

Supporting our tamariki to develop skills to navigate the future





Each school, kura and wharekura will be able to design their own local curriculum around the Digital Technologies and Hangarau Matihiko content to suit their own views and philosophies.

As an education system, we want to equip our young people with the right set of skills for whatever path they choose to follow.

We live in a 'fast evolving digital world' that is characterised by changing ways of living and working.

Digital technologies are used everywhere: we have automatic scanners at the supermarkets to buy our food, drones helping farmers to know when to water their crops, and surgeons using robots to mend hearts.

The challenge for educators is to equip all of the students of Aotearoa with the understanding of how digital technologies work so they can make life better.

We want all of our young people to have the knowledge and skills to deal with new problems and opportunities as they arise, and be safe while doing so.



Setting the scene...

What do we mean when we say digital technologies?

IT IS ABOUT:

- Helping to develop digitally capable thinkers, producers and creators
- Teaching kids HOW digital technologies works (the computer science principles)
- And how they can use that knowledge to solve problems
- So they become creative innovators of digital solutions

IT'S NOT ABOUT:

- Just using electronic devices and hardware

The consultation process

To understand what skills were needed most by our young people in order to thrive in a digital society, we asked you – as well as other experts in education and technology.

Developing the Digital Technologies & Hangarau Matihiko curriculum content was a team effort between a number of leading curriculum and Technology experts across New Zealand. We worked with advisory groups that included teachers, kaiako, education leaders and subject association experts. We also trialled the new curriculum content with schools, kura and wharekura.

Public consultation of the proposed curriculum content: 28 June – 3 September 2017



ONLINE SURVEY

via the DigiTech mailbox¹

655 responses received
(**504** complete, **151** partial)



WORKSHOPS

53 face to face workshops

19 locations
2,381 attendees



EMAILED SUBMISSIONS

33 submissions received



INDEPENDENT CURRICULUM ADVISORY GROUP²

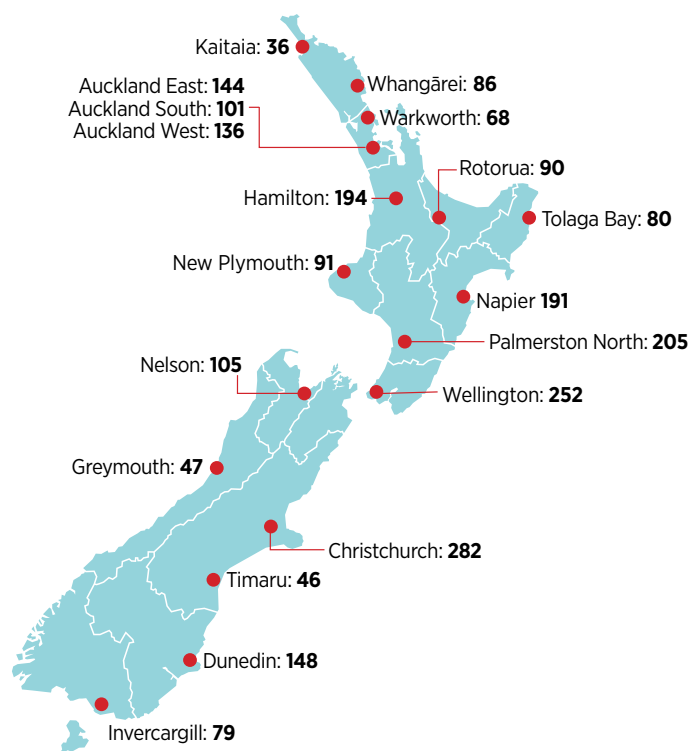
Recommendation report from feedback received

Attendees at consultation workshops

Morning session: school, kura and Kāhui Ako leaders and members of Boards of Trustees

Afternoon session: teachers and kaiako – split into two workshops, English and Māori medium

Community evening session: parents, whānau, community and industry



Closing the feedback loop

We have now gathered all of the feedback on the draft Digital Technologies & Hangarau Matihiko curriculum content, and identified the major themes from those conversations. This summary report will share what we heard, and what we're doing.



Learn more



¹ The Consultation Feedback Report can be found at <https://education.govt.nz/digital-technology-consultation>



² The Curriculum Advisory Group report can be found at <https://education.govt.nz/digital-technology-consultation>



A digitally fluent person can decide **when** and **why** to use specific digital technologies to achieve a specific task or solve problems.

A digitally capable person **can create** their own digital technologies solution.

We are committing to a new and important area of contemporary and future teaching and learning.

What's changing?

The Technology Learning Area in the New Zealand Curriculum now clearly outlines the expectations for learning in Digital Technologies.

This change creates a ripple effect throughout the curriculum. We're making sure that our young people can leave school with strong skills in literacy, numeracy, and are digitally fluent and capable.

From 2018, the new Digital Technologies & Hangarau Matihiko curriculum content will be available to support our kids to become digital technology creators and innovators. By 2020, we'll be expecting that schools, kura and wharekura will be teaching the curriculum content.

The Hangarau Wāhanga Ako in Te Marautanga o Aotearoa has now been revised to include Hangarau Matihiko.

