**Western Australian Curriculum**

Technologies| Digital Technologies

ABLE*WA* Stages A–D

**Content Descriptions, Elaborations and Achievement Standards**

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**Stage A | Content descriptions**

**Knowledge and understanding**

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| --- | --- |
| **Digital systems** | **Elaborations** |
| React to the use of some common digital systems, (hardware and [software](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/software) [components](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/components)), as they experience their purpose [(VCDTDS001)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-a/vcdtds001) | * experiencing digital systems used within everyday life and school programs, for example phones, printers, cameras, multimedia presentations, tablets, games * using voice and body movements to make sounds in a microphone * experiencing cause and effect devices, for example touch keys on a banana keyboard * experiencing and playing with switches, for example a jelly bean switch * experiencing changes in a program due to the activation/deactivation of a switch by another, co-actively or through individual exploration |
| **Data and information** | **Elaborations** |
| React to patterns and different types of data and experience how data is sorted and represented as images using digital systems [(VCDTDI002)](http://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCDTDI002) | * experiencing how their movements can create sounds and visual effects * using numeric data and displaying them as images, for example selecting and displaying photos of classmates who are present at school on a given day * experiencing the use of visual data, for example searching through a school-based digital photo library to select an image of themselves and significant people in their life * experiencing different types of data processing by digital systems, for example images, sound, text and numbers |

**Processes and production skills**

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| **Creating digital solutions** | **Elaborations** |
| Experience steps involved in completing a routine task [(VCDTCD003)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-a/vcdtcd003) | * watching the presentation of an event in a series of slides or screens accompanied by text and pictures * carrying out a simple step-by-step procedure such as cleaning teeth * showing how everyday tasks can be broken down through displays and visual schedules |

**Stage A | Achievement standard**

By the end of Stage A, students recognise common digital systems that are used to meet specific everyday purposes.

Students react to different types of [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data) and how digital systems can be used to represent [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data) as images.

Students recognise that routine tasks involve completing a set of steps.

**Stage B | Content descriptions**

**Knowledge and understanding**

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| **Digital systems** | **Elaborations** |
| Explore the purpose and use of some common digital systems (hardware and software components) [(VCDTDS004)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-b/vcdtds004) | * observing the use of basic digital systems in everyday routines and copying them, for example using a tablet or phone to take a photograph * mimicking the use of various digital devices and assistive systems, for example using touch and reaction-linked devices that are in close proximity, using a voice-activated device * practising hand gestures to resize an image or text, or swipe to navigate * copying how to carry out an instruction, for example tapping an icon or swiping a screen |
| **Data and information** | **Elaborations** |
| Collect and sort familiar [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data), and with assistance use digital systems to represent the findings as images [(VCDTDI005)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-b/vcdtdi005) | * experimenting with devices to capture and record data such as taking a photo (image data) and recording the results from a structured data-sorting activity * assisting to sort objects and events in structured shared experiences based on teacher-defined characteristics and using digital systems to represent the findings * sorting data by size and displaying the objects from tallest to smallest * assisting to sort data through structured learning experiences, for example sorting classroom objects into categories based on them being ‘the same’ * using software to select images and sounds to represent the findings of sorted data |

**Processes and production skills**

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| **Creating digital solutions** | **Elaborations** |
| Follow a sequence of steps and decisions needed to solve simple problems [(VCDTCD006)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-b/vcdtcd006) | * following a sequence strip to complete the steps in an everyday event, such as morning circle, unpacking their bag * using problem-solving skills to explore cause and effect programs or activities that have a clear action/consequence, such as dropping a ball, turning on a screen * following a simple single step instruction (step-by-step using verbal and visual prompts) to complete everyday routine activities * following a sequence of instructions or events presented as pictures or images for familiar routine activities and commonly experienced events |

**Stage B | Achievement standard**

By the end of Stage B, students explore some common digital systems for a purpose.

Students collect [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data), sort them based on given [characteristics](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/characteristics) and with assistance use digital systems to display findings as images.

Students follow a sequence of steps and decisions needed to solve simple problems.

