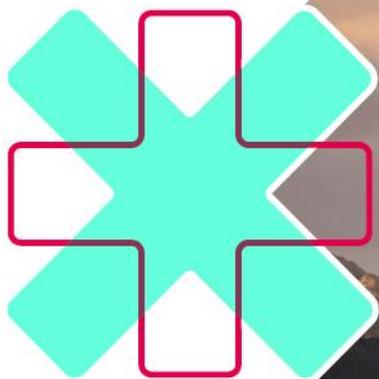


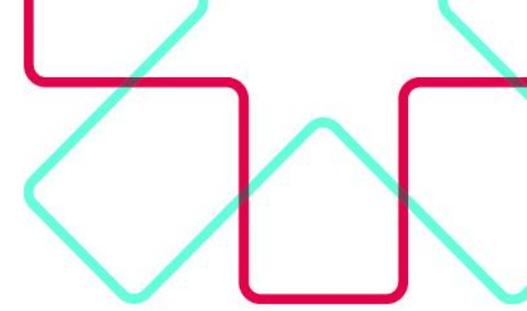
DIGITAL TECHNOLOGIES AND HANGARAU MATIHIKO CONSULTATION

Final Report

Report on submissions received

September 2017





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PREFACE

This report has been prepared for the Ministry of Education by EeMun Chen from MartinJenkins (Martin, Jenkins & Associates Limited).

MartinJenkins advises clients in the public, private and not-for-profit sectors, providing services in these areas:

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- evaluation and research
- strategy and investment
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- business improvement
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Our aim is to provide an integrated and comprehensive response to client needs – connecting our skill sets and applying fresh thinking to lift performance.

MartinJenkins is a privately owned New Zealand limited liability company. We have offices in Wellington and Auckland. The company was established in 1993 and is governed by a Board made up of executive directors Kevin Jenkins, Michael Mills and Nick Davis, plus independent directors Sir John Wells (Chair) and Hilary Poole.

Acknowledgements

We would like to thank all the parents/whānau members, teachers, school leaders, Board of Trustee members, businesses and industry and education sector organisations who have generously provided their time to participate in the consultation survey and workshops, and provide email submissions.

Disclaimer

This report is a summary of the consultation responses of individuals, businesses and organisations. The responses and perceptions do not necessarily reflect the views of MartinJenkins or the Ministry of Education.

This is the final version of the report and it incorporates clarifications raised to date. Slightly earlier versions were used for the Curriculum Advisory Group review and in discussions with sector reference groups.



EXECUTIVE SUMMARY

The Ministry of Education invited submissions on the proposed new curriculum content in Digital Technologies and Hangarau Matihiko over July and August 2017. A range of submissions were received:

- 655 responses via an online survey
- over 2,000 workshop attendees
- 33 email responses.

The survey included questions related to consistency, connections, adaptability, clarity, future focus and implementation. Email submitters were encouraged to provide submissions which addressed these areas. Workshops were provided around the country, with sessions targeted to specific audiences (such as teachers, school management and community).

Content

Overall, the majority of respondents agreed with the intent and direction of the documents (approximately 70 percent). Workshop attendees and survey/email respondents thought there were some areas of omission or areas that could be strengthened, particularly in relation to digital citizenship, fluency and literacy. Additionally, there was some discussion on whether the Digital Technologies and Hangarau Matihiko strand should be integrated or a standalone learning area. Some survey respondents questioned whether the documents would stand the test of time, and referred to language, concepts and technologies in the documentation which appeared to be out-dated or not standard industry practice.

Many respondents and workshop attendees discussed the extent to which there should be more focus on the underlying capabilities rather than content knowledge. That is, creativity, collaboration, resilience, problem solving, critical thinking, communication and self management, rather than coding.

Whether Digital Technologies and Hangarau Matihiko should be integrated across the curriculum rather than strands within the Technology learning area was a considerable point of discussion in workshops and via the survey and emails. It was noted that the proposed curriculum content is linked with other existing areas, and that there is a risk of a siloed approach if they are standalone learning areas.

On the whole, the sections of the consultation document and the exemplars were clear to submitters. How all the elements fit together and with the Technology learning area were broadly regarded as relatively easy to understand. Student progressions were also regarded as reasonably clear. However, there were many comments and much workshop discussion relating to the introduction of 'progress outcomes' into the New Zealand Curriculum and clarity sought as to how they are linked to Achievement Objectives and curriculum levels.

Hangarau Matihiko

Workshop attendees and submitters questioned whether the Māori medium content should be treated as a separate curriculum, particularly as it had content that would benefit students being taught in an English medium. Additionally, it was noted that Hangarau Matihiko had different and broader concepts that were not as well covered in the English medium documentation (for example, nature of technology).

Implementation

While there was general enthusiasm for the proposed curriculum content, there was less confidence in relation to implementation. About 40 percent of teachers thought the consultation was clear in relation to how it might be used in practice and integrated. About half of the email submitters felt they were well informed about the proposed new curriculum content. A general theme emerging from submitters and workshop attendees was that appropriate resources and resourcing in general would be critical to successful implementation. Resources mentioned included funding for hard and soft infrastructure and resources, sample teaching units, a single and



accessible place for resources, relief teachers, specialist teachers and ongoing professional development.

The key challenges voiced by teachers, those in school management and Board of Trustee members were workload, professional development and teacher capability. The types of support sought were in-person workshops, in school/kura professional development and e-learning modules. Funding for professional development, teacher release, resources and hardware/software were mentioned specifically.

Many submitters commented that the timetable for implementation of the proposed content is too rushed, not allowing teacher capability to develop and for them to gain familiarity with the curriculum content. Some suggested that the document could be released as a living document, with ongoing consultation with the sector as it is implemented.

Outcomes

About half of the respondents thought the new curriculum content set up students well for the future, whether that be in further study, employment or interacting in a digital world. There was little discussion in the workshops on this point, with most discussion focused on the content itself and implementation.

There were calls for the development and implementation of evaluative activity to monitor and assess implementation and outcomes.

Clarification

There were a number of areas where workshop attendees and submitters sought further clarification:

- Whether Digital Technologies and Hangarau Matihiko is compulsory for Year 9 / Year 10
- Progress outcomes (as discussed above)
- Application of Digital Technologies and Hangarau Matihiko to Steiner Waldorf schools and Partnership Schools | Kura Hourua
- Linkages with Te Whāriki

- The research and evidence underlying the curriculum content.

It should be noted that a high proportion of parent/whānau member submissions were associated with special character schools, which have skewed the parent/whānau member results. Submitters also had high self-rated digital literacy, which may not be the case for the general sector and public. Care should be taken before attempting to generalise the survey results to the wider sector and public.



METHOD

Survey development

The Ministry of Education (the Ministry) wished to understand the views of teachers, kaiako, principals, Board of Trustee members, parents, whānau and education and technology sector stakeholders on the proposed Digital Technologies and Hangarau Matihiko (DT & HM) curriculum content to ensure:

- it is fit for purpose and future-focused
- that any updated curriculum material reflects rich teaching and learning content.

The survey was based on the Ministry's consultation areas:

- *Consistency*: To what extent does the updated Technology learning area reflect the vision of the New Zealand Curriculum and Te Marautanga o Aotearoa?
- *Connections*: To what extent are the linkages between the proposed new content and the rest of the curriculum clear? How might we reflect digital technologies learning in the name of the Technology learning area?
- *Adaptability*: How useful is the consultation material in considering how to integrate and adapt the proposed DT & HM content to design local curriculum for your students?
- *Clarity*: In relation to the consultation material, how easy to understand was:
 - How all the elements of the changes fit together?
 - How the elements of the changes fit with the existing Technology learning area?
 - The various parts of the proposed new curriculum content?

- *Coherency*: Consider whether the proposed new curriculum content:
 - Helps me to understand student progress in Computational Thinking for Digital Technologies
 - Helps me to understand student progress in Designing and Developing Digital Outcomes
- *Future focus*:
 - To what extent do you agree that the proposed new content ensures students have the skills, knowledge and capabilities they need to fully participate in the 21st century and beyond?
 - To what extent do you agree that the intent and direction of the proposed new content will have a positive impact on students' competencies in thinking, using language, symbols and texts, and participating in and contributing to communities of the future?
- *Making use of the new curriculum content*:
 - What do you anticipate being the biggest challenge in teaching and integrating the DT & HM curriculum content into teaching programmes?
 - What support do you think you might need to strengthen your teaching practice across the Technology learning area?

The survey was designed so that respondents were directed to questions that were relevant to them. The survey also asked for information on specific characteristics of the respondent (for example, roll of school if they were a teacher or parent/whānau member, territorial authority area, and industry if they were a business or industry association). The last section of the survey allowed respondents unlimited space to provide free text comments.

The online survey was implemented using SurveyGizmo. SurveyGizmo allows respondents to participate in the survey on a desk top, tablet or mobile device. The survey questions are provided in Appendix 1 and Appendix 2.



Consultation process

The Ministry's consultation process ran from 28 June to 3 September 2017. Those interested in the consultation were able to submit an online survey or an email submission. Workshops were also provided around the country.

