DIGITAL TECHNOLOGIES HUB

What's the difference between ICT Capability and Digital Technologies?

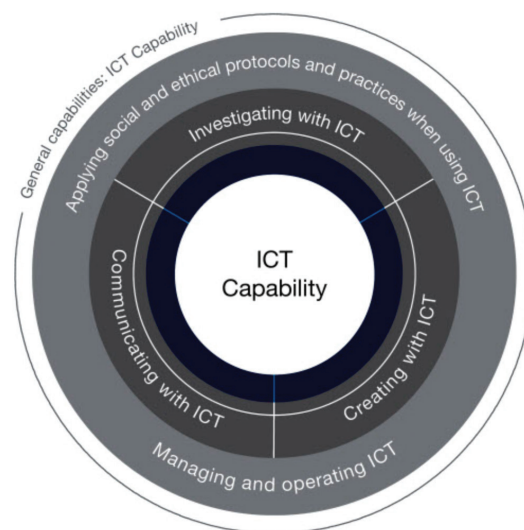## Information Communication Technology (ICT) Capability

A general capability taught within all curriculum areas for students in years F–10.

Develops skills and understandings in managing and operating ICT to investigate, create and communicate.

Incorporates digital citizenship when considering the ethical and social impacts of using technologies.

Is explicitly planned and taught in all subject areas.

ICT supports students to be effective users of technology.

General capabilities: ICT Capability
Applying social and ethical protocols and practices when using ICT
Investigating with ICT
Communicating with ICT
Creating with ICT
Managing and operating ICT

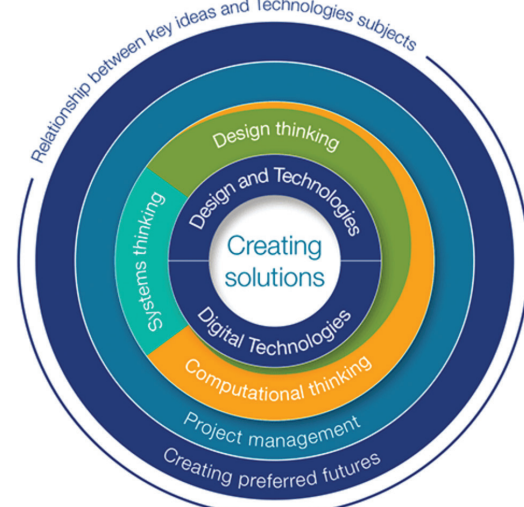**ICT Capability**

Digital Technologies

A new subject for F–10 (optional in 9-10) students with new and unique skills and content.

Develops knowledge, understandings and skills of the underlying concepts of information systems, data and computer science.

Encourages students to design and create digital solutions that solve problems taking their preferred futures into consideration.

Must be assessed and reported at least once every two years.

Digital Technologies build on and extend ICT, moving students from technology consumers to creators.

Relationship between key ideas and Technologies subjects
Design thinking
Design and Technologies
Systems thinking
Creating solutions
Digital Technologies
Computational thinking
Project management
Creating preferred futures

Use ICT

- Presentation tools
- Locate information
- Digital publishing
- Interpret timelines
- Ownership and use
- Spreadsheets and graphing
- Analyse and visualise data
- Cyber safety
- Managing files
- Mapping and geospatial tools
- Online communication
- Digital music / multimedia

Types of Rubbish	Amount
Plastic	60
Paper/Card	20
Metal	2
Glass	2
Organic	120
Other	4

Create solutions and learn about Digital Technologies

- Digital systems (networks)
- Robotics and automation
- Coding and programming
- Computational thinking
- User interface design
- Storing and transmitting data (binary numbers)
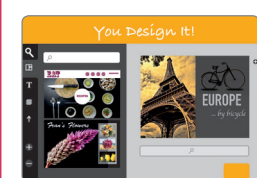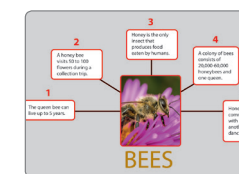- Pattern recognition
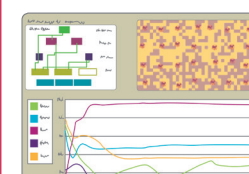- Algorithms
- Programming boards
- Data collection

Examples of ICT in action

Use digital concept mapping tools to plan and select research tasks.
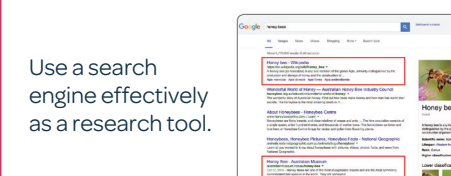
BEES

Use presentation software to present findings of an inquiry that includes text, images and video.
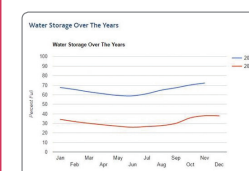
Use video to analyse a sports performance to provide coaching tips.

Use a computer simulation or game to test predictions and collect data.

Use a search engine effectively as a research tool.

Honey bee

Use spreadsheet functions to create tables, record, sort, calculate and present data to identify trends.

Water Storage Over The Years

Use an online game that has a grid map system to learn about directions.

Examples of Digital Technologies in action

Create and code an image using black and white squares. Invite a classmate to decode and recreate the image.
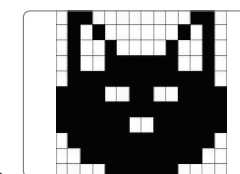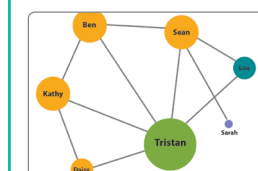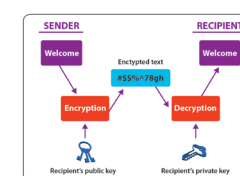
Compare a transport network and computer network to explore ideas about pathways, reliability, protocols and security.

Create an interactive story with user-input using a familiar programming language.

CHOOSE YOUR CHARACTER AND BEGIN

Create your own simulation using a visual or text-based programming language.

Explore ways to securely transmit data through techniques of encryption and decryption.

SENDER · RECIPIENT
Welcome · Welcome
Encrypted text
Encryption · Decryption
Recipient's public key · Recipient's private key

Create network diagrams to identify relationships between different sources of data (eg friends on social media) and analyse this data.

Design your own maze and use an app to program a robot to go through it.