## Te Hekenga ki Hawaikihou

A Co-designed Curriculum Integration Framework for Māori Medium Education Settings to Prepare Ākonga for Their Future Pathways



0

0

0

0

## HE MIHI

#### Acknowledgements

Ka haere ngā mihi ki ngā kaiako o tēnā kura, o tēnā kura i tautoko mai i tēnei kaupapa, arā, ko Te Rēhia Hanara koutou ko Rita-Lee Peihopa, ko Raukura Ratapu, ko Grant Ranui, ko Whetu Marama Ririnui, ko Mark Rangi. Tēnā rawa atu koutou katoa, mō koutou i whakaae mai ki te tono a Huia me Te Tāhuhu o te Mātauranga. Inā kē te whakaaro nui ki tēnei kaupapa. Me kore ake koutou hei tautoko i tēnei kaupapa. E kore e mutu ngā mihi.

Me mihi hoki ka tika ki ngā kura i whakaae mai kia whakawātea i ngā kaiako nei kia tae mai rātou ki tā mātou hui: ki Te Kura Kaupapa Māori o Te Whānau Tahi, koutou ko Te Wharekura o Mauao, me Te Kura Kaupapa Māori o Te Kōtuku, tēnā koutou katoa.

E rere atu hoki ngā kupu mihi ki a Sian Montgomery-Neutze, te mātanga mātauranga i tautoko i tēnei kaupapa. E kore ngā mihi e mimiti.

Nā mātou te kete i whatu, nā koutou me ā koutou kōrero anō i purena ai.

The Ministry of Education and Huia would like to acknowledge the participants of the co-designed curriculum integration framework workshop – Te Rehia Hanara, Rita-Lee Peihopa, Raukura Ratapu, Grant Ranui, Whetu Marama Ririnui and Mark Rangi. Their mātauranga, experience and guidance have been invaluable in developing this framework.

We would also like to express our gratitude to the kura that shared their kaiako with us: Te Kura Kaupapa Māori o Te Whānau Tahi, Te Wharekura o Mauao, and Te Kura Kaupapa Māori o Te Kōtuku.

Our sincerest thanks to Sian Montgomery-Neutze for her invaluable expertise and guidance in the development of this work.

First published in 2019 for the Ministry of Education by Huia Publishers 39 Pipitea St, PO Box 12280 Thorndon, Wellington 6144 Aotearoa New Zealand

Copyright in this report © Te Tāhuhu o te Mātauranga 2019

This report is copyright. Apart from the fair dealing for the purpose of private study, research, criticism or review as permitted under the Copyright Act, no part may be reproduced by any process without the prior permission of the Ministry of Education.

## NGĀ IHIRANGI

#### Contents

2	HE KŌRERO WHAKATAKI Introduction
3	TE HEKENGA KI HAWAIKIHOU Journey to Hawaikihou
4	KIA ARAHINA E NGĀ WHETŪ Guided by the Stars
9	TE KOROWAI O TE KAIWHAKATERE Equipping the Navigators
11	CURRICULUM INTEGRATION FRAMEWORK
14	AKORANGA Academia: Curriculum Alignment
20	WĀNANGA Learning: Curriculum Alignment
26	MĀTAURANGA Knowledge: Curriculum Alignment
34	TOITŪTANGA Sustainability: Curriculum Alignment
40	WHĀNAU Family Support: Curriculum Alignment
50	TE TAIAO  Environment: Curriculum Alignment

## HE KŌRERO WHAKATAKI

#### Introduction

This report presents a co-designed curriculum integration framework that reflects some of the key skills and knowledge that ākonga in Māori medium education settings seek to develop in preparation for their future pathways.

The framework was developed through a co-design process with kaiako from the Māori medium education sector. It is presented through three metaphorical images. The first sets the scene for a journey to Hawaikihou (the new Hawaiki)<sup>1</sup> and is the catalyst from which the framework is designed.

The second is a guided map, which uses a Māori knowledge system to capture and reflect the aspirations of ākonga, kaiako, whānau, community, hapū, iwi and the Ministry of Education (the Ministry). This is where the original three key focus areas of civics/democratic rights and responsibilities, financial literacy and budgeting and key workplace competencies are articulated in a format that has been suggested by the participants of the sector engagement research and co-design workshop.

The third, and most complex, is a korowai that denotes the learning outcomes and achievements of the raukura – ākonga who graduate from Māori medium education settings. This is where the key focus areas of the Ministry, the suggested focus areas of the Māori medium education sector and the hopes and aspirations of the learner are woven together. This is presented as a korowai, which adorns the learner with all of the lessons, knowledge and tools that they need to become a successful adult.

The curriculum integration happens in this section through the identification of relevant wāhanga ako and how these relate directly to the learning outcome statements. These wāhanga ako have been scaffolded to align with the learning outcome statements that the kaiako created during our co-design workshop. This set of six learning outcome statements is presented as a destination for the learner – an aspiration for the kura community in which they have grown and an investment by the Ministry and whānau who have supported their journey towards this achievement.

It is intended that this framework will be used to support the development and integration of the School Leavers' Toolkit into the Māori medium education sector. During the sector engagement part of this research, it became apparent that there is evidence that all kura are using different approaches<sup>2</sup>.

With this in mind, we were able to move away from our initial concept to create a broad framework for each of the curriculum areas which would be articulated as four separate documents. Instead, we have been able to devise a solution that we feel transcends these, through the benefits of an authentic, ako-based co-design process.

The framework presented here is this solution. Through the metaphor of a graduate korowai, each curriculum can be amalgamated to ensure interpretation and use by all Māori medium education settings.

<sup>1.</sup> The concept of Hawaikihou is attributed to Dr. Eru Tarena, who coined the phrase at He Huinga Raukura – Kura arareo Māori Pathway Expo that HUIA attended on 9 May 2019 at Te Hapua Community Centre – Hallswell, Christchurch.

<sup>2.</sup> Including Te Marautanga o Aotearoa, Te Marautanga o Te Aho Matua and The New Zealand Curriculum.

## TE HEKENGA KI HAWAIKIHOU

#### Journey to Hawaikihou

During our co-design workshop, the concept of a journey to Hawaikihou was shared with us by Mark Rangi, Tumuaki of Te Kura Kaupapa Māori o Te Whānau Tahi. He stated that this concept of Hawaikihou was introduced to him by Dr Eruera Tarena at He Huinga Raukura – Māori Medium Pathway Expo Christchurch in May 2019.\*

Hawaikihou is described as a destination that encapsulates the aspirations of our tūpuna through the achievements of our rangatahi. Māori knowledge systems teach us the timeless concept of whakapapa, and it is through this lens that we are given an opportunity to understand the potential of Hawaikihou as an aspirational goal for our people.

Through the Māori medium education settings in which our rangatahi are immersed in te ao Māori, we are also given an opportunity to explore the potential for Hawaikihou to transition

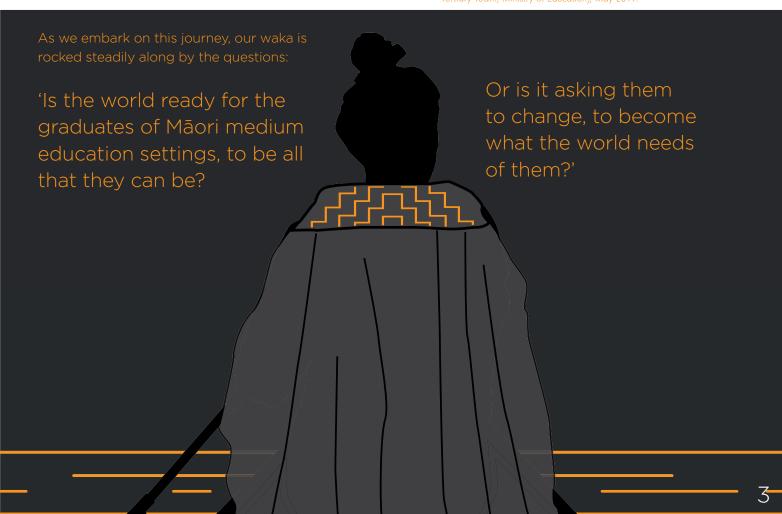
our aspirations from survival within the education sector, to thriving within te ao hurihuri.

We know, through the Stocktake Summary Report<sup>3</sup>, that for many of our Māori medium ākonga, kaiako and whānau, the very idea of life after kura can be daunting. We also know that there is a real dissonance between multiple perspectives at the Māori medium education setting exit point – that is, the value of Māori medium education as it is known by the kura environment and the wider world in which our ākonga find themselves.

As a reflection of this, the HUIA team was challenged during the first morning session of our workshop. We were asked by one of the participants: 'Is this School Leavers' Toolkit preparing our rangatahi for te ao Pākehā, or te ao Māori?' The ensuing discussions anchored us throughout the day. Perhaps there is no real answer to this, as there are no certainties that the future holds anything but that which the individual can conceive. Perhaps the waka that we launch, on this journey to Hawaikihou, forms the base from which we might consider this.

\* Permission has been granted by Dr Eru Tarena to Huia for this concept to be used in this report and framework.

3. Huia Publishers. (2019) Stocktake Summary Report School Leavers' Toolkit for Māori Medium Education Settings (Report for Secondary Tertiary Team, Ministry of Education), May 2019.



## KIA ARAHINA E NGĀ WHETŪ

#### Guided by the Stars

During the season of hōtoke, many of us are feeling the effects of the celestial changes that dictate our planets rotation around Tama-nui-te-rā. The days are shorter, the nights are colder and the time for wānanga is upon us. During this time, we are distracted from unwellness and the encroaching darkness by our endless search for knowledge and understanding of the world around us.

For our tūpuna, constellations were not just symbols by which the world was articulated, but the maps by which they sailed across the ocean. During our co-design workshop, clustered constellations were suggested as a guide for the journey to Hawaikihou. It was surmised that these constellations might relect the aspirations of Māori medium education setting raukura, their whānau and the kura in which they grow.

The school leavers of the Māori medium education sector are guided at the exit point by the arrival of these constellations. This is the signal for them, and all involved, that the journey to Hawaikihou is upon them. The aspiration that these raukura exit Māori medium education settings equipped with the knowledge systems passed down to them by their pakeke (be they whānau or kaiako) is mapped through the following framework.



## Aro Ki Te Hā

Ākonga develop a strong sense of self through their understanding of, and contribution to, their community, culture and society

Through this aspiration, the ākonga is envisioned to have graduated Māori medium education settings with a strong sense of who they are in the world and the roles and responsibilities that they take up as a result of that sense of self. Their time within the Māori medium education sector means they are aware of the world around them, particularly from an iwi, hapū and whānau perspective. It also means that they are aware of the contributions that they make to these groups.

They have a mindfulness of the wider world and are able to see themselves within that. For the adults around them, this means that ākonga are prepared to enter the wider world with their autonomy intact. It also means that they are equipped with the tools of the past, the now and the future.

