



This document is an introduction to planning a teaching and learning outline with syllabus content for Year 3 Design and Technologies: Materials and technologies specialisations context. It demonstrates suggested sequencing and timing of syllabus content, giving students the opportunity to study at least one of the contexts for Design and Technologies. Teachers should refer to the Authority’s *Policy Standards for Pre-primary to Year 10: Teaching, Assessing and Reporting*, Table 1: *Western Australian Curriculum and Assessment Outline*, for further details on curriculum requirements and available options.

Schools may choose to teach the syllabus content for two hours a week for a semester **or** one hour a week for the year. Sample plans provide a range of possible learning experiences from which assessment should be drawn. The following Year 3 sample teaching and learning outline provides teachers with possible learning experiences over eight weeks and unpacks the syllabus content to assist teachers in their understanding.

A presentation is available on the Authority’s website (see [Resources > Presentations](#)) which unpacks the process to develop this plan.

The syllabus content for Design and Technologies: Materials and technologies specialisations (context) is set out in the table below.

Year 3	
Technologies and society	Role of people in design and technologies occupations Ways products, services and environments are designed to meet community needs
Materials and technologies specialisations	Suitability and safe practice when using materials, tools and equipment for a range of purposes
Investigating and defining	Create a sequence of steps to solve a given task
Designing	Develop and communicate ideas using labelled drawings and appropriate technical terms
Producing and implementing	Select, and safely use, appropriate components with given equipment to make a solution
Evaluating	Use criteria to evaluate design processes and solutions developed
Collaborating and managing	Work independently, or collaboratively when required, to plan, safely create and communicate sequenced steps



**Year 3 Learning Area: Technologies – Design and Technologies (context: Materials and technologies specialisations)**

**Year 3 Achievement standard**

At Standard, students identify roles people in Design and Technologies have on the community and explore design development processes of products, services and environments. In Engineering principles and systems, students observe and recognise ways applied forces and properties of materials affect the behaviour of objects. In Food and fibre production, students identify equipment and simple processes used in food and fibre production from a range of environments, cultures or time periods. In Materials and technologies specialisations, students select and safely use suitable materials, tools and equipment to create design solutions.

With all Design and Technologies contexts, students create a sequence of steps to solve a given task. They develop and communicate ideas using labelled drawings and appropriate technical terms. Students select and safely use appropriate components with given equipment to make a solution. They use criteria to evaluate design processes and solutions developed. Students work independently, or collaboratively to plan, safely create and communicate sequenced steps.

Week	Syllabus content	Content unpacked	Suggested teaching and learning experiences
1	<p><b>Technologies and society</b> Role of people in design and technologies occupations</p> <p>Ways products, services and environments are designed to meet community needs</p>	<ul style="list-style-type: none"> <li>designs to meet community needs: <ul style="list-style-type: none"> <li>products, such as food, baskets, seats, bus</li> <li>services, such as parents, teachers, gardeners, bus drivers</li> <li>environments, such as home, school, park, roads</li> </ul> </li> <li>design development process of products, services and environments: <ul style="list-style-type: none"> <li>nurse (providing a service) in a hospital (environment) giving a sick child medicine (product)</li> <li>chef (providing a service) in a restaurant (environment) preparing and cooking food (product) for the family</li> </ul> </li> <li>key roles people in design and technology have on community</li> </ul>	<p>Text stimulus: <i>'Australian Kids through the Years'</i> Written by: Tania McCartney Illustrated by: Andrew Joyner</p> <ul style="list-style-type: none"> <li>show images on page 1 and page 2, and identify a range of: <ul style="list-style-type: none"> <li>products</li> <li>services</li> <li>environments</li> </ul> </li> <li>explain how designs meet community needs, with relevant examples, such as providing food for the family</li> <li>describe key roles people in each image have on their community</li> <li>communicate observations and ideas using sketches and a T-chart to compare 'what is used, by who, in the picture with what is used, by who, in my home' – show product, service and environment</li> </ul>
2–3	<p><b>Designing</b> Develop and communicate ideas using labelled drawings and appropriate terms</p> <p><b>Materials and technologies specialisations</b> Suitability and safe practice when using materials, tools and equipment for a range of purposes</p>	<ul style="list-style-type: none"> <li>communicate design ideas: <ul style="list-style-type: none"> <li>develop (sequence, series) drawings</li> <li>label design features</li> <li>appropriate terms for materials, tools and equipment</li> </ul> </li> <li>connect and relate suitability of various materials, tools and equipment for a range of purposes, for example: <ul style="list-style-type: none"> <li>kite making</li> <li>basket weaving</li> <li>soft toy</li> </ul> </li> <li>purpose of product <ul style="list-style-type: none"> <li>end use, storage, cleaning</li> <li>design features, such as size, colour, weight, texture etc.</li> </ul> </li> <li>required materials, tools and equipment for a selected design</li> </ul>	<p>Text stimulus: <i>'Australian Kids through the Years'</i></p> <ul style="list-style-type: none"> <li>refer to the images on page 1 and page 2 to draw and compare different design ideas for a range of baskets: <ul style="list-style-type: none"> <li>use labels/annotations to explain their purpose</li> <li>identify design features, such as handles, weaves, shape, size</li> <li>discuss, using appropriate terms, what the baskets are designed to carry</li> </ul> </li> <li>refer to the images on page 1 and page 2 to explain the suitability of materials, tools and equipment for a range of activities observed: <ul style="list-style-type: none"> <li>materials - based on observable features, group living things and non-living things</li> <li>tools</li> <li>equipment</li> </ul> </li> <li>consider specific design features for selected basket: <ul style="list-style-type: none"> <li>material, weave, shape, size, dimension (height, depth etc.), end use</li> </ul> </li> <li>develop list of materials, tools and equipment required to make a simple basket</li> </ul>
4–5	<p><b>Investigating and defining</b> Create a sequence of steps to solve a given task</p> <p><b>Materials and technologies specialisations</b> Suitability and safe practice when using materials, tools and equipment for a range of purposes</p> <p><b>Producing and implementing</b></p>	<ul style="list-style-type: none"> <li>plan of selected design to include: <ul style="list-style-type: none"> <li>labelled diagram</li> <li>materials required, consider basic size, quantity, weight colour, texture etc.</li> <li>tools required, purpose/suitability</li> <li>given equipment</li> <li>sequence of steps for given task</li> </ul> </li> <li>safe practices for the use of a range of materials, tools and equipment, consider: <ul style="list-style-type: none"> <li>safety features</li> <li>use</li> <li>storage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>proposed basket design <ul style="list-style-type: none"> <li>draw and label diagram of basket, include weave design</li> <li>select materials, such as leaves, grasses, stems, straw, plastic, raffia, construction paper, ribbon</li> <li>list construction tools, such as, scissors, glue, ruler, pencil, card, cane</li> <li>develop sequence of steps, could include annotated diagrams, for basket construction</li> </ul> </li> <li>outline safe practices when using materials, tools and given equipment to produce baskets</li> <li>practise various design weaves, select preferred weave based on ease of use, appearance, aesthetics, strength etc.</li> <li>select and safely implement processes to create basket, based on sequence of steps, given equipment; evaluate and modify design, materials, steps as necessary; document alterations/changes</li> </ul>

