# Queensland Studies Authority  logoTechnology Years 1 to 10 Syllabus

## Nature of the technology key learning area

Technology involves **envisioning and developing products** to meet human **needs and wants**, capitalise on **opportunities** and extend human **capabilities**. **Products of technology** include artefacts, processes, systems, services and environments. These products make up the designed world. Products of technology have **impacts and consequences** on individuals, local and global communities, and environments.’

**‘Working technologically’** is the term used in the Technology syllabus to describe **a way of**

**working** that interweaves technology practice, information, materials and systems with considerations of appropriateness, contexts and management.

 

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| Strands The learning outcomes of the Technology key learning area are organised into four strands:* Technology Practice
* Information
* Materials
* Systems

The **Technology Practice** strand has four key concepts:* *Investigation is carried out to gather knowledge ideas and data for use in meeting design challenges.*
* *Ideation is undertaken to generate and communicate ideas that meet design challenges, and to justify the selection of these ideas.*
* *Production procedures can be identified, described and managed when making products that meet design challenges.*
* *Evaluation is undertaken to make judgments about the appropriateness of design ideas, processes and products when meeting design challenges.*
 | **The Information** strand has two key concepts:* *Information originates from different sources, exists in various forms and can be used for different purposes.*
* *Information can be manipulated, presented and managed in different ways for different purposes.*

The **Materials** strand has two key concepts:* *Materials have characteristics that affect their selection and use in products.*
* *Materials can be manipulated and processed by using suitable equipment and techniques.*

The **Systems** strand has two key concepts:* *Systems comprise interactive components and have inputs, processes and outputs that can be controlled in logical ways based on certain principles.*
* *Systems can be developed, refined and optimised by organising their components.*
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Technology education provides opportunities for students to ***respond to design challenges.*** Design challenges are situations, problems or tasks that require students to make cognitive and practical responses that draw on their technology knowledge, practices and dispositions.