## Kia Matomato Te Tipu

Ākonga develop an understanding of financial capability and the skills to thrive in an ever-changing world

Through this aspiration, ākonga are able to navigate the many currents of the changing times through their knowledge of financial capability. This is applied in a variety of contexts – from sustainability, to entrepreneurship and even financial management. Their time within the Māori medium education sector has meant that they have been exposed to a variety of opportunities to learn about currency, trade and commerce.

This is not just through exposure to financial literacy and budgeting, but also through their understanding of and exposure to broader kaupapa around the kura. For the adults around them, this means that raukura are able to manage their own finances, but also recognise and have an understanding of how to contribute to the financial capability of the world around them.

## He Kai Kei Aku Ringa

Ākonga develop an understanding of the workforce, and gain future-focussed, transferrable skills

Through this aspiration, ākonga are aware of opportunities for employment and what the world expects of them. They are capable of transferring their skills across a multitude of settings. They are also aware of the changes that they may face within their working life and the skills they might need to support them to face these challenges.

Raukura are cognisant of the ways in which their skills can be used to contribute to a wider group and the value that they can add. For the adults around them, this means that they are confident, capable and ready to rise to any challenge.

## TE KOROWAI O TE KAIWHAKATERE

#### Māori Medium School Leavers' Toolkit

This framework is designed to support the integration of a School Leavers' Toolkit into Māori medium education settings. It was created in consultation with Māori medium education settings and was commissioned by the Ministry of Education in 2019.

It serves to provide guidance to kaiako, kura leadership, the Ministry of Education and other stakeholders (whānau, iwi organisations, resource developers, academics and researchers) about how the components of a School Leavers' Toolkit can be tailored to suit the needs of Māori medium education settings. The framework is designed as

a korowai, which metaphorically adorns the raukura who graduate from Māori medium education. The korowai has six whenu, which articulate the aspirations of Māori medium education settings for the ākonga.

The korowai is an embodiment of the aspiration that each ākonga who graduates from Māori medium education settings is a deeply critical thinker who brings this intelligence with them on their journey into life after kura. During the co-design process, this was articulated as 'Kia mōhio te raukura ki te tātari i tōna ao hurihuri' (developing critical thinkers for the changing world).

The six whenu are:

AKORANGA Academia 2 WĀNANGA Learning 3 MĀTAURANGA Knowledge

TOITŪTANGA Sustainability 5 WHĀNAU Family Support

TE TAIAO
Environment

These whenu are placed across four levels, which are suggested to align with the abilities or expectations of ākonga in Tau 7–13. At each level is a scaffolded learning outcome statement, which supports the ākonga to progress from awareness to exploration and through knowledge to embodiment.

#### Please note

As you read through the framework, there are several key things to note:

#### 1. The framework is a guide

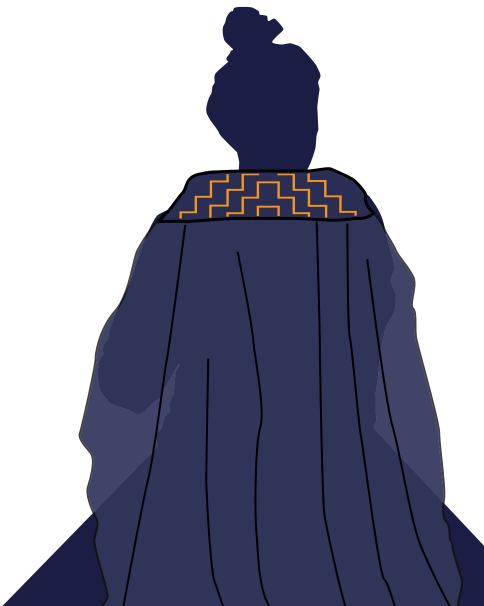
All Māori medium education settings are different; therefore, the toolkit needs to serve the diversity of those settings. This framework is a guide, not a set of definitive statements. Kura, kaiako and whānau should feel free to adapt the curriculum alignments, to ensure that their ākonga are empowered to fulfil the needs of their community, hapū, iwi, whānau and personal aspirations. Presented here is a suggestion, based on the findings of our sector engagement with Māori medium education settings, co-design workshops and consultation with curriculum design experts.

#### 2. A bilingual framework

The curriculum alignment is presented bilingually, as our research has found that many Māori medium kaiako like to have content provided in both te reo Māori and te reo Pākehā.

#### 3. Relevance to the reader

The curriculum alignments are presented in order of relevance. The wāhanga below are ordered to show how likely alignment between each progression statement and its corresponding curriculum area is. This means that the progressions for each whenu are often overlapping with others. As a result, there are some areas where multiple wāhanga ako are presented to show progress from awareness to exploration, but not knowledge to embodiment (and vice versa). Each scaffold is unique to the progress of the ākonga in that area.



# CURRICULUM INTEGRATION FRAMEWORK

HEI KOROWAI MŌ TE KAIWHAKATERE

Te Tajao Environment Kia whai koha ki ngā tikanga kaitiakitanga Ākonga are conscious of their responsibilities	Akonga are aware of the issues facing the natural world	TMoA (reo Pākehā) L4 Te Reo Pāngarau Hauora Tikanga-ā-lwi Pūtaiao TMoA L5 Te Reo Pāngarau Hauora Tikanga-ā-lwi	Akonga are exploring the ramifications of action vs. inaction and how we can learn from the past to inform the future	TMoA (reo Pākehā) L4 Te Reo Māori Pāngarau Hauora Tikanga-ā-lwi Pūtaiao TMoA L5 Te Reo Māori Pāngarau Hauora Tikanga-ā-lwi
Whānau Family support Kia noho tōna ngākau ki ngā āhuatanga whai pānga o tōna iwi, tōna hapū me tōna whānau Ākonga are open to and aware of the diverse aspects of their whānau/hapū/iwi		TMoA (reo Pākehā) L4 Te Reo Māori Hauora Tikanga-ā-lwi Ngā Toi TMAA L5 Te Reo Māori Hauora Tikanga-ā-lwi	Ākonga are learning about safe, ancestral practices within a whānau, hapū and iwi context	TMoA (reo Pākehā) L4 Te Reo Māori Hauora Tikangarā-lwi Ngā Toi TMoA L5 Te Reo Māori Hauora Tikangarā-lwi
Toitūtanga Sustainability Kia aumangea te tirohanga whakamua Ākonga are future-focussed, sustainable and innovative		TMoA (reo Pākehā) L4 Hauora Pāngarau Tikanga-ā-łwi TMoA L5 Hauora Pāngarau Tikanga-ā-łwi	Ākonga are developing their knowledge of sustainable and innovative practices	TMoA (reo Pākehā) L4 Havora Pāngarau Tikanga-ā-lwi TMoA L5 Havora Pāngarau Tikanga-ā-lwi
CURRICULUM INTEGRATION FRAMEWORK Māori medium School Leavers' Toolkit	TAU 7-8 Awareness	Te Marautanga o Aotearoa	TAU 9–10 Exploration	Te Marautanga o Aotearoa
Mātauranga Knowledge Kia mau tühonohono ki ngā āhua, ngā here iho matua o te rākaihinonga Ākonga are secure in the knowledge of ancestral entrepreneurship		TMoA (reo Pakeha) L4 Te Reo Māori Hauora Pāngarau TMoA L5 Te Reo Māori Hauora	Ākonga are exploring what ancestral knowledge systems are and how they have survived colonisation	TMoA (reo Pákehá) L4 Te Reo Máori Hauora Pángarau TMoA L5 Te Reo Máori Hauora
Wānanga Learning Kia mātau te mōhio ki te hōhonutanga o te ako Ākonga understand the depth of learning		TMoA (reo Pákehá) L4 Ngá Toi Hángarau TMoA L5 Ngá Toi Hángarau TMoA (reo Pákehá) L6 Pülaiao	Ākonga explore the ways that they can maximise their learning styles to gain knowledge	TMoA (reo Pálehá) L4 Ngá Toi Hángarau TMoA L5 Ngá Toi Hángarau TMoA (reo Pálehá) L6 Pütaiao
Akoranga Academia Academia Kia mau ki te aka matua kia tū rangatira ai i ngā ao e rua Ākonga are equipped with the best of both worlds	Ākonga are aware of the value of kaupapa Māori such as wairuratanga, kaitakitanga, manaakitanga, whanaungatanga, ūkaipotainga and tino rangatiratanga	TMoA (reo Pākehā) L4 Te Reo Māori Te Reo Pākehā Tikanga-ā-lwi TMoA L5 Te Reo Māori Te Reo Māori Te Reo Pākehā Tikanga-ā-lwi TMOA (reo Pākehā) L6	Ākonga gain knowledge about the structures that exist which divide, unite and evolve in our local and global communities	TMoA (reo Pākehā) L4 Te Reo Māori Tikanga-ā-lwi TMoA L5 Te Reo Māori Tikanga-ā-lwi

±		#	I
Ākonga are finding innovative solutions to global issues and developing an understanding of the diversity of our environment	TMoA (reo Pākehā) L6 Te Reo Māori Pāngarau Hangarau Tikanga-ā-lwi Pūtaiao Hangarau TMOA L7 Te Reo Māori Pāngarau Hangarau Hangarau Hangarau	Ākonga are finding innovative solutions to global issues and developing an understanding of the diversity of our environment	TMoA (reo Pākehā) L6 Te Reo Māori Hauora Tikanga-ā-lwi Pūtaiao TMoA L7 Te Reo Māori Hauora Tikanga-ā-lwi
Åkonga are exploring what diversity means for Māori, but also in a global sense, and how Māori practices will be valuable in their adult life	TMoA (reo Pākehā) L6 Te Reo Māori Hauora Tikanga-ā-lwi Pūtaiao TMoA L7 Te Reo Māori Hauora Tikanga-ā-lwi Pūtaiao	Ākonga are exploring what diversity means for Māori, but also in a global sense, and how Māori practices will be valuable in their adult life	TMoA (reo Pākehā) L6 Te Reo Māori Hauora Tikanga-ā-lwi Pūtaiao TMoA L7 Te Reo Māori Hauora Tikanga-ā-lwi
Ākonga are working in and exploring the ways in which innovation and sustainability are necessary to a variety of contexts	TMoA (reo Pākehā) L6 Tikanga-ā-lwi Hangarau Tikanga-ā-lwi Hangarau	Ākonga are working in and exploring the ways in which innovation and sustainability are necessary to a variety of contexts	TMoA (reo Pākehā) L6 Tikanga-ā-lwi Hangarau Tikanga-ā-lwi Hangarau
TAU 11-12 Knowledge	Te Marautanga o Aofearoa	TAU 13 <b>Embodiment</b>	Te Marautanga o Aotearoa
Ākonga are contemporising those knowledge systems, and challenging themselves	TMoA (reo Pākehā) L6 Te Reo Māori Pāngarau Hauora Tikanga-ā-lwi Pūtaiao Ngā Reo TMoA L7 Te Reo Māori Pāngarau Hauora Tikanga-ā-lwi Pāngarau Hauora	Ākonga are contemporising those knowledge systems and challenging themselves	TMoA (reo Pākehā) L6  Te Reo Māori Pāngarau Hauora Tikanga-ā-lwi Pūtaiao Ngā Reo TMoA L7  Te Reo Māori Pāngarau Hauora Tikanga-ā-lwi Pūtaiao
Ākonga are making informed decisions about their own learning and pathways	TMoA (reo Pākehā) L6 Ngā Toi Hāngarau Pūtaiao TMoA L7 Ngā Toi Hāngarau	Ākonga are making informed decisions about their own learning and pathways	TMoA (reo Pākehā) L6 Ngā Toi Hāngarau Pūralao TMoA L7 Ngā Toi Hāngarau Pūralao
Ākonga are able to form their own ideas about how these systems and structures can be used for the benefit of te ao Māori	TMoA (reo Pākehā) L6 Tē Reo Tīkanga-ā-lwi TMoA L7 Tē Reo Tīkanga-ā-lwi	Ākonga are able to form their own ideas about how these systems and structures can be used for the benefit of te ao Māori	TMOA (reo Pákehá) L6  Te Reo Te Reo Pákehá Tikanga-ā-lwi TMOA L7  Te Reo Te Reo Pákehá Tikanga-ā-lwi