The online survey

A link to the survey was provided on the Ministry's website and the draft curriculum content documents. The survey was also translated into Te Reo, and submitters were able to change the language of the survey while they were submitting their responses.

In total 1,045 responses were received, with 505 completed surveys. The raw data was cleaned for analysis by removing surveys that did not answer at least one substantive question. Additionally, we scanned for duplicate responses, low quality data and responses that were submitted quickly.

After this process there were 504 complete responses and 151 partial responses.

Workshops

Workshops were provided around the country in July and August 2017. Multiple sessions were provided in each region, and targeted to specific audiences:

- Morning session – focused on school, kura and kahui ako leaders and members of Boards of Trustees
- Afternoon session – focused on teachers and kaiako – split into two workshops, English and Māori medium
- Community evening session – focused on parents, whānau, community and industry.

Table 1 outlines the estimated number of attendees at each of the workshops. Some attendees attended multiple workshops and in some cases Ministry representatives were included. Numbers are estimates only.

Table 1. Estimated attendee numbers at consultation workshops¹

	Morning	Afternoon	Evening	TOTAL
Auckland East	70	65	9	144
Auckland South	49	40	12	101
Auckland West	84	45	7	136
Christchurch	152	115	15	282
Dunedin	78	60	10	148
Greymouth	22	12	13	47
Hamilton	91	83	20	194
Invercargill	46	33		79
Kaitaia	22	14		36
Napier	100	88	3	191
Nelson	54	36	15	105
New Plymouth	46	36	9	91
Palmerston North	100	85	20	205
Rotorua	67	0	23	90
Timaru	26	20		46
Tolaga Bay	39	30	11	80
Warkworth	48	13	7	68
Wellington	114	92	46	252
Whangārei	46	25	15	86
TOTAL	1,254	892	235	2,381

¹ Workshop registrations totalled over 3,500. The figures are attendance estimates only and may underestimate the actual attendance numbers. Exact attendance figures were not available for the English medium and Māori medium breakout sessions. While Māori medium attendance was low

overall compared to English medium, in some regions there was a significant Māori medium attendance level.



Emailed submissions

Thirty-three submissions were received via email. These submissions have been included in the analysis and this report.

Limitations

As with other surveys, it is likely that a number of response biases apply, including social desirability bias and extreme responding (particularly where respondents feel highly motivated to advocate for change).

While there was broad response from across the sector and public, and across New Zealand, the submissions may not be a representative sample and care should be taken before attempting to generalise the results to the wider sector and public.

The question asking for respondents' ethnic groups(s) was altered half way through the consultation process to allow respondents to select more than one ethnic group. As no survey responses were received via the Te Reo version of the survey, all relevant respondents were directed to the two questions focusing on the unique Māori medium content half way through the consultation process.

Comments on the consultation process

There were various comments received on the consultation process itself. There were an equal amount of positive comments as negative comments. Some commented that the workshops and the survey were not well designed for quality consultation. Others thought that there was a lot of consultation activity and that a lot of feedback was being sought. Survey respondents, email submitters and workshop attendees commented that the consultation period was too short.

“my experience with MoE consultations is that they're largely pro forma to validate preconceived plans, and thus not worth a big effort.”

A Board of Trustees member

“We have had less than 10 days from the consultation workshop until feedback closes. This is hardly enough time to digest what we have been told and to understand what the new Digital Technologies curriculum contains.”

School management at a primary school

“Exciting idea and great to see the huge amount of consultation.”

A representative of an education-related business or education organisation

“Thank you for providing The Digital Technologies Curriculum (DTC) Consultation and actively asking for feedback. A sign of good democracy at work, methinks.”

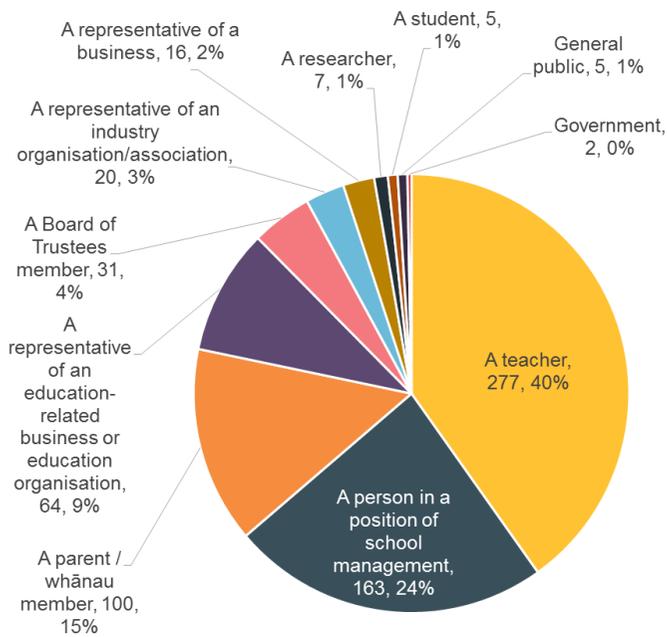
A parent



Short profile of respondents

Of the 690 individuals and organisations who made submissions during the consultation period, the majority were teachers (40 percent) or a person in a position of school management (24 percent) (Figure 1). There was broad community engagement, with 15 percent of respondents identifying themselves as parents or whānau members, 2 percent as business representatives and 1 percent as the general public.

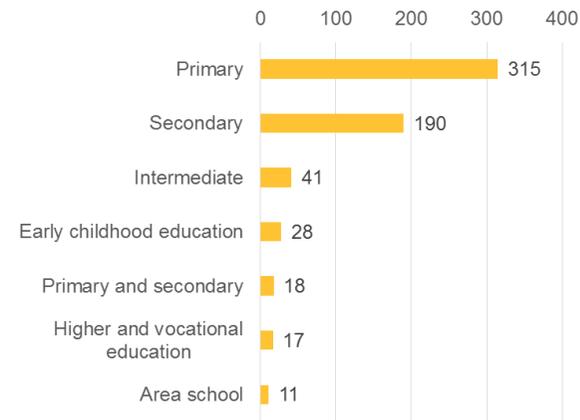
Figure 1. Representation of submitters, n = 690



Due to the small number of researchers, students, general public and government, these respondent types will not be reported on separately in this report.

Of those who indicated what level of education system they belong to, or have in mind, when responding, most were in the primary and secondary sector (Figure 2).

Figure 2. Education sector, n = 620

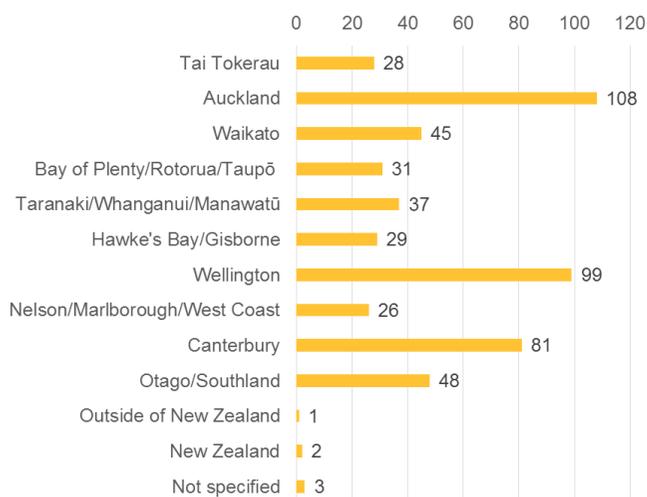


Note: This question was only asked of teachers, people in a position of school management, Board of Trustees member, representative of an education-related business or education organisation, parents/whānau members and students.

Of the survey respondents and submissions via email, most were from the Auckland, Wellington and Canterbury Ministry of Education regions (Figure 3).



Figure 3. Respondents by Ministry of Education region, n = 537

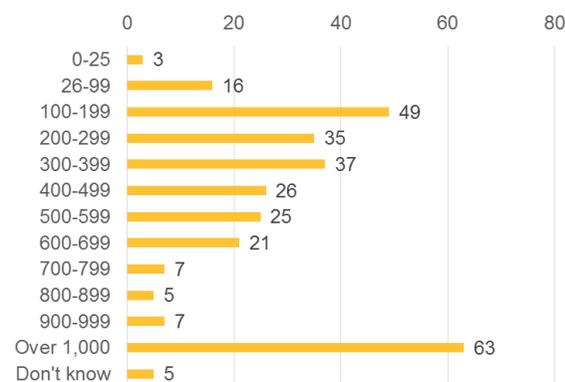


Of respondents who indicated what their school roll was, large schools with student numbers over 1,000 were highly represented, with the next highest group being schools with a school roll between 100 and 199 (Figure 4).

Based on the school directory, there are 119 schools in New Zealand with rolls over 1,000; the majority of these are secondary or composite schools. Of the respondents who indicated they were from large schools, 48 were teachers, 13 were people in a position of school management and 2 were Board of Trustee members.

There were likely multiple responses from some schools, including large schools. We did not ask respondents to identify their school so they could provide their submissions anonymously. It is unclear whether the results have been skewed by particular concerns that may be related to school size.

