

Cut through the technical language

of Digital Technologies

The Digital Technologies curriculum exists within the Technologies learning area of the Australian Curriculum. It comprises 2 strands:

- Knowledge & Understanding
- Processes & Production Skills

Digital Technologies

Overview

Digital Systems



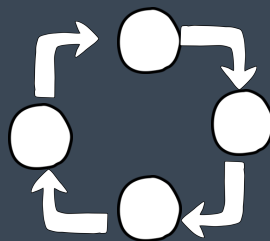
The components of digital systems: hardware, software, networks

Representation of Data



How data are represented and structured symbolically

Data



Collecting, managing & analysing data

Key Curriculum Elements

for creating digital solutions

Collaboration & Communication

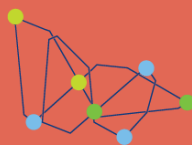


Managing, creating and communicating ideas & information

Computational Thinking



Integrating problem-solving with the capabilities of digital systems



Cut through the technical language

of Digital

Technologies

The Digital Technologies curriculum exists within the Technologies learning area of the Australian Curriculum. It comprises 2 strands:

- Knowledge & Understanding
- Processes & Production Skills

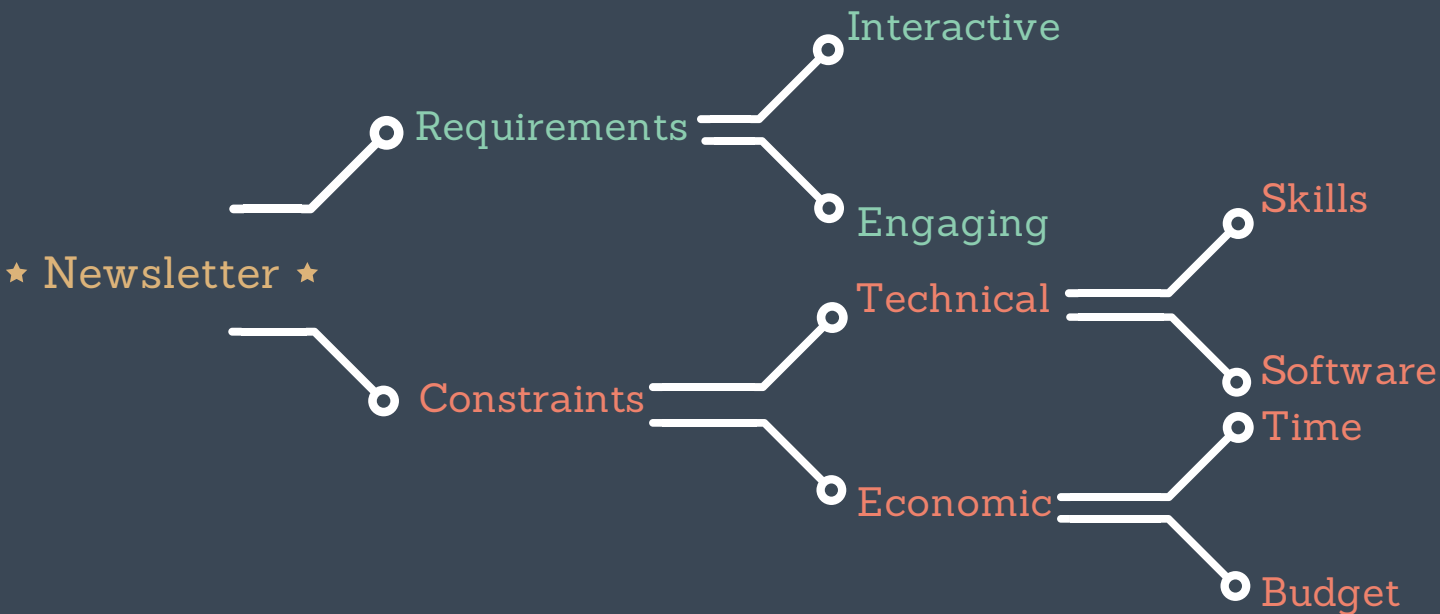
Decompose

Breaking down problems into smaller, manageable parts.

