

Kupu Māori	Interpretation	Connection to Teaching and Learning in your context in Technology: These are a collection of thoughts across over 100 Technology Kaiako from around the motu to date. (8.6.23)
Whanaungatanga	A sense of relationship, connection, and belonging.	Class is a whanau Introductions at the beginning of course – model it – Teacher does mihi/pepeha (continuum – birthday recognition) Mentoring, Kaitiaki, group time Establishing a safe environment to encourage all akonga to use te reo and join with Karakia Group work – Shared outcomes Bringing own and Māori culture into design Stakeholders including whanau voice and community, local marae/hapu/iwi Akonga consulting with each other Relating to context
Manaakitanga	The process of showing respect and care; reciprocity between people, living things, and places.	Making connections Design is useful for end user Health context Looking at relevant Implications Brief development Stakeholder – Taking their views on board in a positive, safe environment Sustainable design and resources Implicit teaching of Manaakitanga in the Level 1 programme Developing products to sell to generate support for those in need. Kura kai – going out to whanau Providing solutions locally – significant projects Digital safety/ Footprint. Digital citizenship.
Kotahitanga	Unity, collaboration, and collective action.	Karakia in class and before meals in Food Technologies Group projects – shared outcomes Leadership opportunities in social setting Research, feedback, stakeholders Collaboration on projects Cross curricular projects with other Learning Areas
Kaitiakitanga	Guardianship, stewardship for living things and resources.	Community involvement – School/local marae Sustainability – waste to worm farms, - local, - seasonal, - recycling. Resources, waste, land, enhancement in waterways. Mindfulness – how can we show evidence? Mentoring, Kaitiaki Test in situation Fitness for purpose in the broadest sense Looking at implications Themes/Topics/issues Future focused planning – (Community gardens – giving to the next generation)
Auahatanga	Innovation and creation.	The core of Technology Design Process - Ideation, concepts, development, prototyping, judging/critiquing, building on ideas. Innovative development Authentic – problem first and include resource costs and budget Understand manaakitanga “mauri”, to ensure positive outcomes that are linked to cultural concepts Freedom to explore ideas – Purposeful play – manipulating/transform/combine materials/techniques and processes. Extension work with tools.

<p>Rangatiratanga</p>	<p>Right to exercise authority, chieftainship, sovereignty, self-determination</p>	<p>Discussion making, justification Suitability for purpose Stakeholders Akonga - choosing own projects (student agency) – This should guide and drive the Teaching and learning. Internal and External communities – background of area/knowledge Leadership – Akonga taking lead in groups – for students the ability is co constructed and consulted which increases engagement Self driven – portfolio work Thinking outside the box Ownership, autonomy, accountability – Planning timelines and outcomes – determination to see a project through. Students should have authority over their own learning – that they interpret the context. This relates to NZC that students manage themselves, they also work in groups – relating to others and the students develop their own outcomes.</p>
<p>Tikanga</p>	<p>The system of values and practices that have developed over time and are deeply embedded in traditional and social context, the correct way of doing things.</p>	<p>Karakia Sourcing appropriate people to support and assist Relevant implications – ethics, legal, social, cultural (eg, consideration and sustainability of local environment) Design practices Cultural practices considered in own design, research, backgrounds Basic classroom procedures including workshop ettiquite, Food health and safety. Te Ao Maori – No hats on table, no ‘bums’ on tables, observing local tikanga for food gathering, traditional karakia for food gathering. Rahui. Plants and understanding times for foraging. Matariki and the use of this for growing.</p>
<p>Manaaki whenua</p>	<p>Caring for the land</p>	<p>Respect Akonga explore an environmental issue and design a brief to address a need or issue. Eg, foresty unintended issue of slash – solution? Fitness for purpose in the broadest sense Sustainable textile practices to reduce waste & prevent harm to environment Recycling/ upcycle/refurbish of usable materials Environmental factors in Design and Visual Communication to site Environmental impact of products – research and designed. Carbon footprint regarding materials from an initial production of product including food packaging. Food miles, greed, seasonality – inflation considerations eg eggs</p>
<p>Manaaki tangata</p>	<p>Caring for the people</p>	<p>Respect Exploring impact of fashion industry on people – eg concept of ethical fashion Usability – relevant implications of end user Thinking about nutritional impact on health of stakeholders (including spriritual) – food, meals and H2O</p>
<p>Rangahau</p>	<p>Research</p>	<p>Te Ao Māori stories are integral. Looking back at traditional ways of doing / making things – what worked? (Don’t reinvent the wheel) Using past knowledge (Use the worlds best) to influence current thinking including Te Ao Māori knowledge. Learn from others mistakes. Learn from past faliures – engineering failures. What is Tapu? What is not? Appropriateness. Conventions, user experience, evaluation existing ideas/solutions Context based research eg healthy eating</p>

<p>Wairuatanga</p>	<p>Spirituality</p>	<p>Friendly, personal greetings at the start of a lesson including starting class with Karakia. Tuakana/Teina programme to promote whare tapa wha – mental wellbeing. Connection with culture, akonga choosing their own context School / family / personal values (eg. Catholic school) Relevant implications – Ethics specifically relating to cultural iconography and use of these – cultural appropriation? Karakia before food – Feed your soul Matariki – food/ offerings for stars – Rangi Mātāmua Connection to the whenua in projects – grounding bare foot. Student goals and aspirations – Self worth.</p>
<p>Whakapapa</p>	<p>Recites a type of framework that details genealogy and maps interrelationships between all things.</p>	<p>Connections to other Learning areas Ancestral knowledge – Historical way of doing things Building on existing work – iterative improvement Future proofing Logo/design creation based on Akonga pepeha Stories as context for product design – history, childhood, passed down</p>
<p>Hauora</p>	<p>A concept of holistic wellbeing.</p>	<p>Waananga – personal wellbeing. Work with NZ nutritional guidelines building this from junior programme Teach explicitly User experience considerations, stakeholder feedback Project management Screen time – gaming/ watching content/distractions of scrolling</p>