Figure 4. Respondents by school roll, n = 299



The ethnic groups which respondents indicated they belonged to is shown in Figure 5. New Zealand European respondents were over-represented, while Māori, Pacific Peoples and Asian respondents were under-represented.

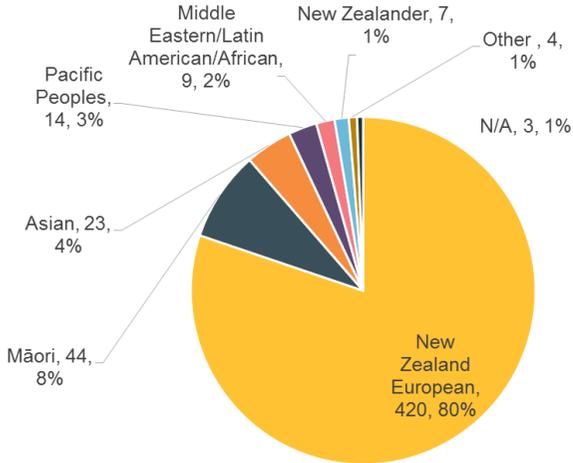
Table 2. Ethnic groups of respondents versus the general population

Ethnic group	Ethnic group(s) of respondents	Ethnic group(s) of the estimated resident population aged 5 and over, 2013
New Zealand European	80%	68% ²
Māori	8%	13%
Pacific Peoples	3%	7%
Asian	4%	11%
Middle Eastern / Latin American / African	2%	1%

² Includes 'other' and 'New Zealander'



Figure 5. Ethnic groups of respondents, n = 505

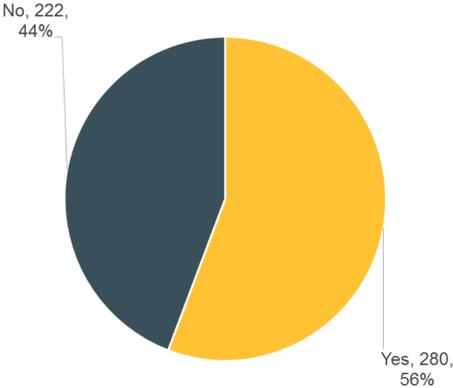


Note: Respondents were able to indicate more than one ethnic group

Consultation responses did not appear to differ by ethnicity. Responses to the intent and direction questions and the employment and lifelong learning questions did not differ by ethnic group (there was no statistically significant difference between responses). The sample sizes of some of the ethnic groups who responded to the teacher, school leadership and school management-specific questions were too small to undertake meaningful analysis to determine whether there were differences by ethnicity.

Over half of the survey respondents indicated that they had attended a Ministry of Education workshop on the proposed curriculum content (Figure 6).

Figure 6. Have you attended a Ministry of Education workshop on the proposed curriculum content?



INTENT AND DIRECTION

The proposed Digital Technologies and Hangarau Matihiko (DT & HM) curriculum content is intended to strengthen the digital competencies of learners, so they can participate, create and thrive in this fast-moving digital world. It is about supporting learners to develop the confidence and skill to not only use digital technologies, but to design and build digital systems.

There were some very complimentary comments on the overall consultation document:

“Changes look great. Kia kaha.” (a teacher)

“Fantastic initiative.” (a teacher)

“This has been along [sic] coming, Yeah!!” (a teacher)

“I am excited about this document.” (a person in a position of school management)

“...congratulations on the development of a specific Digital Technologies curriculum.” (a representative of an education-related business or education organisation)

“He rawe tenei Wānanga” (a representative of an education-related business or education organisation)

“It is a good initiative [sic].” (a representative of an industry organisation/association)

The consultation survey included questions on the intent and direction of the proposed material.

Is it what students need?

Overall, 70 percent of respondents strongly agreed or agreed that the intent and direction set out in the proposed new content contributes to what New Zealand students need. Industry organisation/association representatives were in the highest agreement (83 percent), closely followed by teachers (80 percent) and people in a position of school management (79 percent)

(Figure 7). Parents and whānau members were more likely to disagree, with only 27 percent indicating that they agreed or strongly agreed that the new content contributes to what New Zealand students need.

Parents and whānau members and digital technology in primary education

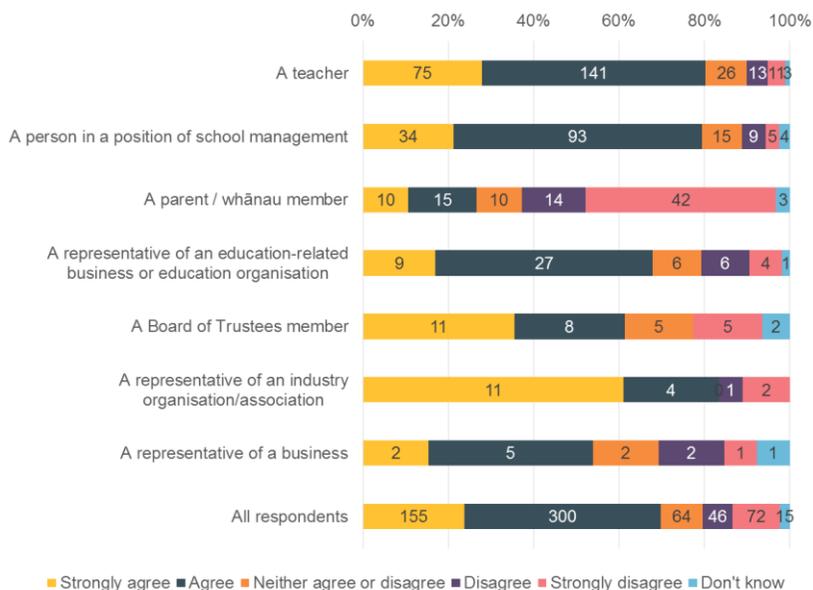
Of the 100 parents/whānau members who submitted a survey or email submission, 17 indicated that their learners were in a special character (Steiner Waldorf) school that recognises the role of digital technology in society and education, but not in the early childhood and primary years. The high proportion of parents/whānau members affiliated with Steiner Waldorf schools suggests that the parent/whānau results are not representative of the general population of parents/whānau members.

Additionally, 34 parents/whānau members indicated that they did not agree with digital technology included in the curriculum for the primary years. The high proportion (44 percent) of parents/whānau members with concerns regarding digital technology in the primary curriculum skews the overall parent/whānau member results.

In relation to representation, one submitter commented that the documents were not accessible to an English as a Second Language audience, and should have been translated into other languages. The translation of the proposed content into Te Reo Māori was commented on positively.



Figure 7. The intent and direction set out in the proposed new content contributes to what New Zealand students need



Application of the proposed Digital Technologies and Hangarau Matihiko curriculum content

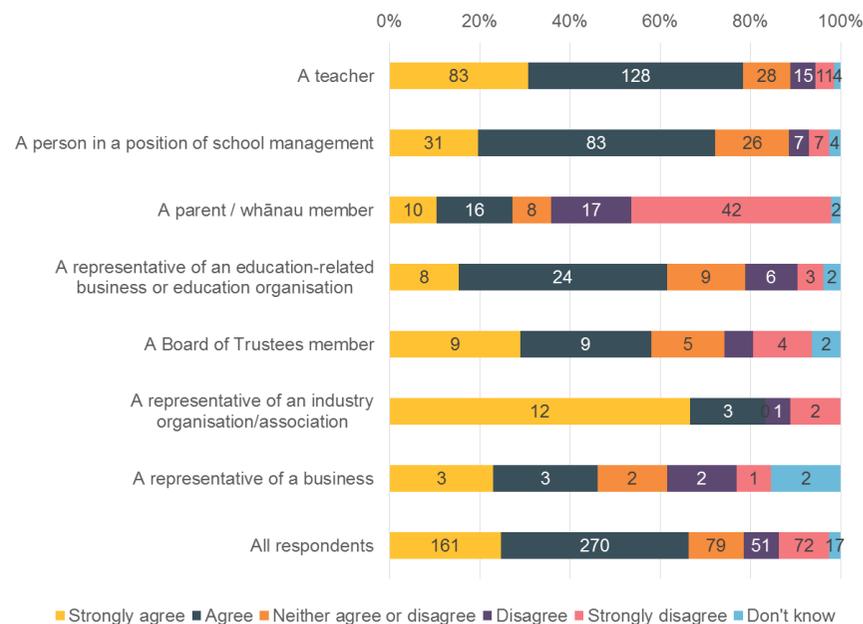
Parents, teachers and the Federation of Rudolf Steiner Waldorf Schools of Aotearoa New Zealand would like the Ministry to clarify its position on how the proposed curriculum content would be implemented within a special character school.

E Tipu e Rea (Independent Support for Partnership Schools | Kura Hourua), on behalf of the Partnership Schools, signalled their willingness to be included in the initiative.

Future-focused

In relation to whether the proposed new content would likely have a positive impact on student competency and ability to participate and contribute in a future society, 66 percent of all respondents agreed or strongly agreed (Figure 8). Again, industry organisations/associations were the most positive (83 percent), followed by teachers (78 percent) and school management (72 percent). Consistently, parents and whānau members were the most sceptical (27 percent).