1

## AKORANGA (ACADEMIA)

Kia mau ki te aka matua kia tū rangatira ai i ngā ao e rua

> Ākonga are equipped with the best of both worlds

#### TAU 7-8 AWARENESS

Ākonga are aware of the value of kaupapa Māori such as wairuatanga, kaitiakitanga, manaakitanga, whanaungatanga, ūkaipōtainga and tino rangatiratanga.

#### TMoA (reo Pākehā) L4

#### - Te Reo

 Using oral, written and paralinguistic learning strategies to articulate their ideas and perspectives.

#### - Tikanga-ā-lwi

 Introduction to social, environmental and economic structures.

#### **TMoA Taumata 5**

#### - Te Reo Māori

 Ka whakapuaki i ngā momo reo mō ngā horopaki ōkawa, ōpaki hoki. Ka haere tonu te whakapārekareka i te rere o te reo ki ngā āhuatanga Māori ake nei. He whaihua, he mārama ānatuhinga i ngā momo tuhinga huhua noa.

#### - Te Reo Päkehä

- Ngā Āhuatanga o te Ākonga i te Tomokanga ki Kaupae 3
- The learner is likely to display most or all of the following characteristics:
- comfort with speaking English in an increasing range of formal and informal contexts
- growing competence in using academic vocabulary (such as technical terms) and language devices (such as figurative language and metaphor)

- confidence in reading English, employing a range of strategies to discover the meaning of unfamiliar words
- o well-established grammatical knowledge
- ability to think critically about how audience, purpose and context influence text in order to effectively communicate ideas in writing.

#### - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

#### TMoA (reo Pākehā) L6

#### - Pūtaiao

- Understanding of concepts in the philosophy of knowledge, in order to appreciate that Western/ modern¹ science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances on scientific knowledge and real-life examples of when these have and have not worked. Examine contemporary ethical dilemmas in science and how these are addressed.

## TAU 9-10 EXPLORATION

Ākonga gain knowledge about the structures that exist which divide, unite and evolve in our local and global communities.

#### TMoA (reo Pākehā) L4

#### - Te Reo

 Using oral, written and paralinguistic learning strategies to articulate their ideas and perspectives

#### – Tikanga-ā-lwi

 Explorations of social, environmental and economic structures

#### TAU 11-12 KNOWLEDGE

Ākonga are able to form their own ideas about how these systems and structures can be used for the benefit of te ao Māori.

#### TMoA (reo Pākehā) L6

#### - Pūtaiao

- Understanding of concepts in the philosophy of knowledge, in order to appreciate that Western/ modern science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances of scientific knowledge and real-life examples of when these have and have not worked.
- Examine contemporary ethical dilemmas in science and how these are addressed.

#### - Te Reo

 Using oral, written and paralinguistic language function and knowledge to articulate, develop and challenge the ideas and perspectives of themselves and others.

#### – Tikanga-ā-lwi

 Identification of social, environmental and economic structures.

#### Taumata 5

#### - Te Reo Māori

Ka whakapuaki i ngā momo reo mō ngā
horopaki ōkawa, ōpaki hoki. Ka haere tonu
te whakapārekareka i te rere o te reo ki ngā
āhuatanga Māori ake nei. He whaihua, he mārama
āna tuhinga i ngā momo tuhinga huhua noa.

#### - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

#### Taumata 6

#### – Te Reo Päkehä

Ka āhei te ākonga ki te kōtuitui i ngā puna mōhiohio, ngā tukanga me ngā rautaki i runga i te whai hua, i te māia, me te hāngai pū, hei tautohu, hei hanga, hei whakapuaki i ngā ariā kei te hōhonu kē atu.

#### TAU 13 EMBODIMENT

Ākonga use the best of both te ao Māori and te ao whānui to embody the aspirations of their whānau, hapū and lwi.

#### TMoA (reo Pākehā) L6

#### - Te Reo

 Using oral, written and paralinguistic language function and knowledge to articulate, develop and challenge the ideas and perspectives of themselves and others.

#### - Tikanga-ā-lwi

 Understanding of social, environmental and economic structures.

#### Taumata 7

#### - Te Reo Māori

Nā te whānui ake o te puna kupu ka kaha ake te tautoko, te whakawhitiwhiti māramatanga, te whakakotahi hei whakatau, hei whakaiti rānei. E whakamahi ana i ngā āhuatanga katoa o te reo me te tinana hei whakatau tika i ngā take, hei whakawhitiwhiti whakaaro, kare ā-roto me te mōhiohio. E takahuri ana i te reo mā te whakapārekareka, mā te kupu peha, mā te kupu huna.

#### - Te Reo Pákehá

 Ka āhei te ākonga ki te kōtuitui i ngā puna mōhiohio, ngā tukanga me ngā rautaki i runga i te whai hua, i te māia, me te hāngai pū, hei tautohu, hei hanga, hei whakapuaki i ngā ariā kei te hōhonu kē atu.

#### – Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

### CURRICULUM INTEGRATION FRAMEWORK



WĀNANGA (LEARNING)

Kia mātau te mōhio ki te hōhonūtanga o te ako

Ākonga understand the depth of learning

#### TAU 7-8 AWARENESS

Ākonga are aware of multiple forms of intelligence and are beginning to understand their own.

#### TMoA (reo Pākehā) L4

#### – Ngā Toi

 Exploring and creating sound, performance and visual arts to investigate, describe and develop skills to seek understanding.

#### - Hangarau

 Work to a plan and show progress and development; developing technical thinking and creative skills that are reflected in practice.

#### TMoA (reo Pākehā) L6

#### - Pūtaiao

- Understanding of concepts in the philosophy of knowledge in order to appreciate that Western/ modern science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances of scientific knowledge, and real-life examples of when these have and have not worked.
- Examine contemporary ethical dilemmas in science and how these are addressed.

#### Taumata 5

#### - Ngā Toi (Taumata 5 & 6)

 Hei whakawhanake i ngā tūmomo tukanga me ōna mōhio ki te huhua o ngā āhuatanga toi, i āna ake mahi toi me tērā o ētahi atu.

#### - Hangarau (Taumata 5 & 6)

- Ka whakatairanga i ō rātou ake whakapono, uara rānei hei otinga mō te whānau, te hapori, te hapū, te iwi rānei, ā, ka tūhura i te pāpātanga ki ētahi atu ahurea, hunga kiritaki hoki.
- Ka tirohia ngā uara me ngā whakapono o iwi kē, ka:
- o whakahāngai ki te otinga;
- o mōhio ki ngā whakaharatau;
- o whakarite ki ngā hangarau a tangata kē;
- o mārama ki ngā ārai me ngā huarahi wātea ka taea.
- Ka tühura i ngā āhuatanga matua o te tangata e pā ana ki:
- o ngā pūnaha, ngā tukanga rānei;
- o te hiahia o ngā kiritaki;
- o ngā rautaki whakatairanga ki te kiritaki.

## TAU 9-10: EXPLORATION

Ākonga explore the ways that they can maximise their learning styles to gain knowledge.

#### TMoA (reo Pākehā) L4

#### – Ngā Toi

 Exploring and creating sound, performance and visual arts to investigate, describe and develop skills to seek understanding.

#### - Hangarau

 Able to work to a plan and show progress and development; developing technical thinking and creative skills that are reflected in practice.

#### TMoA (reo Pākehā) L6

#### - Pūtaiao

- Understanding of concepts in the philosophy of knowledge, in order to appreciate that Western/ modern science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances of scientific knowledge, and real-life examples of when these have and have not worked.

 Examine contemporary ethical dilemmas in science and how these are addressed.

#### Taumata 6

#### - Ngā Toi (Taumata 5 & 6)

 Hei whakawhanake i ngā tūmomo tukanga me ōna mōhio ki te huhua o ngā āhuatanga toi, i āna ake mahi toi me tērā o ētahi atu.

#### - Hangarau (Taumata 5 & 6)

- Ka whakatairanga i ō rātou ake whakapono, uara rānei hei otinga mō te whānau, te hapori, te hapū, te iwi rānei, ā, ka tūhura i te pāpātanga ki ētahi atu ahurea, hunga kiritaki hoki.
- Ka tirohia ngā uara me ngā whakapono o iwi kē, ka:
- o whakahāngai ki te otinga;
- o mōhio ki ngā whakaharatau;
- o whakarite ki ngā hangarau a tangata kē;
- o mārama ki ngā ārai me ngā huarahi wātea ka taea.
- Ka tūhura i ngā āhuatanga matua o te tangata e pā ana ki:
- o ngā pūnaha, ngā tukanga rānei;
- o te hiahia o ngā kiritaki;
- ngā rautaki whakatairanga ki te kiritaki.

#### TAU 11-12 KNOWLEDGE

Ākonga are making informed decisions about their own learning and pathways.

#### TMoA (reo Pākehā) L6

#### – Ngā Toi

 Investigate and develop sound, performance and visual art skills to create, theorise, describe and know processes of development and competence in a variety of media.

#### - Hangarau

 Examine and investigate values and beliefs and the nature and needs of other cultures/people.

#### - Pūtaiao

- Understanding of concepts in the philosophy of knowledge, in order to appreciate that Western/ modern science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances of scientific knowledge, and real-life examples of when these have and have not worked.
- Examine contemporary ethical dilemmas in science and how these are addressed.

#### TAUMATA 7

#### - Ngã Toi (Taumata 7 & 8)

 Hei tātari, hei whakaputa i ōna ake ariā, ki te whai ao ki te ao mārama.

