**Western Australian Curriculum**

Technologies| Design and 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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| --- | --- |
| **Technologies and society** | **Elaborations** |
| Experience how people create familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) to meet their needs [(VCDSTS001)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-a/vcdsts001) | * experiencing designed solutions such as harvesting products from the school garden * being exposed to people making design decisions based on personal needs. For example, the types of tools and equipment used in the school garden * experiencing the use and impact of technologies in their life such as types of outdoor play equipment |
| **Technologies contexts** | **Elaborations** |
| Experience the [characteristics](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/characteristics) and [properties](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/property) of familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least one [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) [context](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/context) [(VCDSTC002)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-a/vcdstc002) | * experiencing toys and objects and use force to produce movement, sound or light, for example, a fan or pull-along toy * reacting to the sensory characteristics of a plant or animal * reacting to the sensory properties of different foods * experiencing materials characterised by their softness, hardness, flexibility, density |

**Processes and production skills**

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| **Creating designed solutions** | **Elaborations** |
| React to a designed solution that has been created and produced safely to meet their needs[(VCDSCD003)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-a/vcdscd003) | * communicating simple choices through accept or reject actions as they experience making, doing and drawing * learning to indicate what they like when prompted * experiencing the production of a designed solution, for example, tasting fruit salad * experiencing being part of a group design process |

**Stage A | Achievement standard**

By the end of Stage A, students react to significant [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) that meet their needs.

With guidance, students experience [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least one [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) [context](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/context). They begin to communicate their needs and indicate a choice or preference through accept and reject actions.

Students react to the use of [tools](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/tool) and [equipment](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/equipment) and experience the sequenced steps involved in [producing](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/producing) a designed solution.

**Stage B | Content descriptions**

**Knowledge and understanding**

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| **Technologies and society** | **Elaborations** |
| Explore the use of familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) to meet their needs [(VCDSTS004)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-a/vcdsts001) | * experiencing designed solutions such as harvesting products from the school garden * being exposed to people making design decisions based on personal needs. For example, the types of tools and equipment used in the school garden * experiencing the use and impact of technologies in their life such as types of outdoor play equipment |
| **Technologies contexts** | **Elaborations** |
| Explore the [characteristics](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/characteristics) and [properties](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/property) of familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least one [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) [context](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/context) [(VCDSTC005)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-b/vcdstc005) | * beginning to appropriately push or pull an object to make it work, for example, push a toy car or spin a top * learning how to care for a plant or animal * beginning to use tools and equipment needed to prepare food * discovering the characteristics of materials, for example, materials that float or sink |

**Processes and production skills**

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| **Creating designed solutions** | **Elaborations** |
| Experience and explore how [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) are created and produced safely to meet personal needs[(VCDSCD006)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-b/vcdscd006) | * communicating a design idea by selecting and indicating materials, for example, identifying what ingredients to put in a sandwich * collecting, giving and sharing materials when prompted * working with others by helping hold, wait, stick, join and put materials together |

**Stage B | Achievement standard**

By the end of Stage B, students are using some familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) appropriately to meet their needs.

With guidance, students explore [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least one [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) [context](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/context). They experience designed solution ideas and select [materials](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/material) and [components](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/components) based on personal preferences.

Students follow a design process step by step and use [tools](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/tool) safely when prompted.

**Stage C | Content descriptions**

**Knowledge and understanding**

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| **Technologies and society** | **Elaborations** |
| Match familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) to the personal needs they meet [(VCDSTS007)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-c/vcdsts007) | * making a decision from a variety of options to meet a need, for example, matching kitchen utensils or garden tools to a specific use * selecting and using products for a specific need, for example, identifying ways to be shaded from the sun/be ‘sun safe’ * suggesting ideas about the use of a product and what need it meets, for example, ‘what do you use scissors for?’ |
| **Technologies contexts** | **Elaborations** |
| Examine and indicate the [characteristics](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/characteristics) and [properties](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/property) of familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least two [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) contexts [(VCDSTC008)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-c/vcdstc008) | * beginning to group designed solutions based on similar characteristics, for example, those that make a noise or bounce * beginning to identify and describe some familiar plants and animals, for example, plants we eat * describing the sensory properties of food according to its colour, taste, texture or smell, for example, green vegetables or sweet foods |

**Processes and production skills**

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| --- | --- |
| **Creating designed solutions** | **Elaborations** |
| Examine and indicate how [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) are created and produced safely to meet needs [(VCDSCD009)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-a/vcdsts001) | * experiencing designed solutions such as harvesting products from the school garden * being exposed to people making design decisions based on personal needs. For example, the types of tools and equipment used in the school garden * experiencing the use and impact of technologies in their life such as types of outdoor play equipment |

**Stage C | Achievement standard**

By the end of Stage C, students use and [identify](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/identify) the purpose of familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution). They match some [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) to a need.

Students use [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least two [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) contexts. With guidance, students reflect on created and produced [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution), developing ideas based on personal preferences. They begin to follow simple sequenced steps and teacher direction to use [tools](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/tool) and [equipment](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/equipment) safely when [producing](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/producing) [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution).

**Stage D | Content descriptions**

**Knowledge and understanding**

|  |  |
| --- | --- |
| **Technologies and society** | **Elaborations** |
| Explore how people create familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) and [identify](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/identify) their ability to meet personal and local community needs [(VCDSTS010)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-d/vcdsts010) | * making design decisions in everyday activities, for example, ‘what should we cook today and why?’ * exploring what technologies they use in their daily life, for example, ‘what tools and equipment do we need to grow vegetables?’ * exploring how and why their local environment has changed over time, for example, new buildings or play equipment |
| **Technologies contexts** | **Elaborations** |
| Explore and communicate the [characteristics](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/characteristics) and [properties](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/property) of familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least two [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) contexts [(VCDSTC011)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-d/vcdstc011) | * experimenting with materials and techniques to make movement, for example, to roll or float * exploring the safe use of tools in the care and use of plants and animals * using tools and equipment safely and hygienically to prepare simple, healthy food * discovering uses for materials and components, for example, how household packaging can be used to represent other objects |

**Processes and production skills**

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| **Creating designed solutions** | **Elaborations** |
| Explore and communicate how [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) are generated and produced to meet needs [(VCDSCD012)](https://k10outline.scsa.wa.edu.au/home/teaching/codes/technologies/design-and-technologies/ablewa-stage-d/vcdscd012) | * using a common testing method and recording results, for example, taste-testing comparison of food products and recording results as a happy or sad face * identifying the jobs or roles of each member of the groups when completing a task * gathering and using materials, tools and equipment to make a designed solution, for example, watering and mulching the garden * following steps to assemble a system and checking that it functions as planned, for example, following instructions to build a spaceship using building blocks |

**Stage D | Achievement standard**

By the end of Stage D, students describe the purpose of familiar [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) and what needs they meet.

Students use [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) in at least two [technologies](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/technologies) contexts, identifying significant [features](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/features).

With guidance, students create [designed solutions](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/designed-solution) evaluating their ideas based on personal preferences. They select [materials](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/material) based on some understanding of their [properties](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/property) and [characteristics](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/characteristics). They follow simple sequenced steps to create a designed solution and demonstrate the safe use of [tools](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/tool) and [equipment](https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/curriculum-browser/syllabus/technologies-overview/glossary/equipment).