Figure 8. The intent and direction set out in the proposed new content is likely to have a positive impact on students’ competency in thinking, using language, symbols and texts, and participating in and contributing to communities of the future



Twelve respondents specifically commented that the proposed new content was not future-proofed or future-focused. In a similar vein a couple of respondents commented that it was too narrow and limiting, and three thought it could have been made more exciting. Most of this cluster of comments related to:

- The density and paper-based nature of the consultation document. The lost opportunity for pop-ups and videos within the document, and discussion of robotics, virtual reality, augmented reality, artificial intelligence, geospatial data etc

“You need videos and ads and pop and excitement to sell this one to ...industry and to the NZ public – let alone teachers. DT is exciting, thrilling and wonderful.”

A teacher

- Outdated concepts and language and omission of more contemporary methods and language, such as user-centred design and Agile

“Computational thinking for digital technologies and Designing and developing digital outcomes, seem a bit 1980s - all rather low level, not enough focus on components, frameworks and high level tools. Very little emphasis on user centred design and contemporary methods of integrating development and client teams.”

A representative of a business

“Limiting computing technologies to digital only is not preparing students for the future. The draft curriculum is at best looking at technolgy [sic] and coding that is based in the early 2000s. Today’s robotics and computing systems are well beyond being simply digital.”

A representative of an education-related business or education organisation

“I was really disappointed in the exemplars. If our goal is to look ahead 10-20 years in computational thinking, these are way off the mark.”

A Board of Trustees member

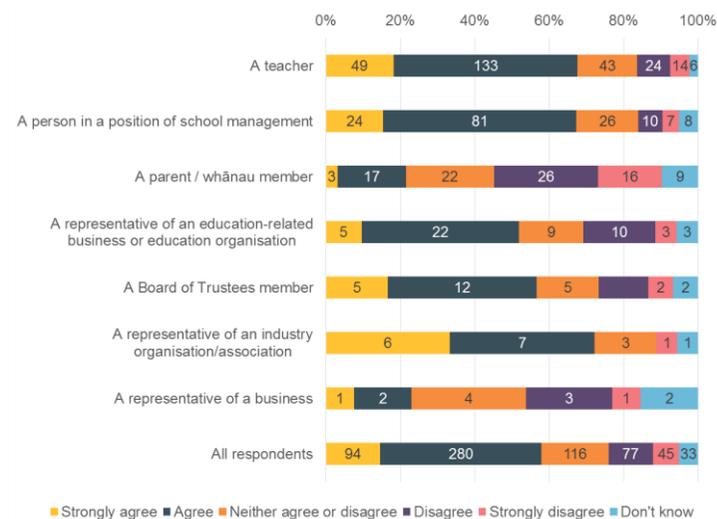
“The curriculum as it stands reads like something from the 80’s and technology have come a long way since then.”

A representative of an industry organisation/association

In relation to whether the proposed new content could be adapted and was flexible enough to address individual and local needs, 58 percent of respondents agreed or strongly agreed (Figure 9). The trend in responses on the previous two questions were replicated in this question:

- 72 percent of industry associations agreed or strongly agreed
- 68 percent of teachers agreed or strongly agreed
- 67 percent of school managers agreed or strongly agreed
- 22 percent of parents and whānau members agreed or strongly agreed.

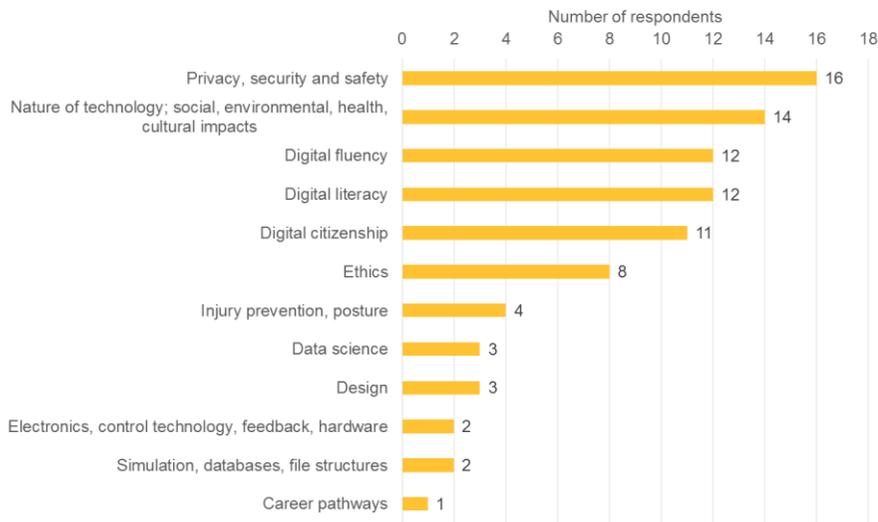
Figure 9. The intent and direction set out in the proposed new content provides schools enough flexibility to integrate and adapt the curriculum over time



Areas of omission and areas that could be further strengthened

A number of respondents commented on specific content areas they thought should be included in the new curriculum content but were currently omitted or not explicitly allowed for. The most commonly mentioned were in relation to privacy, security and safety as well as social impacts (Figure 10). Similar comments were echoed in the workshops.

Figure 10. Suggested additional content areas



“The nature of technology is not as explicit as in the Māori document, why is this?”

Workshop attendee

For many respondents (25 respondents) focus on specific ‘how’ capabilities were more important than the ‘what’; indeed, a few thought there was too much emphasis on coding (4 respondents). These ‘how’ capabilities were often referred to as soft skills and included creativity, collaboration,



resilience, problem solving, critical thinking, communication and self management.

One respondent summed this up well through a vision of the New Zealand Curriculum articulated by Emeritus Professor Alan Reid from the University of South Australia during the development of the New Zealand Curriculum:

*“Teachers would teach **through** knowledge **for** the capabilities/key competencies, and the end point of teaching was not knowledge per se but the key competencies.”*

As cited by an education organisation (emphasis added by respondent)

Hangarau Matihiko

There were no consultation submissions via the Te Reo version of the survey. There were few submissions that directly discussed the Māori medium proposed content (7 respondents); however, there were breakout sessions at the workshops that focused on the Māori medium content.

A few asked why the two curriculums are very separate and suggested that they should be integrated. It was felt that the English medium should incorporate Māori aspects so that Māori students in English medium schools do not miss out on this aspect of the curriculum. Additionally, there were a number of concepts in the Māori medium version that were considered very important by respondents and workshop attendees, which should also be included in the English medium curriculum.

“Throughout the English version - there is no reference to the Hangarau Matihiko document”

A teacher

“While expressed better in the Māori version, the English version does not fully express the need to ‘do no harm’ with the creation and distribution of digital technologies”

An education organisation

“Connections are not spelt out for Occupational Health and Safety considerations for teachers, health and wellbeing or spiritual considerations for student...hauora is not addressed at all in the English version “

A researcher

In relation to the overall intent and direction, there were comments about ensuring the integration of Māori world views and culture, and principles of the Treaty of Waitangi:

“Concerned if there is anyone trying to connect this elegantly with our culture”

Workshop attendees

How are Māori world views and tikanga going to be incorporated into Hangarau Matihiko?

Workshop attendees

*I know our curriculum asks for the **teaching of ethical behaviour for learners**, though this is not very strongly emphasised in the new document....Once again, we have the belief that this should be **treaty based** and honour the principles of Partnership, Participation and Protection.*

*A person in a position of school management
(emphasis added by respondent)*

Policy development

A few respondents and workshop attendees mentioned that it was not clear that the proposed curriculum content was the outcome of extensive evaluative and research work on digital technologies content in education. Some thought that the process and policy development required more input from educationalists.

“... there is no acknowledgment of any research or leaders in the field have contributed, albeit, it has been said that a number of different groups contributed to the work ...if the document is to be credible a full

bibliography/reference must be added to ensure we know whose thinking is being taken into account.”

A person in a position of school management

What is the pedagogy or development behind this curriculum?

Workshop attendee

Submitters with a history of research in early childhood education and in digital technologies commented that child development research suggests that the computational thinking elements of the proposed curriculum content would be best introduced from Year 2.

The abstract theoretical processes required for Computational Thinking are not appropriate for what has become known as the ‘concrete operational stage’ of children in year 0 and 1.

Researchers

Additionally, a number of respondents and workshop participants commented on the need for an extended glossary in the consultation document given the number of new words introduced, and a glossary/vocabulary list for the Māori medium. We understand that a list of Te Reo words included in the curriculum content will be made available when the curriculum content is released.

Evaluation

One submitter recommended that the Ministry put in place both qualitative and quantitative evaluation projects to monitor the take-up of the new curriculum. A monitoring and evaluation framework for Digital Technologies and Hangarau Matihiko could be developed that incorporates both process evaluation (uptake and reach, and implementation) and impact evaluation (the extent that it achieves policy outcomes – short, medium and long term policy outcomes).

The same submitter suggested that a sector consultative group be retained during implementation to advise on ways to respond to evaluation findings.