Years 7 - 8

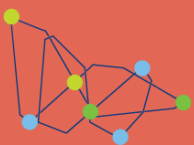
----- Content Description -----

Define and decompose real-world problems taking into account functional requirements and economic, environmental, social, technical and usability constraints (ACTDIP027).



-- One Possible Task Example --

Interest in a monthly newsletter is declining. The readers want a publication that is engaging and interactive, but there are time and budgetary constraints. Kim, who produces the newsletter, uses word processing software to create the newsletter. Identify and classify the constraints on the solution to this problem.



Cut through the technical language

of Digital Technologies

The Digital Technologies curriculum exists within the Technologies learning area of the Australian Curriculum. It comprises 2 strands:

- Knowledge & Understanding
- Processes & Production Skills

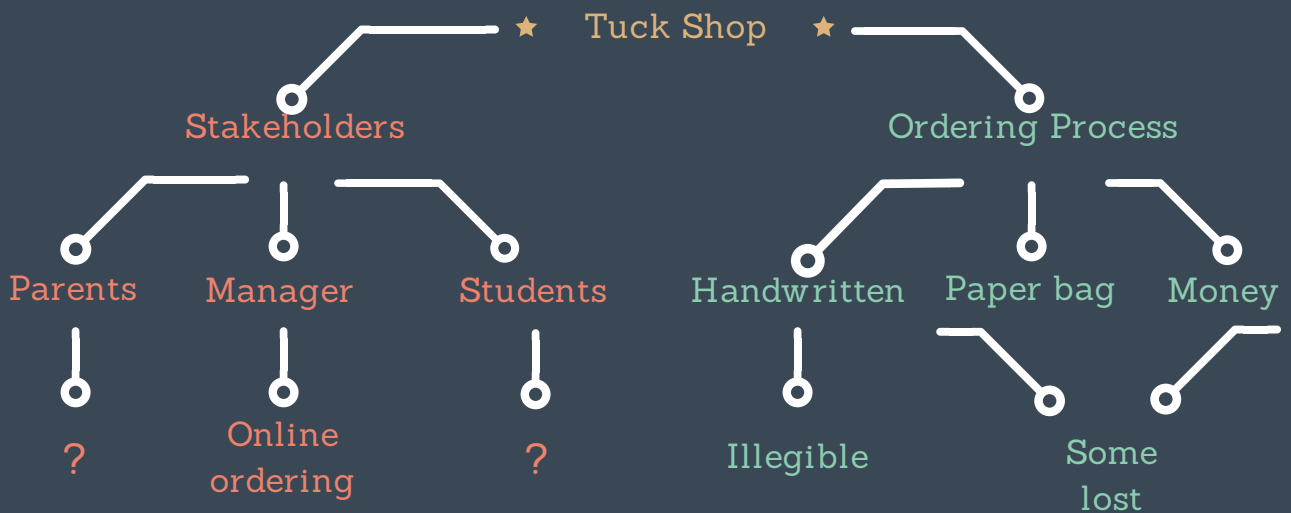
Decompose

Breaking down problems into smaller, manageable parts.

Years 9 - 10

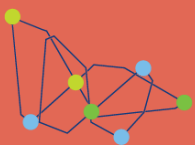
----- Content Description -----

Precisely define and decompose real-world problems, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs (ACTDIP038).



-- One Possible Task Example --

Tuck shop orders are currently written on the outside of paper bags and the money put in the bag. Bags and money go missing and sometimes writing is illegible so wrong food is provided. The tuck shop manager would like an online ordering system. How could you break this problem down? What are the functional requirements of the solution? Who else should be interviewed to find out what is needed of the solution?



Cut through the technical language

of **Digital**

Technologies



The Digital Technologies curriculum exists within the Technologies learning area of the Australian Curriculum. It comprises 2 strands:

- Knowledge & Understanding
- Processes & Production Skills

Sources

<http://www.iste.org/docs/ct-documents/ct-vocabulary-and-progression-chart.pdf>

<http://www.australiancurriculum.edu.au>

License



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

Brought to you by:



Digital Learning and Teaching
Victoria

www.dltv.vic.edu.au

Infographic designed by:



www.vgrinteractive.com.au