**Stage C | Content descriptions**

**Knowledge and understanding**

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| **Digital systems** | **Elaborations** |
| Initiate some basic functions on common digital systems (hardware and [software](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/software) [components](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/components)) to meet a purpose [(VCDTDS007)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-c/vcdtds007) | * developing motor skills to slide, double tap and beginning to use a mouse to activate or manipulate a game * using two switches for two functions * exploring various digital systems to operate a program, for example using a keyboard to type, a mouse or stylus to draw and using appropriate pressure to activate a key * using devices purposefully, for example scanning and selecting a program or adjusting the volume |
| **Data and information** | **Elaborations** |
| Collect, sort and recognise simple patterns in data, and assist with the use of digital systems to represent data as pictures and symbols [(VCDTDI008)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-c/vcdtcd009) | * pairing identical objects from a small collection * copying a pattern associated with a familiar activity, for example repeating a movement pattern * matching, sorting and organising objects in practical situations * sorting objects and events based on easily identified characteristics and using digital systems to represent data, for example sorting objects based on colour or shape and creating a digital drawing * assisting to collect and sort data in a structured situation, for example questioning friends about their favourite animal or football team and selecting an image of the most popular response * assisting in using common software to present data creatively such as a slideshow, movie or sounds |

**Processes and production skills**

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| **Creating digital solutions** | **Elaborations** |
| Follow, and with assistance, represent a sequence of steps and decisions (algorithms) needed to solve simple problems [(VCDTCD009)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-c/vcdtcd009) | * re-sequencing a known everyday activity using visual images or verbal cues * experimenting with very simple, visual step-by-step procedures to explore using a device or completing a task, for example printing a picture or starting a game * identifying sequences of instructions or events that are commonly experienced such as the sequence of traffic lights or instructions for making a sandwich * following two to three-step series of instructions to use a piece of hardware or software, for example locating a website by keying in its URL or inserting an image in a file |

**Stage C | Achievement standard**

By the end of Stage C, students explore alternative digital systems to meet a purpose.

Students collect and sort different [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data) and [identify](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/identify) patterns in [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data) through matching. With assistance, they use digital systems to display findings with pictures and symbols.

Students represent a sequence of steps that could be followed to solve a simple problem.

**Stage D | Content descriptions**

**Knowledge and understanding**

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| **Digital systems** | **Elaborations** |
| Carry out some key functions on digital systems (hardware and [software](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/software) [components](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/components)) to meet a purpose [(VCDTDS010)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-d/vcdtds010) | * identifying and using different techniques to carry out an instruction, for example a control key or mouse to close a file, or a mouse or hand movement to resize an image, or a stylus or selecting an existing object to create a shape * using some features of a computer to carry out a number of functions, for example saving work, moving the cursor and scrolling within a file * using icons to operate familiar software such as Save, Favourites, Home |
| **Data and information** | **Elaborations** |
| Collect, sort, and recognise, with assistance, different types of patterns in [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data), and use digital systems to represent [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data) as pictures, symbols and diagrams [(VCDTDI011)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-d/vcdtdi011) | * collecting, sorting and displaying data in a personally meaningful way, for example collecting leaves, sorting them into groups based on size, shape or colour and using a drawing program to represent the findings * sorting like objects based on a given classification, for example group shoes based on colour or size and presenting the findings * examining and continuing a simple repeated pattern with given objects, movement or sounds * using common software to present ideas creatively, for example creating a slideshow, poster, drawing or image about a wishful holiday destination |

**Processes and production skills**

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| **Creating digital solutions** | **Elaborations** |
| Follow and represent a sequence of steps and decisions (algorithms) needed to solve simple problems [(VCDTCD012)](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/technologies/digital-technologies/ablewa-stage-d/vcdtcd012) | * taking and using photos to represent the sequence of events, for example placing in order photos of buildings/rooms that need to be passed when getting from the classroom to the front school gate * viewing a game and listing the number of levels within it * writing a simple set of instructions to sequence events, for example the processes involved in making toast with jam * recognising sequences of instructions or events that are commonly experienced such as crossing a road that has traffic lights |

**Stage D | Achievement standard**

By the end of Stage D, students use key functions of digital systems and indicate their purpose.

Students collect, sort and recognise, with assistance different types of patterns in [data](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/data). They use digital systems to display results using pictures, symbols and diagrams.

Students use a sequence of steps and decision making processes to solve a simple problem.