ALIGNMENT WITH THE CURRICULUM

The vision of the New Zealand Curriculum and Te Marautanga o Aotearoa is that students develop the competencies they need for study, work and lifelong learning, so they may go on to realise their potential.

The consultation survey asked respondents to what extent the proposed new content reflects this vision, and the extent to which the linkages to the New Zealand Curriculum and Te Marautanga o Aotearoa are clear.

The majority of respondents (68 percent) thought that the proposed new content was consistent with the vision of the New Zealand Curriculum and Te Marautanga o Aotearoa.

In relation to clarity of linkages, about half (47 percent) of the respondents indicated that the linkages between the proposed new DT & HM content and the rest of the New Zealand Curriculum and Te Marautanga o Aotearoa were clear. Fifty-one percent of teachers who responded indicated that they thought the linkages were clear.

Integration versus a standalone learning area

Many of the final comments and email submissions put forward views on whether DT & HM should be integrated across the curriculum (24 respondents) or have its own learning area (5 respondents). Workshop attendees raised the same issue. Workshop attendees commented that the proposed curriculum content was relatively narrow, which risks it being siloed. Many workshop attendees, survey respondents and email submissions felt that it should not fall in the Technology learning area, but be overarching/integrated. The Singapore model was cited as one which treats digital technologies as overarching.

Two respondents asked the Ministry to clarify its position as they felt the consultation document was unclear on that point.

Others felt components of the curriculum content could be explicitly linked and integrated into existing areas, including mathematics, statistics, other Technology areas, e-learning and English (11 respondents).

Impact on other parts of the curriculum

There was concern that the new curriculum content would take away from other learning areas, particularly the other Technology strands and core skills in reading, writing and mathematics (17 respondents). Respondents and workshop attendees commented that because the curriculum is so crowded as it is, if Digital Technologies was to be added to each curriculum another area should be removed.

Linkages with Te Whāriki

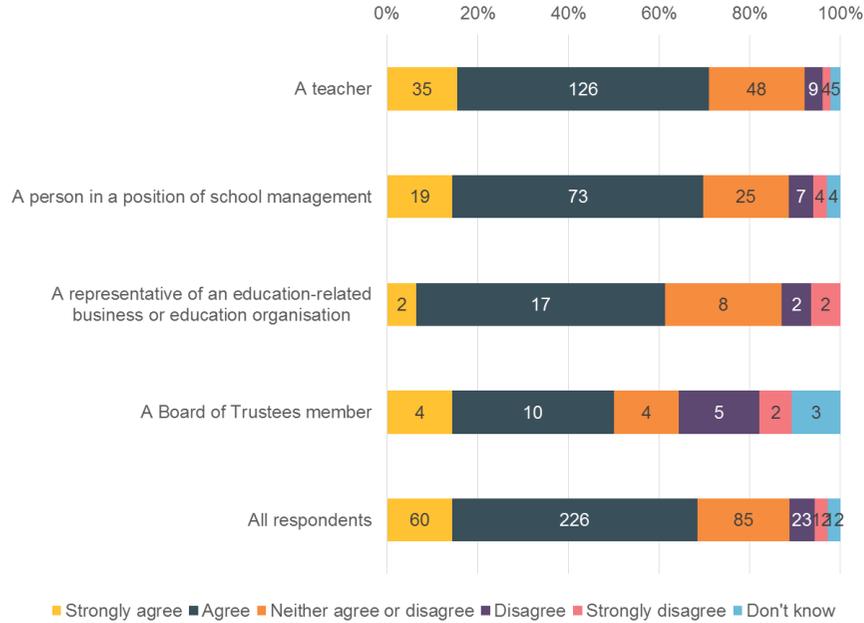
Respondents and workshop attendees commented that explicit linkages with early child education and Te Whāriki should be made in the document (9 respondents).

“[I’m] worried about teaching this, already overloaded - how [does] it fit in with what [I am] already doing.”

Early childhood education workshop attendee

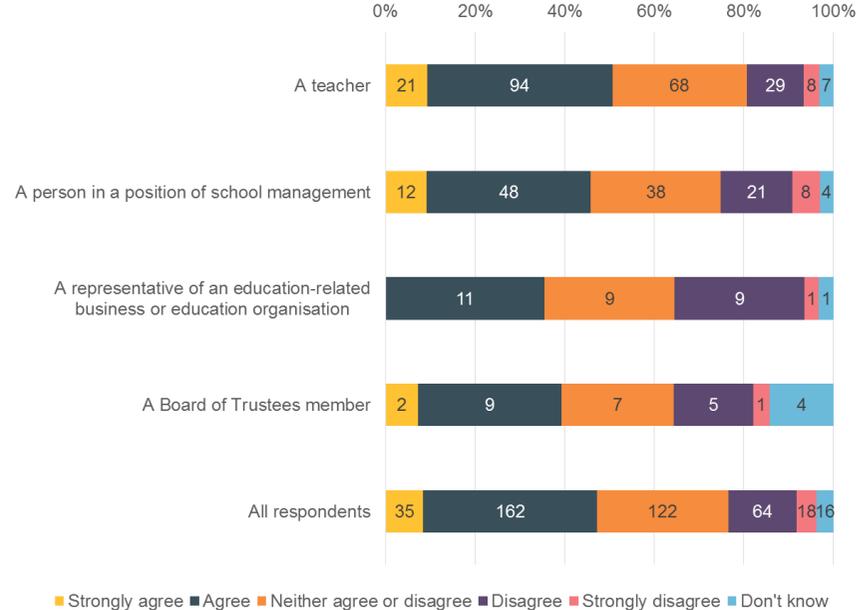


Figure 11. The proposed new content reflects the vision of the New Zealand Curriculum and Te Marautanga o Aotearoa, n = 419



Note: This question was only asked of teachers, school management, Board of Trustee members and representatives of an education-related business or education organisation

Figure 12. The linkages between the proposed new content and the rest of the New Zealand Curriculum and Te Marautanga o Aotearoa, n = 418



Note: This question was only asked of teachers, school management, Board of Trustee members and representatives of an education-related business or education organisation



Progress outcomes

Many respondents (30 respondents) and workshop attendees commented on the inconsistency in language and concepts in the consultation document and the New Zealand Curriculum. In particular the introduction of 'progress outcomes' against a framework that includes Achievement Objectives and curriculum levels. It was felt that the introduction of 'progress outcomes' would cause confusion in the sector and would require schools to undertake further work during the implementation phase to integrate DT & HM into their teaching programmes. The uneven numbers of progression outcomes between Computational Thinking for Digital Technologies and Designing and Developing Digital Outcomes was also a cause of concern.

Some submitters and workshop attendees commented that the use of progress outcomes has the potential to narrow the curriculum, and discourage creativity and innovation in how capability and skills development is introduced, taught and assessed. Additionally, submitters and workshop attendees recommended removing outcome statements from the proposed curriculum content.



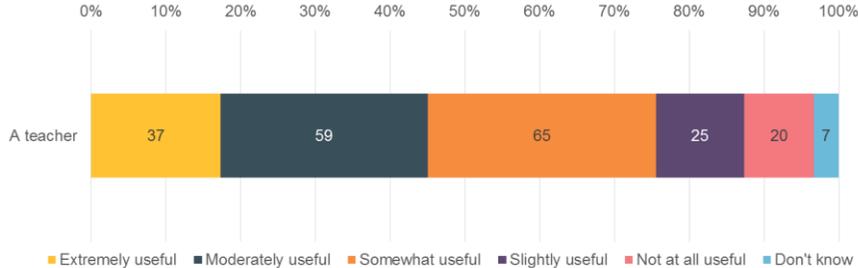
CONNECTIONS AND ADAPTABILITY

The Ministry wished to understand:

- To what extent are the linkages between the proposed new content and the rest of the curriculum clear?
- How useful is the consultation material in considering how to integrate and adapt the proposed content to design local curriculum for your students?

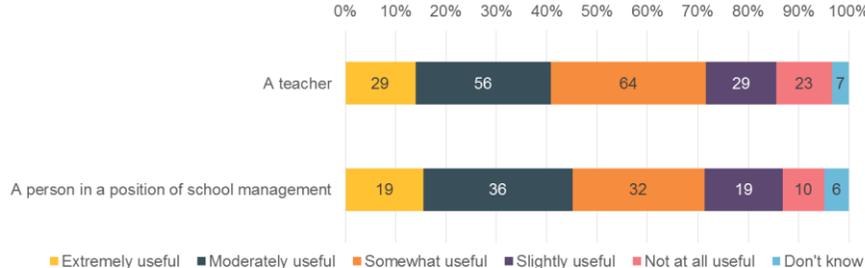
Forty-five percent of teachers indicated that the consultation document was extremely useful or moderately useful in articulating the linkages between the proposed content and what they currently teach (Figure 13).

Figure 13. How useful is the proposed content in articulating the links between the proposed curriculum content and what you currently teach?



In relation to integrating the proposed new content into existing Technology programmes, 41 percent of teachers thought it was extremely or moderately useful. Slightly more school managers thought it was extremely or moderately useful (45 percent) (Figure 14).

