologies Achievement standard

By the end of Foundation students show familiarity with digital systems and use them for a purpose. They represent data using objects, pictures and symbols and identify examples of data that is owned by them.

#### Learning area Achievement standard

By the end of Foundation students identify familiar products, services and environments and develop familiarity with digital systems, using them for a purpose. They create, communicate and choose design ideas. Students follow steps and use materials and equipment to safely make a designed solution for a school-selected context. They show how to represent data using objects, pictures and symbols and identify examples of data that is owned by them.

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#### Knowledge and Understanding

AC9TDIFK01 Recognise and explore digital systems (hardware and software) for a purpose

#### **Teacher Background Reading**

#### DIGITAL SYSTEMS

#### What do we mean by a Digital System?

The word "Digital" means made of numbers. All the data and information in a computer system is converted to numbers so that the device can understand them.

We can tell the difference between digital devices and other devices because digital devices:

- Need to be charged with electricity
- Often have screens
- Have buttons so we can interact with them.
- Can save information so we can access it again.
- · We can share information very easily

#### **Identifying Digital Systems around the School**

How many digital devices are in the classroom? The teacher laptop, mobile phone, Desktop Computer, calculator, projector. Your school is run on digital systems. The morning roll, the email system and the network to allow student devices to access the internet and other information. It is worthwhile to investigate who your IT network administrator is and where some of the devices for the network can be seen around the school.

Collect items that are digital versus analog. A digital watch shows the discrete numbers 9.00am then 9.01am while an analog watch shows the hands moving from one place to another.

Other items for discussion:

- A book versus reading a file on a tablet or laptop
- · A calculator versus adding up numbers on paper
- · Keeping a photo album book versus keeping photos on a phone
- Games on a device versus a board game

#### Collecting Data on a tablet or laptop.

Using tablets or laptops students can collect some data about themselves and store it in one location such as a OneNote, BookCreator or ExplainEverything. They can:

- Type some text by copying their name
- Take a photo of themselves
- Record a sound of themselves singing a song
- · Record a video saying their name and introducing a friend

OneNote allows the user to type, take photos, record sound and video and store all the files in one space. This is a great way to collect data easily and have it available to play back. OneNote has an 'Insert' menu with some simple buttons that allow you to record audio and video and the files are stored right on the page. If you want to type something just start typing and the text will





appear on the page. You may need give students a hand in finding a photo by clicking on Picture and browsing for the file. Once you show students how to do it - they will be able to manage their files better and able to browse for their documents.

See the OneNote Insert Menu below. You can see how easy it is to collect sound and video data right from the app.



If you use BookCreator you can get each student to create a single page by:

- Create a new book
- · Choose the book shape
- · Add your name
- Style the text
- Add a selfie
- Record a voice message or video
- Change the background

Teachers can put all the student books together by:

- · Click the Books button beneath any book.
- Choose Combine books.
- Select the books you want to combine choose them in the order you want them to display in the book.
- Click Next.
- Give the new combined book a name. You can also change the author name if you need to. Then click Create Book.

Explain Everything is available online at www.explaineverything.com. Teachers can set up an INVITE CODE for the students to use to collaborate on a project. This is a nice and easy solution for creating a new document, adding image files and video and record sound.

#### Classroom Resources List

#### **DIGITAL SYSTEMS**

Resources for the Digital Systems Activities:

- · Photocopied Worksheets
- Actual examples of digital mobile phone/old phone, tablet/book/board game, digital watch/analog watch, GPS/Map, Art Supplies & Folders of Documents/Laptop.
- · Internet Access, Microsoft OneNote or BookCreator

#### **Student Learning Activities**

#### **DIGITAL SYSTEMS**

#### **Introductory Activity**

Demonstrate the difference between writing on the white board and typing on the computer through the projector. You could discuss what are the benefits of one over the other. Things to highlight include: Once you rub off the writing from the white board it is gone forever but the typed text can be saved and accessed again. You can demonstrate how easy it is to find the file once it has been closed. Once it has been demonstrated a number of times, get the students to call out









the instructions to access a file and open it. I find demonstrating is often never enough. Once the students engage and give you the instructions, they have constructed their own understanding of what you have demonstrated.

#### "What is digital?" Activity

Student can identify digital technology in the classroom or at home. As an introduction, Worksheet 1 allows students to compare a book to a tablet and a mouse to a pencil. This worksheet is a good starting point for a discussion about the use of a mouse and a tablet and how they are different to using a pencil on a book.

Discussion questions:

- 1. Does a book or a pencil need electricity?
- 2. Does a tablet or mouse need electricity?
- 3. When is it easier to use a pencil with a book?
- 4. When is it easier to use a mouse and a screen?