Introducing the strengthened Digital Technologies & Hangarau Matihiko curriculum content to all schools, kura and wharekura

IN TWO MAJOR STEPS:

1.

Working with you to get the curriculum content right

2.

Working with you to find the best way to:

- update schools, kura, families, whānau and communities about what's changed
- support teachers and kaiako

1 | Working with you to get the curriculum content right

Digital Technologies



What we heard:

That some of the language and explanation we used was confusing to some and distracted from the focus on the curriculum learning;

- The relationships between Achievement Objectives and Progress Outcomes was not clear.
- Te Ao Māori and the Te Tiriti o Waitangi needed to be more explicit.
- Ethics and digital citizenship needed to be more explicit.

We also heard that we needed to be clearer on our expectations for Years 9 and 10.

What we're doing:

We've changed how we have framed and introduced the new ideas in the curriculum so that it is clearer, including:

- Reviewing the content to make sure ethics, digital citizenship, Te Ao Māori and Te Tiriti o Waitangi are explicit.
- Moving the Outcome Statements into the Learning Area Statement to avoid confusion with Progress Outcomes.
- Being clearer about the roles and expectations of Achievement Outcomes and Progress Outcomes.
- Showing the opportunities to integrate digital technologies learning throughout the curriculum.

We will make sure that the resources that support the new curriculum content for teachers and education leaders make these changes clear, and help them to develop a deeper understanding of the key ideas.

Our expectations are: in each of Years 1 - 10, students will gain learning and experience in Computational Thinking and Designing and Developing Digital Outcomes.



What are 'Progress Outcomes'?

Progress Outcomes recognise that there are key points in a learner's journey irrespective of curriculum level or year level.

Progress Outcomes are a new way to give clear expectations about the most important learning steps.



Hangarau Matihiko

“He aha te mea nui o te ao? He tangata, he tangata, he tangata”.



From the outset, the development of the Hangarau Matihiko content has involved working with kaiako, kura whānau, iwi and Māori experts. The main message we heard during this process was the important place of people and te reo Māori me ōna tikanga when designing and using hangarau matihiko. Hangarau Matihiko must also resonate with the diverse identities of iwi and enable them to use their stories to illustrate how Hangarau Matihiko is present in te ao Māori.

We'll have more face to face discussions with kura, kaiako, and whānau and continue to listen during the implementation period. The feedback that we have received has helped us to refocus the Hangarau Matihiko curriculum guidance on te reo Māori me ōna tikanga, placing the needs and impacts on people and the environment at the forefront.

What we heard:

- The technical elements of Hangarau Matihiko needed to have more relevance to te ao Māori.
- Any changes to the Hangarau Matihiko content must reflect the Hangarau Iho statement.
- That the concepts in the proposed Hangarau Matihiko curriculum content were appreciated, but that we could weave them all together more.

What we're doing:

We agreed that more relevance to te ao Māori would support greater learning of Hangarau Matihiko. For example we now have a story about Maui that reflects the relevance of Hangarau Matihiko and its origin in te ao Māori.

The foundational principles and values of Te Marautanga o Aotearoa are now more woven into just two tupuranga. This should make the content more straight-forward to learn and teach. The Hangarau Wāhanga Ako has been updated to highlight the changes that have taken place to include Hangarau Matihiko content.

The two tupuranga in Hangarau Matihiko are now named: Te Whakaaro Rorohiko and Tangata me Te Rorohiko. These integrate the essential elements of te reo Māori me ōna tikanga, digital citizenship and computational thinking.

We are continuing to work on the exemplars that are based on Māori contexts and use Māori ways of thinking. We are weaving te reo and tikanga Māori with learning about Hangarau Matihiko and we are strengthening the sense of wairua Māori throughout the Hangarau Matihiko content.



We'll have more face to face discussions with kura and their whānau and continue to listen during the implementation period.



For both Digital Technologies & Hangarau Matihiko curriculum content – we heard:

The exemplar resources for both English medium and Māori medium could be improved by having more connection to Te Ao Māori and Te Tiriti o Waitangi. All exemplars should model digital technology best practice and show the new curriculum content successfully being used in real life at schools, kura and wharekura.

What we're doing:

We agree that there is a significant opportunity to celebrate overall quality in Aotearoa's education sector through continually updating the exemplars. The teaching and learning experiences that we'll promote in the exemplars will connect more and showcase the Values, Principles, and Key Competencies across the National Curricula. We will make sure that all schools, kura, and wharekura have a simple way to access them.





There is a significant opportunity to celebrate overall quality in New Zealand's education sector.

What we heard:

That the NCEA standards, assessment resources, and teaching and learning guides should be put in place in a phased way, with more lead-in time.

What we're doing:

We're going to extend the Level 3 transition year to two years, meaning that the old standards will be phased out at the end of 2018, 2019 and 2020 respectively. This would mean that students who complete the old NCEA Level 1 standards in 2018 will be able to continue to work towards the old standards for Levels 2 and 3 in 2019 and 2020.

