Queensland Curriculum, Assessment and Reporting Framework

Technology

Essential Learnings by the end of Year 5

Learning and assessment focus

Students explore the designed world and recognise that they can be both users and creators of technology. They identify and understand the characteristics of a range of resources (information, materials and/or systems) and assess their suitability for a specific purpose and context. They investigate the characteristics of Australian resources and their impact on technology products and processes of the past and present. They understand that technology can contribute to many different kinds of activities, including work and leisure. They are aware that people of all ages and backgrounds choose to work in technology-related fields.

Students use the essential processes of **Ways of working** to develop and demonstrate their **Knowledge and understanding**. They develop their ability to work technologically by generating, assessing and communicating design ideas and by selecting, manipulating and processing resources, to individually and collaboratively design and make products. They analyse how technology and its products and processes impact on people, their environments and local communities. They reflect on their learning and evaluate products and processes.

Students select and use tools and technologies, including information and communication technologies (ICTs), in purposeful ways. They use ICTs as an integral component of their learning, to inquire, create and communicate within technology contexts.

Students demonstrate evidence of their learning over time in relation to the following assessable elements:

- knowledge and understanding
- investigating and designing
- producing
- evaluating
- reflecting.

Queensland Government
Department of Education, Training and the Arts

Queensland Studies Authority
Partnership and innovation

Ways of working

Students are able to:

- identify and analyse the purpose and context for design ideas
- generate design ideas that match requirements
- communicate the details of their designs using 2D or 3D visual representations
- select resources, techniques and tools to make products
- plan production procedures by identifying and sequencing steps
- make products to match design ideas by manipulating and processing resources
- identify and apply safe practices
- evaluate products and processes to identify strengths, limitations, effectiveness and improvements
- reflect on and identify the impacts of products and processes on people and their communities
- reflect on learning to identify new understandings and future applications.

Knowledge and understanding

Technology as a human endeavour

Technology influences and impacts on people, their communities and environments.

- Different ideas for designs and products are developed to meet needs and wants of people, their communities and environments
  e.g. playgrounds are designed for children; community swimming pools are designed to cater for specific needs and all age groups; community centres are designed to accommodate a range of activities.
- Aspects of appropriateness influence product design and production decisions
  e.g. team uniforms are designed to have specific functions and to look good; cultural protocols are followed when an Aboriginal person uses traditional designs on a product.
- The products and processes of technology can have positive or negative impacts
  e.g. cars are a convenient method of transportation but impact on the environment; mining for resources can contribute to a community's economy and impact on the natural environment.

Information, materials and systems (resources)

The characteristics of resources are matched with tools and techniques to make products to meet design challenges.

- Resources have particular characteristics that make them more suitable for a specific purpose and context
  e.g. selecting and using suitable information sources to investigate a game; designing shoes and uniforms based on function and aesthetics; selecting suitable materials to create an eco-friendly compost system.
- Techniques and tools are selected to appropriately manipulate characteristics of resources to meet design ideas
  e.g. circulating information using electronic or paper means; selecting suitable equipment that conducts heat when melting resources.