#### **Drawing: Book or Tablet**

Creating a simple drawing of a butterfly on the screen versus on paper. Discussion questions:

- 1. What was easier with the tablet?
- 2. What was easier with the pencil?
- 3. Which one looks better?
- 4. Which one was more fun to do?

#### Finding a newly created file to rename

Students can use their devices to take a photograph and find the file they just created and rename the file "MyPhoto". Depending on the devices the students are using, this maybe something that needs to be demonstrated and practiced many times. Once students know exactly where their file is stored on their device, they can add the file to any document by browsing using file explorer or finder.

Once students are able to locate and rename a photo, students are ready to start their book.

#### Creating a OneNote, ExplainEverything or BookCreator Book

Discuss the difference between text and the sound of someone reading the text.

Text is something you SEE while Sound is something you HEAR

Discuss the difference between a photo and a video.

A photo is STILL while a video MOVES and has SOUND.

This means they are different data types. Each student can create a single page that contains their name in text, a photo of their face, a recording of them speaking or singing and a Video of them dancing or showing off a pet at home.

Once all the students have completed their pages, you can put them together to make a class book that talks and dances and identifies each student.





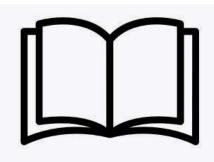


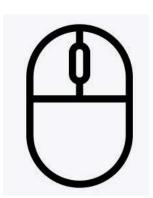
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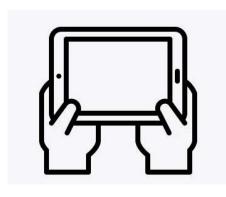


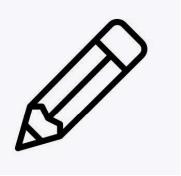
#### AC9TDIFK01 Digital Systems Worksheet 1 Digital Devices

# DIGITAL?









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#### **Knowledge and Understanding**

AC9TDIFK02 Represent data as objects, pictures and symbols

#### **Teacher Background Reading**

#### **DATA REPRESENTATION**

What do we mean by a Data?

#### **Symbols**

Data can be words, numbers, images, sounds or video. Sometimes we need to use other things to represent data when the data is complex. On a toilet door, we use symbols to represent 'girls' and 'boys'. A symbol is a visual short cut. We instantly recognise a symbol before we recognise words that we need to read. Below are many symbols we use everyday with their meaning. They are also on Worksheet 1. Students can discuss the meanings of the symbols. Most will be familiar, some may not be.











#### Representing ideas as symbols

If we were to describe ourselves, we would talk about the things we like, the way we look and our personality. What if we had to reduce that information into symbols. We could use colour to symbolise a wide range of things that can describe us. I've listed a few things that western culture associates with eight colours. What might be interesting is if the class decides what 'blue' represents rather than what I have listed below.

RED = Angry
WHITE = Calm
BLUE = Strong/male
GREEN = Smart
YELLOW = Happy
ORANGE = Funny
PINK = Pretty/female
PURPLE = Scared

Once you have a 'dictionary' of what the colours mean to the students, they can create their own tower or home out of blocks that represent them. For example: Ms Farrell sometimes gets angry, but not all the time. She can be funny and happy. So my house will be mostly yellow with some orange with a little bit of red.

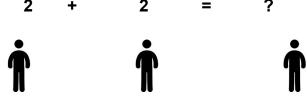
Once the houses are built, the students can describe themselves through the colour symbols in what they have built by presenting to the class. If blocks are unavailable - colouring in some shapes could also explore this idea. You could also ask students what they think a triangle, circle or square would symbolise.

Use Worksheet 2 to identify the colour meanings by colouring the sections and writing the meanings as words and drawing the feelings as faces in the circles.

#### Concrete symbols to variables

A variable is a place holder which can hold any number. We learn to use 'x' in mathematics much later, but students can learn about variables earlier in digital technology contexts. It is good to have lots of small things that look the same, such as blocks, pom-poms or counters.

Learning to count and learning that symbols can have other meanings can be easily related in concrete thinking. Line up three students against the whiteboard. Give 2 blocks to student one, give 2 blocks to student two and write the addition above their heads on the board.



The student with the question mark will have a small box. Both students one and two put their blocks into the box and student number three counts them. The box is actually a variable. What if we write different numbers and instead of a plus, we write minus? This means student two will remove the blocks from the box. We could make an even longer equation with a plus and a minus and add another student. We get to count the answer in the box. This is a great way to get students to develop concrete thinking about mathematical concepts and it is the basic of understanding variables in programming.







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AC9TDIFK02 Digital Systems Worksheet 1 Data Representation

# SYMBOLS

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# Colour Meaning RED BLUE YELLOW GREEN PINK WHITE PURPLE

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#### **Processes and Production Skills**

AC9TDIFP01 Identify some data that is personal and owned by them

#### **Teacher Background Reading**

#### PRIVACY AND SECURITY

#### **Private Data and Public Data**

#### What is Private Data?

When we look at information on the internet, especially on social media, we can see people's faces, names and what they do. This information has become public for anyone to see. There are some people who live a public life:

- · The Prime Minister of Australia
- · The Queen of England
- Actors
- Musicians
- · Sports People.

