Tahakopa School Technology Statement

"Just because something doesn't do what you planned it to do, doesn't mean it's useless."
(Thomas Edison)

The New Zealand Curriculum

What is technology about?
Technology is intervention by design: the use of practical and intellectual resources to develop products and systems (technological outcomes) that expand human possibilities by addressing needs and realising opportunities. It is never static, it is influenced by and in turn imparts on the cultural, ethical, environmental, political, and economic conditions of the day.

Why study technology?
The aim is for students to develop a broad technological literacy that will equip them to participate in society as informed citizens. They learn practical skills as they develop models, products and systems. Adaption and innovation are at the heart of technological practice. Quality outcomes result from thinking and practices that are informed, critical and creative.

How is the learning area structured?
The learning area comprises four strands: Technological Practice, Technological Knowledge, Nature of Technology and Digital. Teaching and learning programmes will integrate all four, though a particular unit of work may focus on just one or two.

In the **Technological Practice** strand, students examine the practice of others and undertake their own. They develop a range of outcomes, including concepts, plans, briefs, technological models, and fully realised products or systems.

Through the **Technological Knowledge** strand, students develop knowledge particular to technological enterprises and environments and understandings of how and why things work. Students learn how functional modelling is used to evaluate design ideas and how prototyping is used to evaluate the fitness for purpose of systems and products as they are developed.

Through the **Nature of Technology** strand, students develop an understanding of technology as a discipline and how it differs from other disciplines. They learn to critique the impact of technology on societies and the environment and to explore how developments and outcomes are valued by different people in different times.

What is important to us

Technological Practice

Students will:

- investigate issues or problems for possible solutions
- consider all aspects of needs and potential impacts on others and the environment
- investigate existing systems and processes and use understandings found
- investigate plans, developed ranges of outcomes, and final products

Technical Knowledge

Students will:

- use models to evaluate design ideas
- see how models can help with fitting the purpose or not
- work through a process to develop ideas
- use different materials properties to help solve problems
- understand how and why products work the way they do
- work as part of a system and how each affects the other

Nature of Technology

Students will understand:

- developments that respond to and create change
- solutions solve problems
- solutions can have positive and negative effects
- impacts on sustainability
- developments respond to sustainable needs
- technology has a major effect on communication
- types of communication are guided by different technologies
- new technologies impact on communication

Digital

Students will:

- make connections with others and the wider world
- understand how to be safe using ICT
- work collaboratively as well as individually
- share with like minded others
- use these tools to take their learning further
- have confidence and use their skills and tools daily
- skilled at using basic computer formats
- develop coding skills
- be active members of communities of practice