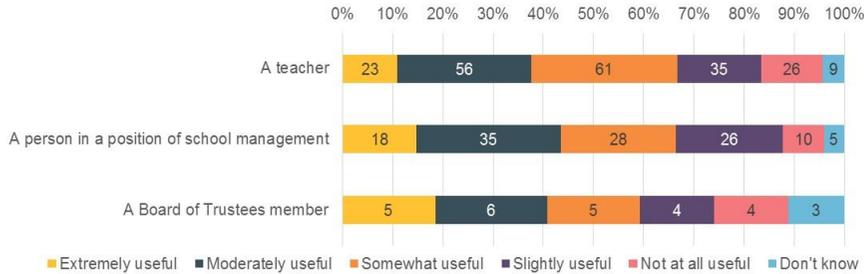
Figure 14. How useful is the proposed content in understanding how to integrate the proposed curriculum content into your Technology programmes?



As for integrating the proposed content into teaching, there was a similar sentiment between teachers, school managers and Board of Trustee members. Thirty-eight percent of teachers found it extremely useful or moderately useful, 43 percent of school managers and 41 percent of Board of Trustee members (Figure 15).



Figure 15. How useful is the proposed content in illustrating how schools and kura could consider integrating the content into their teaching?



Given that respondents expressed that the consultation documentation could only go so far in terms of helping them integrate the proposed content into their teaching and Technology programmes, it was important to understand what sorts of support or initiatives might help.

In relation to integrating content into teaching, many respondents commented that exemplars, resources, lesson plans, models, exam scripts, and access to specialist teachers would be critical (39 respondents). Respondents also identified that a central repository of resources or a database would be helpful (5 respondents).

“Also, without adequate PLD and resources that teachers can use directly then it will only ever be taught by a few teachers in a few isolated schools so this must be considered. In the mid-2000s there was a Beacon Schools Project that the MOE supported and resulted in several subjects having a huge range of resources being written by some expert teachers which were then passed onto every school in the country. Could this be done again?”

A person in a position of school management

“I find it really hard when finding maths resources (and spend a lot of time setting up), I’m hoping for a big box that is all in one place to get things easily with support.”

A workshop attendee

“We recommend that the government fund the production of sample teaching units for all levels of the curriculum in both English and Māori Medium to enable teachers to develop confidence with the new curriculum content”

An education organisation

“Are there case-studies on the process schools have used to roll out this (or similar) curriculum?”

Workshop attendee

Workshop attendees mentioned the importance of developing appropriate resources for the Māori medium. It was felt that there should be specific exemplars and lessons that are underpinned by Māori world views and that integrate culture. Additionally, there were broader questions related to whether there were plans to write a programming language in Māori.



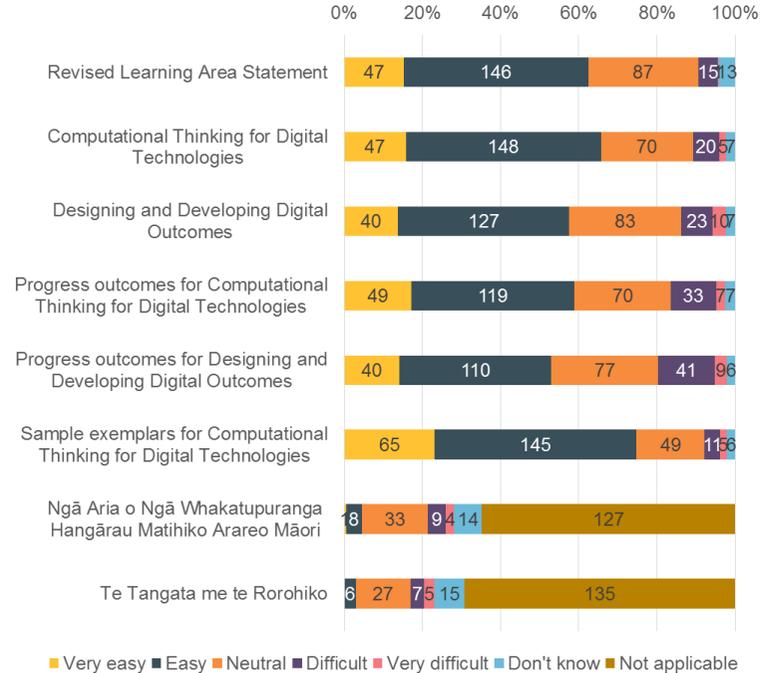
CLARITY

The survey included questions on whether different sections of the proposed new curriculum content were easy to understand. On the whole, teachers and school managers thought the following sections were ‘very easy’ or ‘easy’ to understand (Figure 16):

- Revised Learning Area Statement
- Computational Thinking for Digital Technologies
- Designing and Developing Digital Outcomes
- Progress outcomes for Computational Thinking for Digital Technologies
- Progress outcomes for Designing and Developing Digital Outcomes
- Sample exemplars for Computational Thinking for Digital Technologies.

However, the two specific content items for the Māori medium were not considered to be ‘very easy’ or ‘easy’ to understand, at 13 percent and 10 percent respectively (after removing the ‘not applicable’ responses). Also, several respondents and workshop attendees commented that they were disappointed that there were no exemplars in the Māori medium consultation document.

Figure 16. How easy to understand were the following parts?

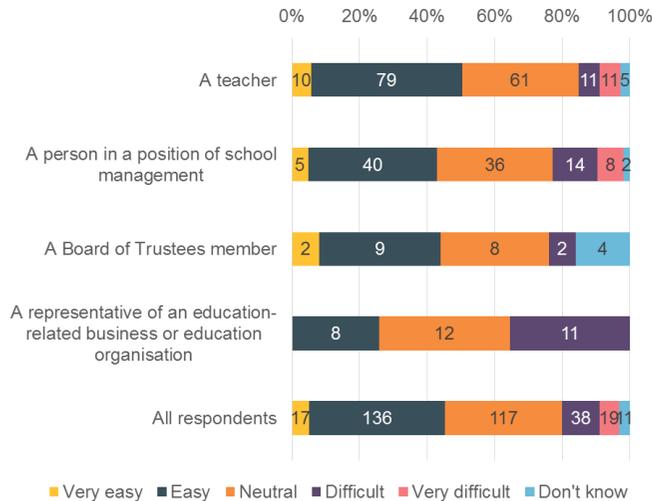


Note: These questions were only asked of teachers and school management



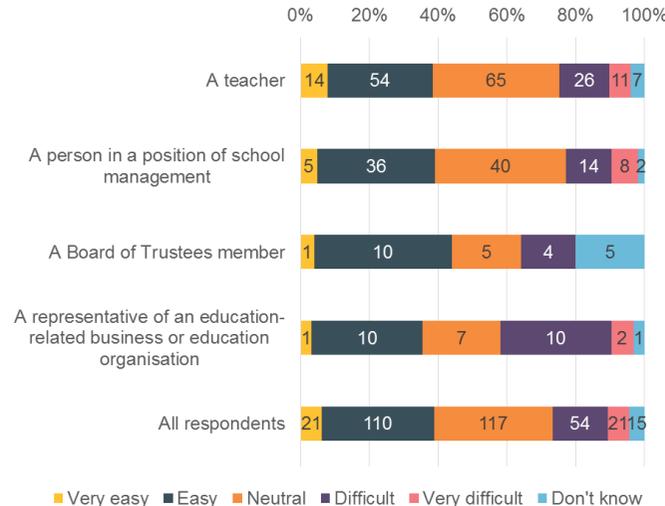
How all the elements of the changes fit together was less easy to understand. Almost half of respondents (45 percent) indicated that they found how all the elements of the changes fit together 'very easy' or 'easy' (Figure 17). Only eight out of the 31 education organisations (26 percent) thought how all the elements fit together was 'easy' or 'very easy' to understand.

Figure 17. How easy to understand was: How all the elements of the changes fit together?



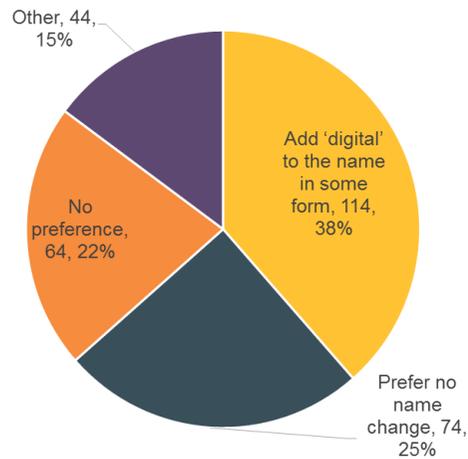
In relation to how the elements of the changes fit with the existing Technology learning area, 39 percent of all respondents indicated that it was 'very easy' or 'easy' to understand (Figure 18).

Figure 18. How easy to understand was: How the elements of the changes fit with the existing Technology learning area?



Respondents thought that adding 'digital' to the Technology learning area name would be the best way to reflect digital technology learning – 38 percent (Figure 19).

