

Food and wellbeing: Design and Technologies

Design and Technologies

In Design and Technologies, students learn how to apply knowledge of the characteristics of food, along with nutrition principles (as described in HPE) to food selection and preparation through the design and preparation of food for specific purposes and consumers. They will also develop understandings of contemporary technology-related food issues such as 'convenience' foods, highly processed foods, food packaging and food transport. The knowledge and understanding strand and processes and production strand are integrated to enhance learning.

The technologies contexts content descriptions provide a framework within which students can gain knowledge and understanding about technologies and design. These content descriptions focus on the characteristics and properties of technologies and how they can be used to create innovative designed solutions.

The technologies contexts in Design and Technologies related to food and wellbeing are:

F–6: Food and fibre production and food specialisations

7–10: Food specialisations, and materials and technologies specialisations.

They provide a progression of learning from Foundation to Year 8 and optionally to Year 9–10 or lead to more specialised Technologies subjects in Years 9 and 10. They also reflect national priorities including workforce needs, food security and sustainable food and fibre production and health and wellbeing priorities.

When learning about food specialisations, students will progressively develop knowledge and understanding about: the characteristics and properties of food to and apply these to food selection and preparation; and contemporary technology-related food issues through creating designed solutions.

Food and wellbeing dimensions

Design and Technologies - Foundation to Year 2

Year 2

Design and technologies knowledge and understanding

Content descriptions with elaborations

Identify how people design and produce familiar products, services and environments and consider sustainability to meet personal and local community needs (ACTDEK001)

- exploring how local products, services and environments are designed by people for a purpose and meet social needs, for example the range of shelters provided for the public in a local community; graphical displays to market school and community events
- making design decisions based on personal and family needs, for example downloading and comparing recipes to suit available cooking facilities such as cooking in the bush compared to cooking in a kitchen

Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating (ACTDEK003)

- exploring which plants and animals can provide food or materials for clothing and shelter and what basic needs those plants and animals have

- identifying products that can be designed and produced from plants and animals, for example food products, paper and wood products, fabrics and yarns, and fertilisers
- considering the suitability of a range of tools when cultivating gardens, mulching and building garden structures and preparing and cooking food from recipes
- identifying and categorising a wide range of foods, including Aboriginal bush foods, into food groups and describing tools and equipment needed to prepare these for healthy eating
- exploring how people from different cultures including those of Asia design and produce different cuisines based on the plants and animals in their region and available tools and equipment
- exploring the tools, equipment and techniques used to prepare food safely and hygienically for healthy eating

Design and technologies processes and production skills

Content descriptions with elaborations

Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (ACTDEP005)

- exploring opportunities around the school for designing solutions, for example how school play areas could be improved; how the school removes classroom waste and identifying opportunities to reduce, recycle and re-use materials; reviewing the school canteen menu to identify healthy food options and suggesting changes to promote future good health
- discussing possible designed solutions based on experience and some research, for example asking adults for advice
- considering the importance of sustainability in designed solutions, for example comparing the durability of materials for a selected solution
- exploring which tools, equipment and techniques to use with selected materials

Generate, develop and record design ideas through describing, drawing and modelling (ACTDEP006)

- recording a judgement about design ideas with teacher guidance, for example expressing own likes and dislikes about a design idea
- identifying one common testing method, and recording results, for example taste-testing comparisons of a food product and recording results in a digital form
- describing how design ideas meet the needs of those who will use the solution

Use materials, components, tools, equipment and techniques to safely make designed solutions (ACTDEP007)

- learning and safely practising a range of technical skills using tools and equipment (for example, joining techniques when making products, watering and mulching gardens, preparing food, using software to design an environment)

Use personal preferences to evaluate the success of design ideas, processes and solutions including their care for environment (ACTDEP008)

- developing criteria for success with teacher guidance including consideration of impact on environment
- reflecting on the processes and challenges of designing and producing a solution and sharing these reflections using digital technologies (for example, when growing a food product, designing a structure to take a load or making a nutritious snack)

Sequence steps for making designed solutions and working collaboratively (ACTDEP009)

- recording the procedure for making a product, for example a recipe or instructions for making a container