#### - Hangarau (Taumata 7 & 8)

- Ka tūhura i ngā momo hangarau ka taea te whakarerekē i roto i ngā āhuatanga o te tangata, me ngā rauropi katoa, pērā i:
- o te whakaōrite whaioranga;
- te raweke ira tangata.

- Kia mārama ki ngā pāpātanga ki ngā whakapono o te tangata.
- Ka tūhura, ka tautohe i ngā painga ohaoha o ētahi otinga me te pānga ki:
- ngā whānau, hapū, iwi rānei;
- o ngā rohe, te motu, te ao whānui hoki.
- Ka taukumekume i te pāpātanga o te otinga hangarau ki:
- o ngā uara, ngā whakapono, me ngā waiaro;
- ngā matatika o te tangata;
- te ao tōrangapū;
- te toitūtanga;
- o te taha ohaoha.

#### - Pūtaiao

- Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.
- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mōhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.

#### TAU 13 EMBODY

Ākonga are equipped with learning skills and strategies that enable them to continue a lifelong pursuit of learning.

#### TMoA (reo Pākehā) L6

#### – Ngā Toi

 Investigate and develop sound, performance and visual art skills to create, theorise, describe and know processes of development and competence in a variety of media.

#### - Hangarau

 Examine and investigate values and beliefs and the nature and needs of other cultures/people.

#### – Pūtaiao

- Understanding of concepts in the philosophy of knowledge in order to appreciate that Western/ modern science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances on scientific knowledge, and real-life examples of when these have and have not worked.
- Examine contemporary ethical dilemmas in science and how these are addressed.

#### **TAUMATA 8**

#### - Ngã Toi (Taumata 7 & 8)

 Hei tātari, hei whakaputa i ōna ake ariā, ki te whai ao ki te ao mārama.

#### - Hangarau (Taumata 7 & 8)

- Ka tūhura i ngā momo hangarau ka taea te whakarerekē i roto i ngā āhuatanga o te tangata, me ngā rauropi katoa, pērā i:
- o te whakaōrite whaioranga;
- o te raweke ira tangata.

- Kia mārama ki ngā pāpātanga ki ngā whakapono o te tangata.
- Ka tūhura, ka tautohe i ngā painga ohaoha o ētahi otinga me te pānga ki:
- o ngā whānau, hapū, iwi rānei;
- o ngā rohe, te motu, te ao whānui hoki.
- Ka taukumekume i te pāpātanga o te otinga hangarau ki:
- o ngā uara, ngā whakapono, me ngā waiaro;
- ngā matatika o te tangata;
- o te ao tōrangapū;
- o te toitūtanga;
- o te taha ohaoha.

#### - Pūtaiao

- Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.
- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.



## MĀTAURANGA (KNOWLEDGE)

Kia mau tūhonohono ki ngāāhua/ngā here iho matua o te rākaihinonga

Ākonga are secure in the knowledge of ancestral entrepreneurship

#### TAU 7-8 AWARENESS

Ākonga are aware of the ways in which our ancestors accessed, maintained and communicated knowledge.

#### TMoA (reo Pākehā) L4

#### - Te Reo

- Debate, question, express emotions and tell stories (joke).
- Writing styles include report, narrative and expository. Expanding reading skills.

#### - Hauora

- Discuss and exchange ideas about the types of food that contribute to physical, spiritual and intellectual wellbeing.
- Compare lore, customs and practices
   of Māori, Pākehā or others and the effect of those
   actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.

#### - Pāngarau

 Considers the values and beliefs reflected in a solution in order to understand the outcome.

- Understands the importance of consultation and dialogue in the local and wider community.
- Able to work to a plan, efficient trials show progress and development, efficiency and appropriateness of the development.
- Developing technical, thinking and creative skills are reflected in practice.
- Product development takes account of the nature of the need and client or community feedback.
- o Understands how technological systems work.

#### Taumata 5

#### - Te Reo Māori

Ka whakapuaki i ngā momo reo mō ngā horopaki ōkawa, ōpaki hoki. Ka haere tonu te whakapārekareka i te rere o te reo ki ngā āhuatanga Māori ake nei. He whaihua, he mārama ānatuhinga i ngā momo tuhinga huhua noa.

#### - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

## TAU 9-10 EXPLORING

Ākonga are exploring what ancestral knowledge systems are and how they have survived colonisation.

#### TMoA (reo Pākehā) L4

#### - Te Reo

- Debate, question, express emotions and tell stories (joke).
- Writing styles include report, narrative and expository. Expanding reading skills.

#### - Hauora

- Discuss and exchange ideas about the types of food that contribute to physical, spiritual and intellectual wellbeing.
- Compare lore, customs and practices of Māori,
   Pākehā or others and the effect of those actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.

#### - Pāngarau

- Consider the values and beliefs reflected in a solution in order to understand the outcome.
- Understands the importance of consultation and dialogue in the local and wider community.
- Able to work to a plan efficient trials show progress and development, efficiency and appropriateness of the development.
- Developing technical, thinking and creative skills that are reflected in practice.

- Product development takes account of the nature of the need and client or community feedback.
- o Understands how technological systems work.

#### Taumata 5

#### - Te Reo Māori

 Ka whakapuaki i ngā momo reo mō ngā horopaki ōkawa, ōpaki hoki. Ka haere tonu te whakapārekareka i te rere o te reo ki ngā āhuatanga Māori ake nei. He whaihua, he mārama ānatuhinga i ngā momo tuhinga huhua noa.

#### - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO
- PĀNGARAU
- o Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana ki tēnei taumata.
- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae hoki ia i ngā tini whakamahinga o te pāngarau e hāngai ana ki tōna hapori. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki maha o te ao whānui.

#### TAU 11-12 KNOWLEDGE

Ākonga are contemporising those knowledge systems and challenging themselves.

#### TMoA (reo Pākehā) L6

#### - Te Reo Māori

- o Manipulate and play while retaining meaning.
- o Can listen, critique and respond.
- o Can communicate ideas, emotions and information.

#### - Pangarau

- Exchange ideas; communicate (written, oral, symbolic/representations).
- Strengthen logical and critical thinking, reasoning skills and creativity.
- Evaluate statistical report (displays, statistics, processes and probabilities)
- Investigate situations (that involve elements of change – compare and calculate).

#### - Hauora

- Evaluate the effectiveness of the work and practices of an environmental group.
- Investigate the roles, practices and effectiveness of local and national organisations that promote wellbeing and environmental safety.

#### - Tikanga-ā-lwi

- Understands that cultures adapt and change and this has consequences for society. Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways. There are causes and consequences of past events that are of significance to New Zealanders and that shape the lives of people and society. Can identify these.

#### – Pūtaiao

 Investigate the effect of human actions and natural processes on an Aotearoa ecosystem.

- Learns about the central concepts of science, their history and their role in science disciplines.
- Learns about how the philosophy of science has developed and changed as the body of science knowledge available to humanity has expanded.
- Develops understanding of concepts in the philosophy of knowledge, in order to appreciate that science contains embedded values that western/ modern may differ from those of indigenous people.
- Develops understanding of the checks and balances on scientific knowledge and real-life examples of when these have and have not worked.
- Examines contemporary ethical dilemmas in science and how these are addressed.

#### - Ngā Reo

 Understand ways in which the target culture(s) is (are) organised for different purposes.

#### Taumata 7

#### - Te Reo Māori

Nā te whānui ake o te puna kupu ka kaha ake te tautoko, te whakawhitiwhiti māramatanga, te whakakotahi hei whakatau, hei whakaiti rānei. E whakamahi ana i ngā āhuatanga katoa o te reo me te tinana hei whakatau tika i ngā take, hei whakawhitiwhiti whakaaro, kare ā-roto me te mōhiohio. E takahuri ana i te reo mā te whakapārekareka, mā te kupu peha, mā te kupu huna.

#### - Pāngarau

- o Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana Ka tēnei taumata.

- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae, ka arotake hoki ia i te takenga mai o te mātauranga pāngarau me ngā tini whakamahinga o te pāngarau. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki

#### - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

#### - Tikanga-a-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

#### – Pūtaiao

 Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.

- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.

#### - Ngā Reo (Taumata 5-8)

- Ka mārama ngā ākonga ki te reo āhua uaua ake, ka taea anō e rātou te whakamahi taua reo.
- Ka taea e rātou te whakawhiti whakaaro mō ngā mea i tua atu i te horopaki e tino pātata ana, hei tauira, mō ngā āhuatanga i ngā rā o mua, i ngā rā kei te tū mai. Ka mārama ngā ākonga ki ngā momo tuhinga maha, ka taea anō e rātou te waihanga aua momo tuhinga. (E whai ana i te Common European Framework for Languages, Global Scale Level A2: Strong Waystage Performance; Council of Europe, 2001.)
- Ka taea e te ākonga te tārai ngā momo kōrero huhua kia whaihua tonu, hei whakapuaki i ōna ake ariā, i ōna ake whakaaro, hei tautoko, hei wero i ō ētahi atu. Ka taea anō e ia te whakamahi me te tautohu ngā āhuatanga taha reo, taha ahurea e ārahi ana i te whakamāoritanga, e āhei ai ia ki te urupare arohaehae ki ngā tuhinga. (E whai ana i te Common European Framework for Languages, Global Scale Level B1: Independent User; Council of Europe, 2001.)

#### TAU 13 EMBODY

Ākonga are vessels of ancestral entrepreneurship.

#### TMoA (reo Pākehā) L6

#### - Te Reo Māori

- o Manipulate and play while retaining meaning.
- o Can listen, critique and respond.
- o Can communicate ideas, emotions and information.

#### - Pangarau

- Exchange ideas and communicate (written, oral, symbolic/representations).
- Strengthen logical and critical thinking, reasoning skills and creativity.
- Evaluate statistical report (displays, statistics, processes and probabilities)
- Investigate situations (that involve elements of change – compare and calculate).

#### - Hauora

- Evaluate the effectiveness of the work and practices of an environmental group.
- Understand relationships to other environments (man-made, created environments).
- Investigate the roles, practices and effectiveness of local and national organisations that promote wellbeing and environmental safety.

#### - Tikanga-ā-lwi

Indentify and describe ways that:

- Cultures adapt and change, and the consequences this has for society.
- Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways.
- Cause and consequences of past events that are of significance to New Zealanders that shape the lives of people and society.
- People have different perspectives about past events that are of significance to New Zealanders.

#### - Pūtaiao

- Investigate the effect of human actions, and natural processes on an Aotearoa ecosystem.
- Learn about the central concepts of science, their history and their role in science disciplines.
- Learn about how the philosophy of science has developed and changed as the body of science knowledge available to humanity has expanded.
- Develop understanding of concepts in the philosophy of knowledge in order to appreciate that Western/modern science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances on scientific knowledge, and real-life examples of when these have and have not worked.
- Examine contemporary ethical dilemmas in science and how these are addressed.