Figure 19. How might we reflect digital technology learning in the name of the Technology learning area? n = 297



Those that provided other options included:

- 6 people who thought it should be a separate and new learning area
- 4 people who suggested including computing, computational or computers in the name in some way
- 4 who thought it should sit above the curriculum or be a part of all curriculum areas
- 4 suggested the use of Digital Technologies (plural).

Others suggested combinations in the following word cloud.



Compulsory?

Many respondents asked for clarification as to whether DT & HM is compulsory for learners in Years 9 and 10 (21 respondents). This was also a common question in the workshops.

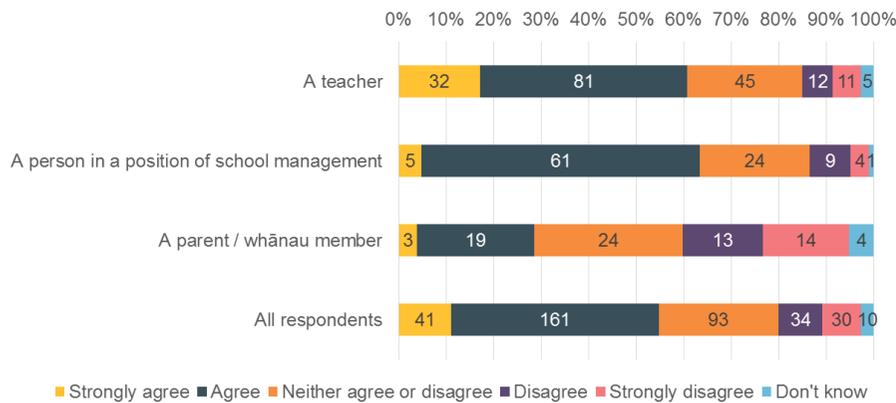


STUDENT PROGRESSION

In order to test whether the learning progressions were clear, the survey asked whether the proposed content helped respondents understand student progress.

In general, teachers and school management thought the student progression related content in Computational Thinking for Digital Technologies was clear. Sixty-one percent of teachers and 63 percent of school management agreed or strongly agreed with the student progress statement. In contrast, only 29 percent of parents or whānau members thought the proposed new curriculum content helped them to understand student progress in Computational Thinking for Digital Technologies (Figure 20).

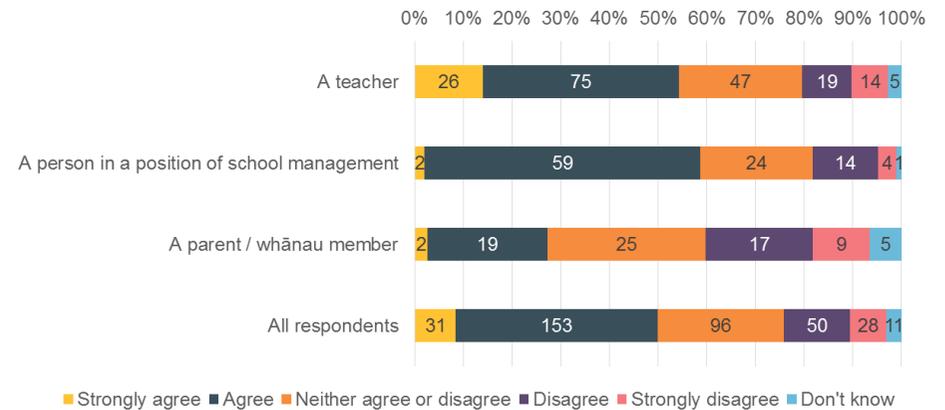
Figure 20. The proposed new curriculum content helps me to understand student progress in Computational Thinking for Digital Technologies



Similar levels of agreement were found in relation to student progress in Designing and Developing Digital Outcomes (Figure 21):

- 54 percent of teachers agreed or strongly agreed
- 59 percent of school management agreed or strongly agreed
- 27 percent of parents or whānau members agreed or strongly agreed.

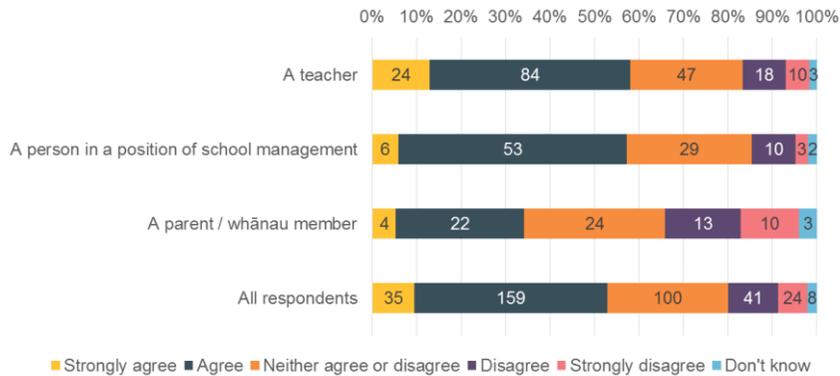
Figure 21. The proposed new curriculum content helps me to understand student progress in Designing and Developing Digital Outcomes



Results were also similar in relation to a clear pathway from Year 1 to Year 13 (Figure 22):

- 58 percent of teachers agreed or strongly agreed
- 57 percent of school management agreed or strongly agreed
- 34 percent of parents or whānau members agreed or strongly agreed.

Figure 22. The proposed new curriculum content shows a clear pathway from Year 1 to Year 13



Evidence

A few respondents (5 respondents) commented on alternative pieces of evidence that could be used to show that students have achieved particular progress outcomes. It was felt that the evidence used in the consultation document was too report writing based and too divorced from the real world.

“Implementation of them would be a much better way of showing understanding and is much more real”

A secondary school teacher

“I would have liked to see multiple ways recommended to provide evidence for progress outcomes, rather than [sic] screenshots/written text. There is still a 'top down' pedagogy and approach to assessment. Co-construction, questioning, enabling resilience/failure mindset, are all very accessible with DT tools.”

A person in a position of school management

Assessment

Ten respondents specifically commented on the need for measurement/assessment tools to track student progression. A couple of respondents also asked whether the Education Review Office would be undertaking assessment in this curriculum area and what tools might be used.



EMPLOYMENT AND LIFELONG LEARNING

To uncover whether submitters thought the new curriculum content showed a clear transition from schooling to future opportunities in a digital world, the survey asked whether the proposed content provided good grounding for:

- Engaging in a digital world
- Further training or study
- Employment in the digital technologies and digital technologies-related sectors
- Employment in other sectors that utilise digital technologies.

Overall, 53 percent of respondents agreed or strongly agreed with the statement that the proposed new curriculum content provides good grounding for engaging in a digital world. Teachers thought it very relevant; 75 percent of teachers agreed or strongly agreed. However, businesses and education organisations/businesses were in less agreement; 14 percent and 13 percent respectively agreed or strongly agreed (Figure 23).

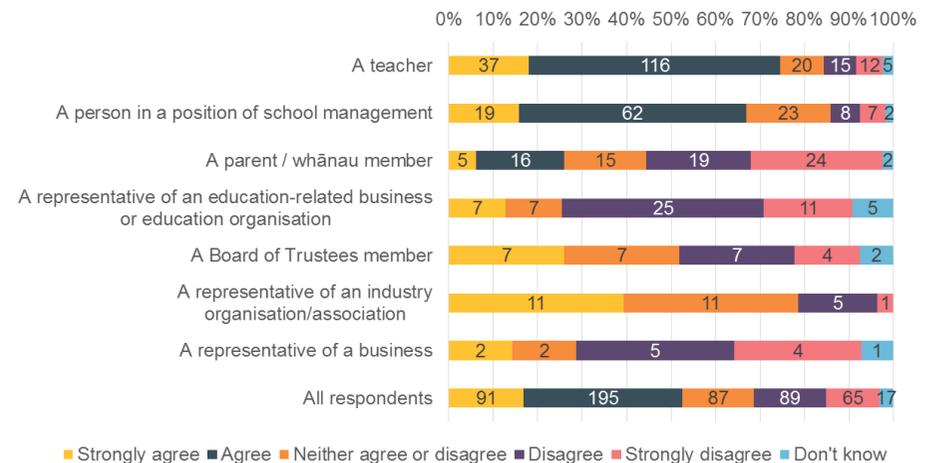
In relation to further training or study, 47 percent agreed or strongly agreed (Figure 24). Teachers agreed or strongly agreed the most (67 percent of teachers), while Board of Trustees members agreed or strongly agreed the least (13 percent).

“One of the best proposals to come out in years> Will have a major impact on children’s learning abilities”

A representative of an industry organisation

As for setting students up well for employment in digital technology sectors or sectors that utilise digital technologies, respondents agreed or strongly agreed at the same rate (46 percent) (Figure 25 and Figure 26).

Figure 23. The proposed new curriculum content provides good grounding for engaging in a digital world



“I agree strongly with the desire to have students gain a deeper understanding of digital technology from a perspective of creating and not just consuming. In my own experience with my children (teens) they consume a great deal, but have very little knowledge of what is involved in providing the technology. They don’t seem particularly motivated to gain any understanding, so “selling” the curriculum will be vital.”