We know who they are just by looking at their photos. We can keep up to date on what they are doing in the news. But do we know where we can meet them? Maybe not. There is some information public people keep private. This is because they don't want lots of fans coming around to their house asking for tea and biscuits with a side of selfy.

The image on the right contains world famous people, Taylor Swift, Beyonce, Justin Bieber, Kim Kardashian, the Queen and Kanye West. Using these people as examples, or others that are in the news, it is possible to discuss why they do not put their phone number or their address online. What would happen?

This is a good starting point for introducing the concept of private data versus public data.

#### **Online Safety**

There are a number of good story books for young children that teach online safety.

The Tweeting Galah by Kim Maslin has an interactive element that can be used with a tablet or phone and comes with reflections questions.













Chicken Clicking by Jeanne Willis is a cautionary tale about a chicken who makes a friend online and goes to meet them without talking to mum and dad first. It turns out to be a fox! The Fabulous Friend Machine by Nick Bland is an Australian story which is similar with a less bleak ending.

#### **Discussion Questions**

Why should you keep your photo and real name private? What about where you live?





#### **Classroom Resources List**

#### **DIGITAL SYSTEMS**

Resources for the Digital Systems Activities:

- · Photocopied Worksheets
- · Photos of famous celebrities
- Chicken Clicking can be found on YouTube Read Aloud.
- · A copy of The Tweeting Galah by Kim Maslin

#### **Student Learning Activities**

#### **DIGITAL SYSTEMS**

#### **Introductory Activity**

Identify some famous people who are public figures.

**Discussion Questions:** 

- 1. Do we know their phone number? Why not?
- 2. Do we know their address? Why not?
- 3. If we saw one of these famous people, what would happen if we tried to talk to them? (They might be nice and say hello, BUT they probably have body guards!)

Since we don't have body guards - we have Mums and Dads!

#### What is Private?

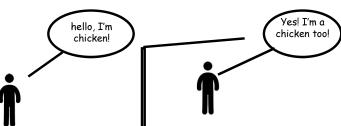
Our name, address and our family information needs to be kept private. We do not want people knowing all about us online - especially if those people are not very nice.

After reading or watching 'Chicken Clicking' discussion questions:

- 1. What do we think of the fox?
- 2. Why do you think the fox was online?
- 3. Did the fox lie?
- 4. Was the Chicken too trusting?
- 5. How could the chicken avoid that situation?

#### Creating a story about keeping safe

Students can role play a version of Chicken Clicking or The Fabulous Friend Machine where one student plays the chicken who tries to make a friend online. With the use of masks, a student can hide behind a blind/table or screen and make friends with the chicken. Unknown to the chicken, we can't tell if it's a fox or another chicken until that student reveals themselves wearing a chicken or fox mask.











#### **Key Digital Literacy Skills**

#### **TYPING**

Students need to learn how to navigate the keyboard. Typing games using a real keyboard rather than a screen keyboard, can be a fantastic way to speed up students ability to use computer devices.

There are plenty of online typing tutorials that are fun for young students.

https://www.typing.com https://www.typingclub.com/

These online tools can get students competing for the best, fastest and most accurate typist. Typing is a 21st century skill that can be used everywhere computers are used.

#### **CREATING & SAVING FILES**

A crucial skill for everyone is to make files, name them and save them so you know where it is until next time you want to open it. Everyone needs to understand what a file and a folder is on a computer and how to browse to find them.

If students are given a demonstration on how to find a file every single day, they will understand how to navigate the Windows environment. Give them a treasure hunt, where they have to find a file on a shared drive. Give them the instructions to follow in terms of the folder they need to access.

If you are unsure as to how to navigate windows, this website is an excellent resource for learning how to browse Windows. https://edu.gcfglobal.org/en/windowsbasics/working-with-files/1/

If you struggle with computers, learning to navigate Windows or File Finder will change your life.

#### **Online Resources**

The BBC is an excellent source of Digital Literacy online activities and games. Try BiteSize, a website that has an entire Computer Science section for Foundation and Year One level students here: https://www.bbc.co.uk/bitesize/subjects/zyhbwmn

Stem Learning in the UK is also an excellent resource for Digital Literacy online resources.

Don't be seduced by robotic devices that use remote controls - these do not develop an understanding of logic and sequence. Focus on systems like Sphero <a href="https://sphero.com/">https://sphero.com/</a> where the robot is "programmed" with coloured cards. it's a great way to get students thinking about problem solving to control a robot.