#### – Ngā Reo

 Understand ways in which the target culture(s) is (are) organised for different purposes.

#### Taumata 8

#### - Te Reo Māori

Kua mārama ake, kua mātanga ake ki te mana o te reo kōrero me ōna āhuatanga katoa. E torotoro ana kia mārama ake ai ki a ia, ki ētahi atu rānei ngā whakaaro me ngā ariā hōhonu. Kua mōhio he mana tō te reo kōrero me te reo ā-tinana i roto i te kōrero. Ka māia tonu ki te pare i ngā whakararu me ngā pātai matawhawhati.

#### - Pāngarau

- o Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana ki tēnei taumata.

- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae, ka arotake hoki ia i te takenga mai o te ātauranga pāngarau me ngā tini whakamahinga o te pāngarau. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki maha o te ao whānui.

#### - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- o TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

#### - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

#### - Pūtaiao

 Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.

- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.

#### - Ngā Reo (Taumata 5-8)

- Ka mārama ngā ākonga ki te reo āhua uaua ake, ka taea anō e rātou te whakamahi taua reo.
- Ka taea e rātou te whakawhiti whakaaro mō ngā mea i tua atu i te horopaki e tino pātata ana, hei tauira, mō ngā āhuatanga i ngā rā o mua, i ngā rā kei te tū mai. Ka mārama ngā ākonga ki ngā momo tuhinga maha, ka taea anō e rātou te waihanga aua momo tuhinga. (E whai ana i te Common European Framework for Languages, Global Scale Level A2: Strong Waystage Performance; Council of Europe, 2001.)
- Ka taea e te ākonga te tārai ngā momo kōrero huhua kia whaihua tonu, hei whakapuaki i ōna ake ariā, i ōna ake whakaaro, hei tautoko, hei wero i ō ētahi atu. Ka taea anō e ia te whakamahi me te tautohu ngā āhuatanga taha reo, taha ahurea e ārahi ana i te whakamāoritanga, e āhei ai ia ki te urupare arohaehae ki ngā tuhinga. (E whai ana i te Common European Framework for Languages, Global Scale Level B1: Independent User; Council of Europe, 2001.)



## TOITŪTANGA (SUSTAINABILITY)

Kia aumangea te tirohanga whakamua

Ākonga are future-focussed, sustainable and innovative

# TAU 7-8 AWARENESS

 $\bar{\mathsf{A}}$ konga are aware of the challenges facing their local and global communities.

# TMoA (reo Pākehā) L4

#### - Hauora

- Compare lore, customs and practices of Māori,
   Pākehā or others and the effect of those actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.
- Investigate the effect of the wider community on the wellbeing of student communities.

# - Pāngarau

- Solve practical problems using measurement (length, area, volume etc.).
- Convert, calculate, create, explain and use measurement.
- Show reasonableness of measurement.
- Show, explain and use location and direction (compass, environment, grids, maps).
- Identify and explain symmetry and invariant properties of transformation.
- Consider the values and beliefs reflected in a solution in order to understand the outcome.
- Understand the importance of consultation and dialogue in the local and wider community.
- Able to work to a plan, efficient trials show progress and development, efficiency and appropriateness of the development.
- Developing technical, thinking and creative skills are reflected in practice.
- Product development takes account of the nature of the need and client or community feedback.
- o Understands how technological systems work.

# - Tikanga-ā-lwi

- Explain how people organise themselves in response to a challenge or crisis.
- Explain how and why individuals and groups pass on and sustain their culture and heritage.

- Explain how places reflect past interactions between people and the environment.
- Explain how exploration presents opportunities and challenges for people, places and environments.
- Explain how places reflect past interactions between people and the environment.
- Explain how exploration presents opportunities and challenges for people places, and environments.
- Explain how and why people use resources differently and the consequences of this.

#### Taumata 5

# - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- o TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

# - Pāngarau

- Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana ki tēnei taumata.
- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae hoki ia i ngā tini whakamahinga o te pāngarau e hāngai ana ki tōna hapori. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki maha o te ao whānui.

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

# TAU 9-10 EXPLORATION

Ākonga are developing their knowledge of sustainable and innovative practices.

# TMoA (reo Pākehā) L4

#### - Hauora

- Compare lore, customs and practices of Māori,
   Pākehā or others and the effect of those actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.
- Investigate the effect of the wider community on the wellbeing of student communities.

## - Pāngarau

- Solve practical problems using measurement (length, area, volume etc.).
- Convert, calculate, create, explain and use measurement.
- Understand the reasonableness of measurement.
- Show, explain and use location and direction (compass, environment, grids, maps).
- Identify and explain symmetry and invariant properties of transformation.
- Consider the values and beliefs reflected in a solution in order to understand the outcome.
- Understand the importance of consultation and dialogue in the local and wider community.
- Able to work to a plan, efficient trials show progress and development, efficiency and appropriateness of the development.
- Develop technical, thinking and creative skills are reflected in practice.
- Product development takes account of the nature of the need and client or community feedback.
- o Understand how technological systems work.

# – Tikanga-ā-lwi

- Explain how people organise themselves in response to a challenge or crisis.
- Explain how and why individuals and groups pass on and sustain their culture and heritage.

- Explain how places reflect past interactions between people and the environment.
- Explain how exploration presents opportunities and challenges for people, places and environments.
- Explain how and why people use resources differently and the consequences of this.

#### Taumata 5

## - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- o TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

## - Pāngarau

- o Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana ki tēnei taumata.
- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae hoki ia i ngā tini whakamahinga o te pāngarau e hāngai ana ki tōna hapori. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki maha o te ao whānui.

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

# TAU 11-12 KNOWLEDGE

Ākonga are working in and exploring the ways in which innovation and sustainability are necessary to a variety of contexts.

# TMoA (reo Pākehā) L6

## - Tikanga-ā-lwi

Identify and describe the ways that

- individuals, groups and institutions work to promote social justice and human rights.
- Cultures adapt and change, and the consequences this has for society.
- Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways.
- People have different perspectives about past events that are of significance to New Zealanders.

# - Pūtaiao

 Relate structural features and behaviours of plants, animals and microorganisms to their biological processes and investigate environmental factors affecting those processes.

# - Hangarau

- Examine the values and beliefs of other cultures/ people to
- o adapt solutions accordingly;
- o determine and understand practice;
- o meet the needs of a diverse client group; and,
- o understand barriers and opportunities.
- Investigate the nature and needs of people and how this affects systems and/or processes, client needs, promotion and marketing.

#### Taumata 7

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

## - Hangarau (Taumata 7 & 8)

- Ka tūhura i ngā momo hangarau ka taea te whakarerekē i roto i ngā āhuatanga o te tangata, me ngā rauropi katoa, pērā i:
- o te whakaōrite whaioranga;
- o te raweke ira tangata.
- Kia mārama ki ngā pāpātanga ki ngā whakapono o te tangata.
- Ka tūhura, ka tautohe i ngā painga ohaoha o ētahi otinga me te pānga ki:
- o ngā whānau, hapū, iwi rānei;
- o ngā rohe, te motu, te ao whānui hoki.
- Ka taukumekume i te pāpātanga o te otinga hangarau ki:
- o ngā uara, ngā whakapono, me ngā waiaro;
- ngā matatika o te tangata;
- o te ao tōrangapū;
- o te toitūtanga;
- o te taha ohaoha.

# TAU 13 EMBODY

Ākonga use future focussed, sustainable and innovative practices to create opportunities for the future.

# TMoA (reo Pākehā) L6

# - Tikanga-ā-lwi

Identify and describe the ways that:

- Individuals, groups and institutions work to promote social justice and human rights.
- Cultures adapt and change and this has consequences for society.
- Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways.
- People have different perspectives about past events that are of significance to New Zealanders.

#### - Pūtaiao

 Relate structural features and behaviours of plants, animals and microorganisms to their biological processes, and investigate environmental factors affecting those processes.

# – Hangarau

- Examine the values and beliefs of other cultures/ people to adapt solutions accordingly, determine and understand practice, meet the needs of a diverse client group and understand barriers and opportunities.
- Investigate the nature and needs of people and how this affects - systems and/or processes, client needs, promotion and marketing.

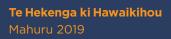
#### Taumata 8

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

## - Hangarau (Taumata 7 & 8)

- Ka tūhura i ngā momo hangarau ka taea te whakarerekē i roto i ngā āhuatanga o te tangata, me ngā rauropi katoa, pērā i:
- o te whakaōrite whaioranga;
- o te raweke ira tangata.
- Kia mārama ki ngā pāpātanga ki ngā whakapono o te tangata.
- Ka tūhura, ka tautohe i ngā painga ohaoha o ētahi otinga me te pānga ki:
- o ngā whānau, hapū, iwi rānei;
- o ngā rohe, te motu, te ao whānui hoki.
- Ka taukumekume i te pāpātanga o te otinga hangarau ki:
- o ngā uara, ngā whakapono, me ngā waiaro;
- o ngā matatika o te tangata;
- te ao tōrangapū;
- o te toitūtanga;
- o te taha ohaoha.





# WHĀNAŪ (FAMILY SUPPORT)

Kia noho ohoho tōna ngākau ki ngā āhuatanga whai pānga o tōna iwi, tōna hapū me tōna whānau

(Ākonga are open to and aware of the diverse aspects of their whānau/hapū/iwi)

# TAU 7-8 AWARENESS

Ākonga are aware of the diversity of whānau, hapū and iwi.

# TMoA (reo Pākehā) L4

## - Te Reo Māori

- Debate, question, express emotions and tell stories (joke).
- o Writing styles report, narrative and expository.
- o Expanding reading skills.

#### - Hauora

- Compare lore, customs and practices of Māori,
   Pākehā or others and the effect of those actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.
- Investigate the effect of the wider community on the wellbeing of student communities.
- Identify and explain the effects of changing situations on relationships and describe appropriate responses.
- Demonstrate a range of assertive communication skills that enable appropriate interactions with others.
- Identify instances of discrimination and act responsibly to support their own rights and feelings, and those of others.

## - Tikanga-ā-lwi

- Explain how people organise themselves in response to a challenge or crisis.
- Explain how and why individuals and groups pass on and sustain their culture and heritage.
- Explain how places reflect the past interactions between people and the environment.
- Explain how exploration presents opportunities and challenges for people, places and environments.
- Identify the causes and effects of events that have shaped the lives of people.

- Describe ways the past is recorded and remembered.
- Explain how and why people use resources differently and the consequences of this.
- Explain how and why individuals and groups seek to safeguard the rights of consumers.