	Select, and safely use, appropriate components with given equipment to make a solution	<ul style="list-style-type: none"> <li>▪ transport</li> <li>• select and safely implement safe practices to create selected design, based on sequence of steps</li> </ul>	
6	<b>Producing and implementing</b> Select, and safely use, appropriate components with given equipment to make a solution	<ul style="list-style-type: none"> <li>• create selected design</li> <li>• monitor, evaluate and modify design during production as necessary</li> <li>• modify/alter sequence of steps as necessary</li> </ul>	<ul style="list-style-type: none"> <li>• continue with creation of selected basket design, following plan as outlined in the sequence of steps</li> <li>• monitor and evaluate processes, materials, use of tools, safety during production</li> <li>• modify basket design as necessary</li> <li>• note modifications on the sequence of steps</li> </ul>
7–8	<b>Collaborating and managing</b> Work independently, or collaboratively when required, to plan, safely create and communicate sequenced steps  <b>Evaluation</b> Use criteria to evaluate design processes and solutions developed	<ul style="list-style-type: none"> <li>• work independently <ul style="list-style-type: none"> <li>▪ refer to, understand and implement the planned sequence of steps</li> </ul> </li> <li>• criteria to evaluate design process: <ul style="list-style-type: none"> <li>▪ modifications required</li> <li>▪ design features</li> </ul> </li> <li>• criteria to evaluate the solution developed: <ul style="list-style-type: none"> <li>▪ original sketch, diagram</li> <li>▪ final product</li> </ul> </li> <li>• collaborate with peers to evaluate plan, safety and final product</li> </ul>	<ul style="list-style-type: none"> <li>• work independently to create own basket: <ul style="list-style-type: none"> <li>▪ understand and implement the planned sequence of steps</li> </ul> </li> <li>• develop agreed, specific criteria to evaluate the design process for the basket, such as: <ul style="list-style-type: none"> <li>▪ design features of the basket for size, handle etc.</li> <li>▪ weave - appropriate for design</li> <li>▪ ease of construction – refer to sequence of steps, diagrams</li> </ul> </li> <li>• develop agreed, specific criteria to evaluate the solution, for example: <ul style="list-style-type: none"> <li>▪ store/carry the identified items, such as food</li> <li>▪ size</li> <li>▪ aesthetics – colour, overall appeal</li> <li>▪ compare to original design sketch, diagram</li> </ul> </li> <li>• evaluate, in collaboration with a peer, by: <ul style="list-style-type: none"> <li>▪ communicating detailed and logically sequenced steps</li> <li>▪ explaining how processes were implemented safely</li> <li>▪ discussing the plan of how the basket will be used</li> <li>▪ listing, and validating changes, if they were to make the basket again</li> </ul> </li> </ul>