What we heard:

To keep the curriculum current and most helpful, it was suggested that we:

- use an independent longitudinal evaluation and a sector consultative group to continue to provide guidance,
- have our supporting exemplars of good practice updated — at least on a two-year cycle,
- avoid any language which will lose its currency as technology changes and date the curriculum.

What we're doing:

We are working on our evaluation plan for the Digital Technologies & Hangarau Matihiko curriculum content and will consider the consultation feedback as part of this work.

The language in the Digital Technologies & Hangarau Matihiko curriculum content (in the Learning Area Statement and Progress Outcomes) has been reviewed to make sure that it won't date. However, the exemplars need to refer to specific digital technology tools and concepts so that they provide useful examples and support for teachers.

Future reviews of the exemplars will keep them up to date, and this will be done on a regular basis.

2 | Working with you to find the best way to:

- update schools, kura, families, whānau and communities about what's changed
- support teachers and kaiako



What we heard:

Generally we heard that school leaders, teachers, parents and whānau, and businesses were supportive of this change to better equip today's learners with future-focussed skills. And, there are already many innovative teaching and learning programmes where knowledge of digital technologies is enhancing learning in classrooms around New Zealand.

But – the majority of respondents (mainly teachers) want help to better understand how they will implement the new Digital Technologies & Hangarau Matihiko curriculum content.

What we're doing:

We recognise that our teachers need to be prepared and comfortable with the changes. That's why we will be spending around \$40 million over the next three years to ensure schools, kura and Kāhui Ako | Communities of Learning have an excellent understanding of the new curriculum content and how this can be incorporated into teaching and learning programmes. We're confident that this programme will give all teachers the opportunity to be ready for the new curriculum content between now and 2020.

For those teachers who are already way ahead with their teaching and learning programmes, we'll support them to share their expertise with others. We'll use digital technology tools to help swap ideas on the curriculum in action and to demystify areas that are hard to understand – online hubs for English medium and Māori medium and current social media tools like Facebook and Twitter.

We realise that this will be a major shift for many teachers and kaiako. Around the country, there are different degrees of readiness for this change, and understanding about how the new curriculum content will look in action.

We'll support teachers in relevant ways throughout the implementation process – and we'll use tools such as online surveys to check in and understand how this is working. Support from Ministry of Education staff will also be provided to help schools, kura and wharekura through the change – to listen and respond.

Students, parents, whānau, community leaders, and businesses need to stay involved. Teachers, kaiako, and education leaders are the key people to talk to these groups. We'll support these conversations with helpful tools and clear messages.

For schools, kura, and Kāhui Ako | Communities of Learning – the next few years can be dedicated to working with their own people to map out and implement a local curriculum that is right for their students, their staff, and that is most relevant to the possible future career-paths in their own local communities.

This will mean there will be time for schools, kura and wharekura to deal with what the change will mean to their way of doing things.

What we heard:

Respondents wanted to know what the new Digital Technologies and Hangarau Matihiko content change would mean for the education of children who are 5 and under.

What we're doing:

Te Whāriki, the early childhood curriculum supports children to become digitally fluent by enabling them to develop a range of strategies for communicating, reasoning and problem solving. Children are introduced to a wide range of tools which may include digital technologies to access and engage with the wider world.

Early Learning Services which are involved in a Community of Learning | Kāhui Ako can participate in Professional Learning and Development focused on supporting teachers to becoming digitally fluent, and on supporting them with the new Digital Technologies & Hangarau Matihiko curriculum content.

Read more about Te Whāriki here: tewhariki.tki.org.nz/



See our support package info on page 14.



Creating a **digitally fluent** and **capable** nation

READY 2014 - 2017

Understanding what changes are needed to the curricula to ensure tamariki have the skills to navigate the future.

Review positioning and content of Digital Technologies & Hangarau Matihiko within the New Zealand Curriculum & Te Marautanga o Aotearoa

Curriculum & NCEA design and development

Draft curriculum consultation from 28 June - 3 September 2017

Digital enterprise scholarships available

Curriculum published in the New Zealand Gazette

Curriculum finalised and published in December 2017

SET 2018 - 2019

Programmes, support and initiatives to help teachers and kaiako get ready for the strengthened Digital Technologies & Hangarau Matihiko (DT & HM) curriculum content.

National Digital Readiness Programme

Get ready to introduce the new DT & HM curriculum content and teaching strategies. A phased programme will be rolled out for teachers and kaiako

Digital Technologies for All Equity Fund

The Digital Technologies for All Equity Fund will open digital technology pathways for priority students

Digital enterprise scholarships available

Professional Learning Development

Comprehensive Professional Learning Development (PLD) and support will be available to help teachers and kaiako integrate DT & HM content into teaching and learning programmes

Curriculum resources and support available

Specialised online provider available

National Digital Championship

Celebrate excellence in DT & HM teaching and learning in schools and kura with the National Digital Championship – regional and national champs to be found!



We'll update you on these initiatives and more here: <https://education.govt.nz/digitech>

GO!

2020 ➤

The strengthened Digital Technologies & Hangarau Matihiko curriculum content being taught in schools and kura.

Ongoing Professional Learning Development



 <https://education.govt.nz/digital-technology-consultation>
Email: digi.tech@education.govt.nz