# - Ngā Toi

- Investigate, use technology, develop and recognise the different types of musicthey are familiar with; their knowledge of music trends; the range of types of sounds used in making music and instruments for producing music.
- Investigate, describe, show understanding of and share ideas about dramatic processes and drama types.
- Develop notions and skill competencies that explains and seeks understanding by exploring and using the results produced by and with resources, art media and tools of art including electronics; selecting art processes and identifying required tools in her/his art work; using the processes and media used by the working artist. Thoughts and concepts must be carefully guided and developed.

# Taumata 5

# - Te Reo Māori

Ka whakapuaki i ngā momo reo mō ngā
horopaki ōkawa, ōpaki hoki. Ka haere tonu
te whakapārekareka i te rere o te reo ki ngā
āhuatanga Māori ake nei. He whaihua, he mārama
ānatuhinga i ngā momo tuhinga huhua noa.

# - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- o TE WAIRUA
- NGĀ TIKANGA
- o TF RFO
- NGĀ UARA ME NGĀ WAIARO

# – Tikanga-ā-lwi

 Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.

- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

# - Ngā Toi (Taumata 5 & 6)

 Hei whakawhanake i ngā tūmomo tukanga me ōna mōhio ki te huhua o ngā āhuatanga toi, i āna ake mahi toi me tērā o ētahi atu.

# TAU 9-10 EXPLORATION

Ākonga are learning about safe ancestral practices within a whānau, hapū and iwi context.

# TMoA (reo Pākehā) L4

#### - Te Reo Māori

- Debate, question, express emotions and tell stories (joke).
- Writing styles report, narrative and expository.
   Expanding reading skills.

#### - Hauora

- Compare lore, customs and practices of Māori, or Pākehā or others and the effect of those actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.
- Investigate the effect of the wider community on the wellbeing of student communities.
- Identify and explain the effects of changing situations on relationships and describe appropriate responses.
- Demonstrate a range of assertive communication skills that enable appropriate interactions with others.
- Identify instances of discrimination and act responsibly to support their own rights and feelings and those of others.

# – Tikanga-ā-lwi

- Explain how people organise themselves in response to a challenge or crisis.
- Explain how and why individuals and groups pass on and sustain their culture and heritage.
- Explain how places reflect past interactions between people and the environment.
- Explain how exploration presents opportunities and challenges for people, places and environments.
- Identify the causes and effects of events that have shaped the lives of people.
- o Describe ways the past is recorded and remembered.
- Explain how and why people use resources differently and the consequences of this.

 Explain how and why individuals and groups seek to safeguard the rights of consumers.

# – Ngã Toi

- Investigate, use technology, develop and recognise: the different types of musicthey are familiar with; their knowledge of music trends; the range of types of sounds used in making music and instruments for producing music.
- Investigate, describe, show understanding, and share ideas about: dramatic processes; drama types.
- O Develop notions and skill competences that explains and seeks understanding by exploring and using the results produced by and with resources, art media and tools of art including electronics; selecting art processes and identifying required tools in their art work; using the processes and media used by the working artist. Thoughts and concepts must be carefully guided and developed.

#### Taumata 5

# - Te Reo Māori

 Ka whakapuaki i ngā momo reo mō ngā horopaki ōkawa, ōpaki hoki. Ka haere tonu te whakapārekareka i te rere o te reo ki ngā āhuatanga Māori ake nei. He whaihua, he mārama ānatuhinga i ngā momo tuhinga huhua noa.

## - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- o TE WAIRUA
- NGĀ TIKANGA
- o TF RFO
- NGĀ UARA ME NGĀ WAIARO

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.

 Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

# - Ngā Toi (Taumata 5 & 6)

 Hei whakawhanake i ngā tūmomo tukanga me ōna mōhio ki te huhua o ngā āhuatanga toi, i āna ake mahi toi me tērā o ētahi atu.

# TAU 11-12 KNOWLEDGE

Ākonga are exploring what that means for Māori, but also in a global sense, and how those practices can be contextualised in their adult life.

# TMoA (reo Pākehā) L6

#### - Te Reo Māori

- o Manipulate and play while retaining meaning.
- o Can listen, critique and respond.
- o Can communicate ideas, emotions and information.

#### - Hauora

- Investigate and explain the effects of food, nutrition and sustenance issues that influence the health and wellbeing of families, children, adolescents and adults.
- Identify and investigate choices related to adolescent development and evaluate the outcomes of those choices.
- Plan safe strategies to protect the rights and responsibilities of students and others, in a range of contexts.
- Apply the principles of motor skill learning to improve fine motor skills.
- Demonstrate physical abilities and responsible attitudes in challenging situations. Applying movement skills.
- Demonstrate understanding and affirmation of people's diverse cultural and social needs when participating in physical activities.
- Choose and maintain ongoing involvement in physical activities and analyse factors influencing their participation.
- Apply environmental, scientific and technological knowledge to enhance physical abilities in a range of contexts.
- Evaluate the effectiveness of the work and practices of an environmental group. Investigate the roles, practices and effectiveness of local and national organisations that promote wellbeing and environmental safety.

- Analyse school and community initiatives that promote the health, wellbeing and safety of adolescents.
- Investigate how the behaviour, values and attitudes of individuals and groups can affect and influence self-worth in others.
- Plan strategies and demonstrate positive interpersonal skills to respond to challenging situations appropriately.
- Demonstrate an understanding of factors which contribute to personal identity, celebrate individuality and protect spiritual, intellectual and physical wellbeing

#### - Tikanga-ā-lwi

Identify and describe the ways that:

- Individuals, groups and institutions work to promote social justice and human rights.
- Cultures adapt and change, and this has consequences for society.
- Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways. There are causes and consequences of past events that are of significance to New Zealanders and that shape the lives of people and society.
- People have different perspectives about past events that are of significance to New Zealanders.
   As a result of scarcity, consumers, producers and government make choices that affect New Zealand society.
- The different sectors of the New Zealand economy are interdependent.

- Relate structural features and behaviours of plants, animals and microorganisms to their biological processes and investigate environmental factors affecting those processes.
- Explore patterns in the inheritance of gene-linked characteristics.
- Explain the importance of genetic variation in the changing environment. Investigate the effect

- of human actions and natural processes on an Aotearoa ecosystem.
- Understand how plate tectonic and other geological processes shape and change the surface of the earth.
- Investigate how geological, atmospheric and astronomical cycles, over time, gradually alter the conditions supporting life on Earth.
- Explain how technologies (such as types of telescopes, satellites and spacecraft) are used in studying and exploring the solar system and the universe, and the spatial relationships that impact on earth.

## Taumata 7

#### - Te Reo Māori

Nā te whānui ake o te puna kupu ka kaha ake te tautoko, te whakawhitiwhiti māramatanga, te whakakotahi hei whakatau, hei whakaiti rānei. E whakamahi ana i ngā āhuatanga katoa o te reo me te tinana hei whakatau tika i ngā take, hei whakawhitiwhiti whakaaro, kare ā-roto me te mōhiohio. E takahuri ana i te reo mā te whakapārekareka, mā te kupu peha, mā te kupu huna.

# - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

- Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.
- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro. tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.

# TAU 13 EMBODIMENT

Ākonga embody the diversity of their whānau/hapū/iwi.

# TMoA (reo Pākehā) L6

## - Te Reo Māori

- o Manipulate and play while retaining meaning.
- o Can listen, critique and respond.
- o Can communicate ideas, emotions and information.

#### - Hauora

- Investigate and explain the effects of food, nutrition and sustenance issues that influence the health and wellbeing of families, children, adolescents and adults.
- Identify and investigate choices related to adolescent development and evaluate the outcomes of those choices.
- Plan safe strategies to protect the rights and responsibilities of students and others, in a range of contexts.
- Apply the principles of motor skill learning to improve fine motor skills.
- Demonstrate physical abilities and responsible attitudes in challenging situations.
- Demonstrate understanding and affirmation of people's diverse cultural and social needs when participating in physical activities.
- Choose and maintain ongoing involvement in physical activities and analyse factors influencing their participation.
- Apply environmental, scientific and technological knowledge to enhance physical abilities in a range of contexts.
- Evaluate the effectiveness of the work and practices of an environmental group. Investigate the roles, practices and effectiveness of local and national organisations that promote wellbeing and environmental safety.
- Analyse school and community initiatives that promote the health, wellbeing and safety of

- adolescents. Investigate how the behaviour, values and attitudes of individuals and groups can affect and influence self-worth in others.
- Plan strategies and demonstrate positive interpersonal skills to respond to challenging situations appropriately.
- Demonstrate an understanding of factors which contribute to personal identity, celebrate individuality and protect spiritual, intellectual and physical wellbeing.

# - Tikanga-ā-lwi

Identify and describe the ways that:

- Individuals, groups and institutions work to promote social justice and human rights.
- Cultures adapt and change, and this has consequences for society.
- Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways.
- There are causes and consequences of past events that are of significance to New Zealanders and that shape the lives of people and society.
- People have different perspectives about past events that are of significance to New Zealanders.
   As a result of scarcity, consumers, producers, and government make choices that affect New Zealand society.
- The different sectors of the New Zealand economy are interdependent.

- Relate structural features and behaviours of plants, animals and microorganisms to their biological processes, and investigate environmental factors affecting those processes.
- Explore patterns in the inheritance of gene-linked characteristics. Explain the importance of genetic variation in the changing environment.
- Investigate the effect of human actions and natural processes on an Aotearoa ecosystem.

- Understand how plate tectonic and other geological processes shape and change the surface of the earth
- Investigate how geological, atmospheric and astronomical cycles, over time, gradually alter the conditions supporting life on Earth.
- Explain how technologies (such as types of telescopes, satellites and spacecraft) are used in studying and exploring the solar system and the universe, and the spatial relationships that impact the earth.

## Taumata 8

#### - Te Reo Māori

Kua mārama ake, kua mātanga ake ki te mana o te reo kōrero me ōna āhuatanga katoa. E torotoro ana kia mārama ake ai ki a ia, ki ētahi atu rānei ngā whakaaro me ngā ariā hōhonu. Kua mōhio he mana tō te reo kōrero me te reo ā-tinana i roto i te kōrero. Ka māia tonu ki te pare i ngā whakararu me ngā pātai matawhawhati.

# - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- o TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

# – Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

- Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.
- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.



# TE TAIAO (ENVIRONMENT)

Kia whai koha ki ngā tikanga kaitiakitanga (Ākonga are conscious of their responsibilities)

# TAU 7-8 AWARENESS

Ākonga are aware that there are issues facing the natural world, from a local and global perspective.

# TMoA (reo Pākehā) L4

#### - Te Reo

- Debate, question, express emotions and tell stories (joke).
- o Writing styles report, narrative and expository.
- o Expanding reading skills.

# - Pangarau

- Solve practical problems using measurement (length, area, volume etc.).
- Convert, calculate, create, explain and use measurement.
- Show reasonableness of measurement.
- Show, explain and use location and direction (compass, environment, grids, maps).
- Identify and explain symmetry and invariant properties of transformation.
- Follow conventions for statistical investigation (multivariate category data, measurement and time series), central tendency, explain and evaluate usefulness of data and variability.
- Explore probability (compare, know outcomes, understand variables, use fractions to show probability).

#### - Hauora

- Discuss and exchange ideas about the types of food that contribute to physical, spiritual and intellectual wellbeing.
- Describe the characteristics of puberty in positive ways in relation to themselves and others.
- Identify and describe how social messages can affect feelings of self-worth.
- Find and use information to make and action safe choices in a range of contexts.
- Demonstrate consistency and control of movements in a range of contexts.

- Demonstrate willingness to learn new skills and strategies, and extend their abilities in movementrelated activities.
- Participate in and demonstrate an understanding of how social and cultural practices are expressed through movement. Investigate the effect of science, technology and the environment on the selection and use of equipment in a variety of contexts.
- Compare lore, customs and practices of Māori,
   Pākehā or others and the effect of those actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.
- Investigate the effect of the wider community on the wellbeing of student communities.
- Identify and explain the effects of changing situations on relationships and describe appropriate responses.
- Demonstrate a range of assertive communication skills that enable appropriate interactions with others.
- Identify instances of discrimination and act responsibly to support their own rights and feelings, and those of others.

# – Tikanga-ā-lwi

- Explain how people organise themselves in response to a challenge or crisis.
- Explain how and why individuals and groups pass on and sustain their culture and heritage.
- Explain how places reflect past interactions between people and the environment.
- Explain how exploration presents opportunities and challenges for people, places and environments.
   Identify the causes and effects of events that have shaped the lives of people.
- Describe ways the past is recorded and remembered.
- Explain how and why people use resources differently and the consequences of this.
- Explain how and why individuals and groups seek to safeguard the rights of consumers.
- Recognise that there are biological processes common to all organisms, which occur in different

- ways in different species. Make detailed scientific classifications of some organisms.
- Recognise and explain the changes undergone by species (especially those of Aotearoa) over long periods of time.
- Develop understanding of key features of the earth's surface, including water, rocks and soil, and the factors which enable life to exist.
- Develop understanding of the water cycle and its effects on climate, landforms and life.
- Learn about the parts of the solar system, including the planets and their moons, with a developing understanding of the distances involved and the factors relating to space exploration.
- Investigate and use scientific models of force and motion, and some applications, e.g. friction, levers and pulleys.
- Investigate and use scientific models to explain the physical phenomena of light, sound and heat.
   Investigate and use simple scientific models of electrical circuits and magnets.
- Carefully consider the values and beliefs reflected in a solution in order to understand the outcome.
- Consider: technological principles; the appropriateness to people; relationships and impacts on the environment; impact on future potential developments.
- Understands the importance of consultation and dialogue in the local and wider community.
- Able to work to a plan, efficient trials show progress and development; efficiency and appropriateness of the development.
- Developing technical, thinking and creative skills are reflected in practice.
- Product development takes account of the nature of the need and client or community feedback.
- o Understands how technological systems work.

# Taumata 5

# Te Reo

 Ka whakapuaki i ngā momo reo mō ngā horopaki ōkawa, ōpaki hoki. Ka haere tonu te whakapārekareka i te rere o te reo ki ngā āhuatanga Māori ake nei. He whaihua, he mārama ānatuhinga i ngā momo tuhinga huhua noa.

# - Pāngarau

- o Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana ki tēnei taumata.
- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae hoki ia i ngā tini whakamahinga o te pāngarau e hāngai ana ki tōna hapori. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki maha o te ao whānui.

## - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

# - Pūtaiao

 Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti

- rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.
- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.

# TAU 9-10 EXPLORE

Ākonga are exploring the ramifications of action vs. inaction, and how we can learn from the past to inform the future.

# TMoA (reo Pākehā) L4

#### - Te Reo

- Debate, question, express emotions and tell stories (joke).
- o Writing styles report, narrative and expository.
- o Expanding reading skills.

## - Pangarau

- Solve practical problems using measurement (length, area, volume etc.).
- Convert, calculate, create, explain and use measurement.
- o Show reasonableness of measurement.
- Show, explain and use location and direction (compass, environment, grids, maps).
- Identify and explain symmetry and invariant properties of transformation.
- Follow conventions for statistical investigation (multivariate category data, measurement and time series), central tendency, explain and evaluate usefulness of data and variability/explore probability (compare, know outcomes, understand variables, use fractions to show probability).

# - Hauora

- Discuss and exchange ideas about the types of food that contribute to physical, spiritual and intellectual wellbeing.
- Describe the characteristics of puberty in positive ways in relation to themselves and others.
- Identify and describe how social messages can affect feelings of self-worth.
- Find and use information to make and action safe choices in a range of contexts.
- Demonstrate consistency and control of movements in a range of contexts.

- Demonstrate willingness to learn new skills and strategies and extend their abilities in movementrelated activities.
- Participate in and demonstrate an understanding of how social and cultural practices are expressed through movement.
- Investigate the effect of science, technology and the environment on the selection and use of equipment in a variety of contexts.
- Compare lore, customs and practices of Māori, or Pākehā or others and the effect of those actions on the environment.
- Investigate ways to improve aspects of a school environment and other environments.
- Investigate the effect of the wider community on the wellbeing of student communities.
- Identify and explain the effects of changing situations on relationships and describe appropriate responses.
- Demonstrate a range of assertive communication skills that enable appropriate interactions with others.
- Identify instances of discrimination and act responsibly to support their own rights and feelings and those of others.

## - Tikanga-ā-lwi

- Explain how people organise themselves in response to a challenge or crisis.
- Explain how and why individuals and groups pass on and sustain their culture and heritage.
- Explain how places reflect the past interactions between people and the environment.
- Explain how exploration presents opportunities and challenges for people, places, and environments.
- Identify the causes and effects of events that have shaped the lives of people.
- o Describe ways the past is recorded and remembered.
- Explain how and why people use resources differently, and the consequences of this.
- Explain how and why individuals and groups seek to safeguard the rights of consumers.

#### - Pūtaiao

- Recognise that there are biological processes common to all organisms, which occur in different ways in different species.
- Make detailed scientific classifications of some organisms.
- Recognise and explain the changes undergone by species (especially those of Aotearoa) over long periods of time.
- Develop understanding of key features of the earth's surface, including water, rocks and soil, and the factors which enable life to exist.
- Develop understanding of the water cycle and its effects on climate, landforms and life.
- Learn about the parts of the solar system, including the planets and their moons, with a developing understanding of the distances involved and the factors relating to space exploration.
- Investigate and use scientific models of force and motion, and some applications, e.g. friction, levers and pulleys.
- Investigate and use scientific models to explain the physical phenomena of light, sound and heat.
   Investigate and use simple scientific models of electrical circuits and magnets.
- Carefully consider the values and beliefs reflected in a solution in order to understand the outcome.
- Consider: technological principles; the appropriateness to people; relationships and impacts on the environment; impact on future potential developments.
- Understands the importance of consultation and dialogue in the local and wider community.
- Able to work to a plan. Efficient trials show progress and development, efficiency and appropriateness of the development.

- Developing technical thinking and creative skills are reflected in practice. Product development takes account of the nature of the need and client or community feedback.
- o Understands how technological systems work.

#### Taumata 5

#### - Te Reo

 Ka whakapuaki i ngā momo reo mō ngā horopaki ōkawa, ōpaki hoki. Ka haere tonu te whakapārekareka i te rere o te reo ki ngā āhuatanga Māori ake nei. He whaihua, he mārama ānatuhinga i ngā momo tuhinga huhua noa.

## - Pāngarau

- o Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana Ka tēnei taumata.
- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae, ka arotake hoki ia i te takenga mai o te mātauranga pāngarau me ngā tini whakamahinga o te pāngarau. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki

# - Hauora (Taumata 5-8)

- o Kia kōtuituia ēnei āhuatanga ki ngā whenu katoa.
- TE WAIRUA
- NGĀ TIKANGA
- o TE REO
- NGĀ UARA ME NGĀ WAIARO

# TAU 11-12 KNOWLEDGE

Ākonga are finding innovative solutions to global issues and developing and understanding of the diversity of our environment.

# TMoA (reo Pākehā) L6

#### - Te Reo

- o Manipulate and play while retaining meaning.
- Can listen, critique and respond.
- o Can communicate ideas, emotions and information.

## - Pāngarau

- Apply direct and inverse relationships (linear proportions), extend powers (integers and fractions), compound rates, use numerical approaches to find optimal solutions, understand the reasonableness of an answer, form and solve linear equation and in-equation, general properties of operations (rational numbers and exponents). Relate graphs tables and equations to linear, quadratic and simple experimental relationships.
- o Measure with appropriate precision.
- Apply relationships between units in the metric system. Calculate volume (prisms, pyramids, cones and spheres using formulae).
- Deduce and apply angle properties related to circles. Recognise when shapes are similar and use proportional reasoning.
- Use trigonomic ratios and Pythagoras theorem. Use a coordinate plane or map to show common areas.
- Compare and apply single and multiple transformations.
- Analyse symmetrical patterns by the transformation used to create them.
- Use statistical enquiry cycle (justifies variables, manage sources of variation, identify and communicate features, make informal references, justify findings, understand ethical conventions).
- Evaluate statistical report (displays, statistics, processes and probabilities).
- Investigate situations (that involve elements of change – compare and calculate).

## - Hangarau

- Evaluate the effectiveness of the work and practices of an environmental group.
- Investigate the roles, practices and effectiveness of local and national organisations that promote wellbeing and environmental safety.
- Analyse school and community initiatives that promote the health, wellbeing and safety of adolescents.

# - Tikanga-ā-lwi

Identify and describe the ways that:

- Individuals, groups and institutions work to promote social justice and human rights.
- Cultures adapt and change, and this has consequences for society.
- Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways.
- There are causes and consequences of past events that are of significance to New Zealanders and that shape the lives of people and society.
- People have different perspectives about past events that are of significance to New Zealanders.
   As a result of scarcity, consumers, producers and government make choices that affect New Zealand society. The different sectors of the New Zealand economy are interdependent.

- Relate structural features and behaviours of plants, animals and microorganisms to their biological processes, and investigate environmental factors affecting those processes.
- Explore patterns in the inheritance of gene-linked characteristics.
- Explain the importance of genetic variation in the changing environment.
- Investigate the effect of human actions, and natural processes on an Aotearoa ecosystem.
- Understand how plate tectonic and other geological processes shape and change the surface of the earth.

- Investigate how geological, atmospheric and astronomical cycles, over time, gradually alter the conditions supporting life on Earth.
- Explain how technologies (such as types of telescopes, satellites and spacecraft) are used in studying and exploring the solar system and the universe, and the spatial relationships that impact the earth.
- Investigate trends and relationships of force, speed, acceleration, gravity, momentum, work, and associated energies and applications.
- Investigate trends and relationships of heat transfer, heat capacity and heat insulation, and associated energies and applications.
- Learn simple concepts of nuclear physics. Investigate trends and relationships of static electricity, types of circuits, electromagnetism, and associated energies and applications.
- Identify patterns and trends in the properties of selected groups of substances; for example, acids and bases, metals, metal compounds and hydrocarbons.
- o Explore factors that affect chemical processes.
- Explore technological ways chemistry may be used to address the needs of society.
- Distinguish at a particle level between atoms, molecules and ions (including covalent and ionic bonding).
- Link atomic structure to the organisation of the Periodic Table.
- Use particle theory to explain factors that affect chemical processes.
- Learn about the central concepts of science, their history and their role in science disciplines. Learn about how the philosophy of science has developed and changed as the body of science knowledge available to humanity has expanded.
- Develop understanding of concepts in the philosophy of knowledge, in order to appreciate that modern/Western science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances on scientific knowledge, and real-life examples of when these have and have not worked.

 Examine contemporary ethical dilemmas in science and how these are addressed.

# - Hangarau

- Examine the values and beliefs of other cultures/ people to, adapt solutions accordingly determine and understand practice, meet the needs of a diverse client group, understand barriers and opportunities.
- Investigate the nature and needs of people and how this affects, systems and/or processes, client needs, promotion and marketing.

#### Taumata 7

## - Te Reo

Nā te whānui ake o te puna kupu ka kaha ake te tautoko, te whakawhitiwhiti māramatanga, te whakakotahi hei whakatau, hei whakaiti rānei. E whakamahi ana i ngā āhuatanga katoa o te reo me te tinana hei whakatau tika i ngā take, hei whakawhitiwhiti whakaaro, kare ā-roto me te mōhiohio. E takahuri ana i te reo mā te whakapārekareka, mā te kupu peha, mā te kupu huna.

# - Pāngarau

- o Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana Ka tēnei taumata.
- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae, ka arotake hoki ia i te takenga mai o te mātauranga pāngarau me ngā tini whakamahinga o te pāngarau. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki.

# - Hangarau (Taumata 7 & 8)

 Ka tūhura i ngā momo hangarau ka taea te whakarerekē i roto i ngā āhuatanga o te tangata, me ngā rauropi katoa, pērā i:

- o te whakaōrite whaioranga;
- o te raweke ira tangata.
- Kia mārama ki ngā pāpātanga ki ngā whakapono o te tangata.
- Ka tūhura, ka tautohe i ngā painga ohaoha o ētahi otinga me te pānga ki:
- o ngā whānau, hapū, iwi rānei;
- o ngā rohe, te motu, te ao whānui hoki.
- Ka taukumekume i te pāpātanga o te otinga hangarau ki:
- o ngā uara, ngā whakapono, me ngā waiaro;
- o ngā matatika o te tangata;
- o te ao tōrangapū;
- o te toitūtanga;
- o te taha ohaoha.

## - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.

 Ngā Mahinga Ohaoha E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

- Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.
- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.

# TAU 13 EMBODIMENT

Ākonga embody kaitiakitanga in a variety of contexts.

# TMoA (reo Pākehā) L6

## - Te Reo

- o Manipulate and play while retaining meaning.
- o Can listen, critique and respond.
- o Can communicate ideas, emotions and information.

# - Pangarau

- Apply direct and inverse relationships (linear proportions), extend powers (integers and fractions), compound rates, use numerical approaches to find optimal solutions, understand the reasonableness of an answer, form and solve linear equation and in-equation, general properties of operations (rational numbers and exponents).
- Relate graphs tables and equations to linear, quadratic and simple experimental relationships.
- Measure with appropriate precision. Apply relationships between units in the metric system.
- Calculate volume (prisms, pyramids, cones and spheres using formulae). Deduce and apply angle properties related to circles. Recognise when shapes are similar and use proportional reasoning.
- Use trigonomic ratios and Pythagoras theorem. Use a coordinate plane or map to show common areas.
- Compare and apply single and multiple transformations. Analyse symmetrical patterns by the transformation used to create them.
- Use statistical enquiry cycle (justify variables, manage sources of variation, identify and communicate features, make informal references, justify findings, understand ethical conventions).
- Evaluate statistical report (displays, statistics, processes and probabilities).
- Investigate situations (that involve elements of change – compare and calculate).

#### - Hangarau

 Evaluate the effectiveness of the work and practices of an environmental group.

- Investigate the roles, practices and effectiveness of local and national organisations that promote wellbeing and environmental safety.
- Analyse school and community initiatives that promote the health, wellbeing and safety of adolescents.

# - Tikanga-ā-lwi

Identify and describe the ways that:

- Individuals, groups and institutions work to promote social justice and human rights. Cultures adapt and change, and this has consequences for society.
- Natural and cultural environments have particular characteristics and are shaped by processes that create spatial patterns.
- People interact with their environments in particular ways. There are causes and consequences of past events that are of significance to New Zealanders and that shape the lives of people and society.
- People have different perspectives about past events that are of significance to New Zealanders.
   As a result of scarcity, consumers, producers and government make choices that affect New Zealand society.
- The different sectors of the New Zealand economy are interdependent.

- Relate structural features and behaviours of plants, animals and microorganisms to their biological processes and investigate environmental factors affecting those processes. Explore patterns in the inheritance of gene-linked characteristics.
- Explain the importance of genetic variation in the changing environment.
- Investigate the effect of human actions and natural processes on an Aotearoa ecosystem.
- Understand how plate tectonic and other geological processes shape and change the surface of the earth.
- Investigate how geological, atmospheric and astronomical cycles, over time, gradually alter the conditions supporting life on Earth.
- Explain how technologies (such as types of telescopes, satellites and spacecraft) are used in

studying and exploring the solar system and the universe, and the spatial relationships that impact the earth.

- Investigate trends and relationships of force, speed, acceleration, gravity, momentum, work, and associated energies and applications.
- Investigate trends and relationships of heat transfer, heat capacity and heat insulation, and associated energies and applications.
- Learn simple concepts of nuclear physics. Investigate trends and relationships of static electricity, types of circuits, electromagnetism; and associated energies and applications.
- Identify patterns and trends in the properties of selected groups of substances; for example, acids and bases, metals, metal compounds, and hydrocarbons.
   Explore factors that affect chemical processes.
- Explore technological ways chemistry may be used to address the needs of society. Distinguish at a particle level between atoms, molecules and ions (including covalent and ionic bonding).
- Link atomic structure to the organisation of the Periodic Table. Use particle theory to explain factors that affect chemical processes.
- Learn about the central concepts of science, their history and their role in science disciplines.
- Learn about how the philosophy of science has developed and changed as the body of science knowledge available to humanity has expanded.
- Develop understanding of concepts in the philosophy of knowledge in order to appreciate that modern/Western science contains embedded values that may differ from those of indigenous people.
- Develop understanding of the checks and balances on scientific knowledge and real-life examples of when these have and have not worked.
- Examine contemporary ethical dilemmas in science and how these are addressed.

# - Hangarau

 Examine the values and beliefs of other cultures/ people, adapt solutions accordingly to determine and understand practice, meet the needs of a diverse client group, understand barriers and opportunities.  Investigate the nature and needs of people and how this affects systems and/or processes, client needs, promotion and marketing.

#### Taumata 8

# - Te Reo

Kua mārama ake, kua mātanga ake ki te mana o te reo kōrero me ōna āhuatanga katoa. E torotoro ana kia mārama ake ai ki a ia, ki ētahi atu rānei ngā whakaaro me ngā ariā hōhonu. Kua mōhio he mana tō te reo kōrero me te reo ā-tinana i roto i te kōrero. Ka māia tonu ki te pare i ngā whakararu me ngā pātai matawhawhati.

# - Pāngarau

- o Te Reo Matatini o te Pāngarau
- Ka whakawhitiwhiti whakaaro, ka āta wānanga te ākonga i āna mahi pāngarau, mā te kupu (ā-waha, ā-tuhi), mā te tohu, me ngā momo whakaahuahanga e hāngai ana. He mea nui tēnei hei tautoko i te whakatutukitanga o ngā whāinga paetae e whai ake nei, e pakari anō ai te whakaaro arorau, te whakaaro arohaehae, te whakaaro whaitake me te auahatanga o te ākonga e hāngai ana ki tēnei taumata.
- o Te Whakamahinga o te Pāngarau
- Ka mārama te ākonga, ka arohaehae, ka arotake hoki ia i te takenga mai o te ātauranga pāngarau me ngā tini whakamahinga o te pāngarau. Me kākahu anō ngā whāinga paetae ki ngā momo horopaki maha o te ao whānui.

# - Hangarau (Taumata 7 & 8)

- Ka tühura i ngā momo hangarau ka taea te whakarerekē i roto i ngā āhuatanga o te tangata, me ngā rauropi katoa, pērā i:
- te whakaōrite whaioranga;
- o te raweke ira tangata.
- Kia mārama ki ngā pāpātanga ki ngā whakapono o te tangata.
- Ka tūhura, ka tautohe i ngā painga ohaoha o ētahi otinga me te pānga ki:
- o ngā whānau, hapū, iwi rānei;
- o ngā rohe, te motu, te ao whānui hoki.
- Ka taukumekume i te pāpātanga o te otinga hangarau ki:

- o ngā uara, ngā whakapono, me ngā waiaro;
- o ngā matatika o te tangata;
- te ao tōrangapū;
- o te toitūtanga;
- o te taha ohaoha.

# - Tikanga-ā-lwi

- Te Whakaritenga Pāpori me te Ahurea: Whiria te kaha tūātinitini, whiria te kaha tūāmanomano. Nō ngā tūpuna, tuku iho, tuku iho.
- Te Ao Hurihuri: E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.
- Te Wāhi me te Taiao: Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papatūānuku e takoto nei.
- Ngā Mahinga Ohaoha: E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai, engari, me tiki kite matamata.

- Ngā Momo Tūhuratanga: Ka oti te whakarōpū me te tautohu, te torotoro, te rapu tauira me te whakatauira, te whakamātau tika, te whakaoti rapanga, te hanga i tētahi mea, i tētahi pūnaha rānei.
- Te Reo Matatini o te Pūtaiao: Ka pakari haere te mõhio ki te reo matatini o te pūtaiao, o te pāngarau, me ngā pūnaha tohu pūtaiao, ā, ka whakamahia ēnei reo matatini hei pānui, hei whakaatu i ōna ake whakaaro, tae atu ki ō ētahi atu.
- Te Whakamahinga o te Pūtaiao: Ka ako mō ngā mahi me ngā kaimahi e whakaputaina ai ngā mātauranga pūtaiao. Ka whakahāngai i tōna mōhio pūtaiao ki ngā whakatau me ngā mahi o te ao tangata, arā, hei whakaaro ki ngā take ā-iwi, me ngā take whānui, e pā ana ki te tangata, te porihanga me te taiao.