A representative of a business



Figure 24. The proposed new curriculum content provides good grounding for further training or study

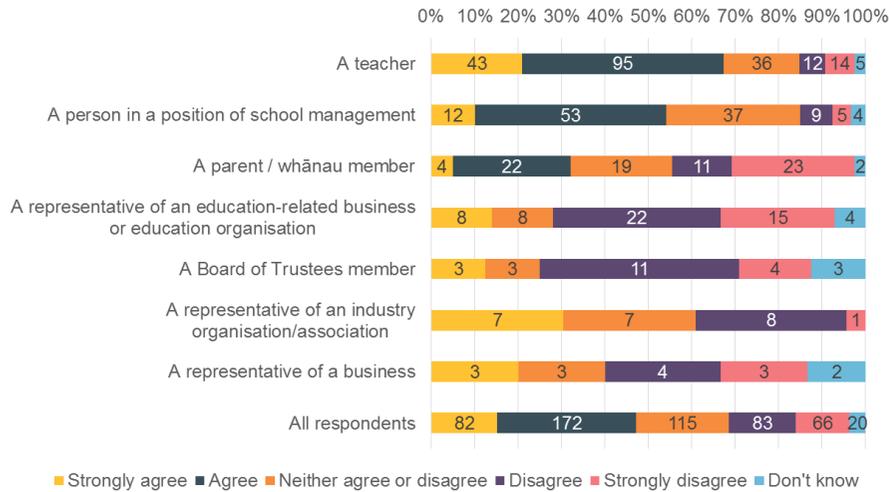
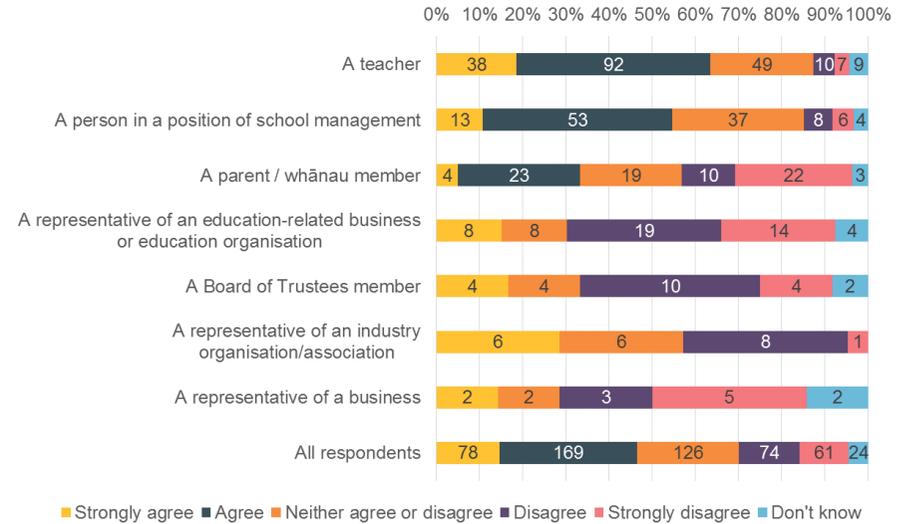


Figure 25. The proposed curriculum content provides good grounding for employment in the digital technologies and digital technologies-related sectors



“The inclusion of digital technologies in the Curriculum is or should be just as important as having subjects like English and Maths. ... An important aspect in the curriculum is that it encourages students to have pathways to technology in related careers.... There needs to be direction to ensure School Boards incorporate digital technologies into the school curriculum. Students will need to demonstrate abilities in navigating a rapidly shifting landscape of skill requirements and digital technologies are critical. Job opportunities will increase in both high skilled, technical areas that require an understanding of digital technologies. There should be more engagement in creating business education links to ensure the curriculum is meeting the needs of employers.”

A representative of an industry organisation



Figure 26. The proposed curriculum content provides good grounding for employment in other sectors that utilise digital technologies

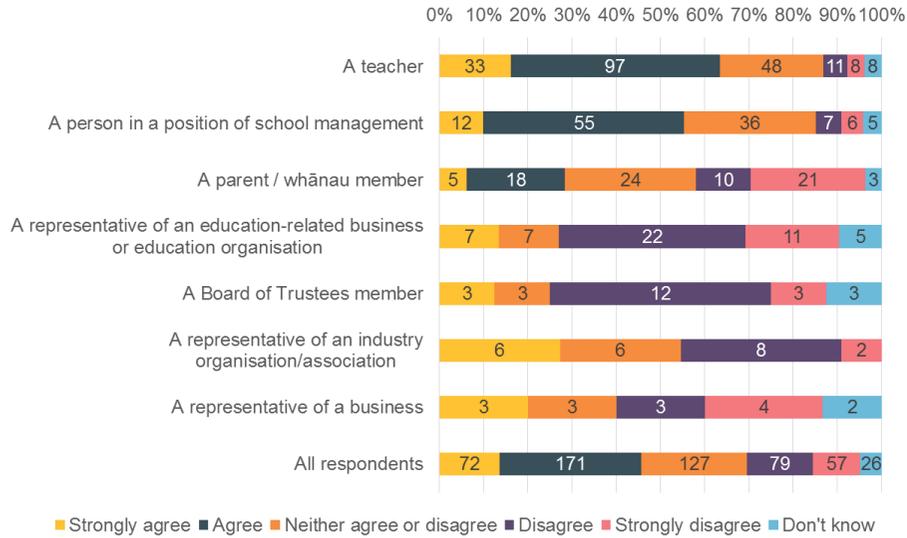
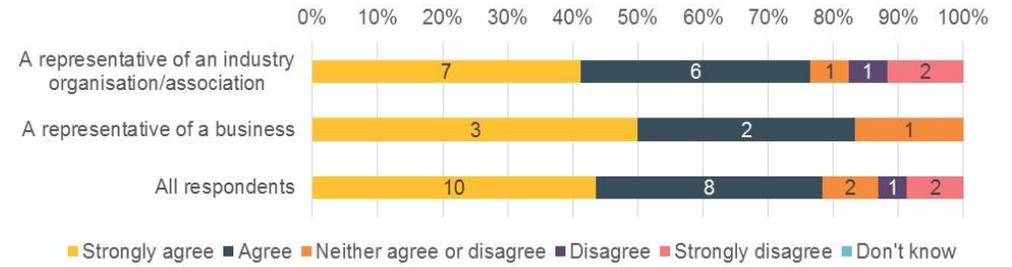


Figure 27. The proposed new curriculum content is relevant to my industry



Industry organisations and businesses were asked whether they thought the proposed curriculum content was relevant to their industry. Both groups of respondents were a relatively small number of the overall respondents, but on the whole, 78 percent of industry organisations and businesses agreed or strongly agreed (Figure 27).



CHALLENGES AND SUPPORT

The most widely commented on factor in the survey final comments, email submissions and workshops was professional learning and development (71 respondents via email and the survey). The comments related to adequate funding, free access, and not enough budget allocated by the Ministry. Relatedly there were also comments with respect to:

- Teacher release days/time and relief teachers (10 respondents)
- Time (20 respondents)
- Workload (10 respondents)
- Communities of Learning (8 respondents)
- Specialist on-site teachers (submissions and workshop attendees)
- Specific Māori medium professional learning and development (workshop attendees)
- Study leave awards and scholarships (survey respondents, email submissions and workshop attendees).

Comments were also made about funding for hardware and software (14 respondents), as well as funding for resources and development of resources (29 respondents).

In relation to funding, some respondents (3 respondents) mentioned that there should be a focus in the consultation document on open source software, as well as a broader range of software and hardware (4 respondents)³.

³ Respondents commented on the mention of Scratch in the English version and iPad in the Māori version.

For respondents focusing on the Māori medium there was a strong desire to develop a network of Māori medium teachers working in Hangarau Matihiko.

Many respondents (18 respondents) also thought implementation of the proposed content was too rushed. One recommended that the implementation date be moved to at least January 2020, with the expectation that this is for implementation establishment, not full implementation. Five suggested that the documentation could be released as a working draft or living document with ongoing consultation with the sector as it is implemented.

Confidence

Confidence with digital technologies was mentioned by many survey respondents and workshop attendees. Many discussed not just having DT & HM teachers being confident but all other teachers and parents/whānau members.

“One of our dilemmas is having staff who are not confident users of technologies available to us. We need time to integrate digital technologies in the classroom. WE need to work with our whānau on shifting the thinking around digital technologies.”

Workshop attendee

At the beginning of each workshop, the facilitators asked how comfortable attendees were with the proposed curriculum content on a continuum of 1 (“scared”) to 5 (“excited”). Most sessions had attendees averaging about 3–



4. By the end of the session, this average generally increased, while some attendees felt the same as they felt at the beginning.

Survey respondents had relatively high self-rated digital literacy, which may not be the case of all those in the education sector, parents and whānau members and business and industry. Eighty-four percent of all respondents strongly agreed or agreed that in their everyday life they were confident using new devices, applications and software and services (Figure 28). In relation to understanding of basic concepts in computing, coding and information processing, 77 percent of all respondents agreed or strongly agreed (Figure 29).

Figure 28. In my everyday life, I am confident using new devices, applications and software and services

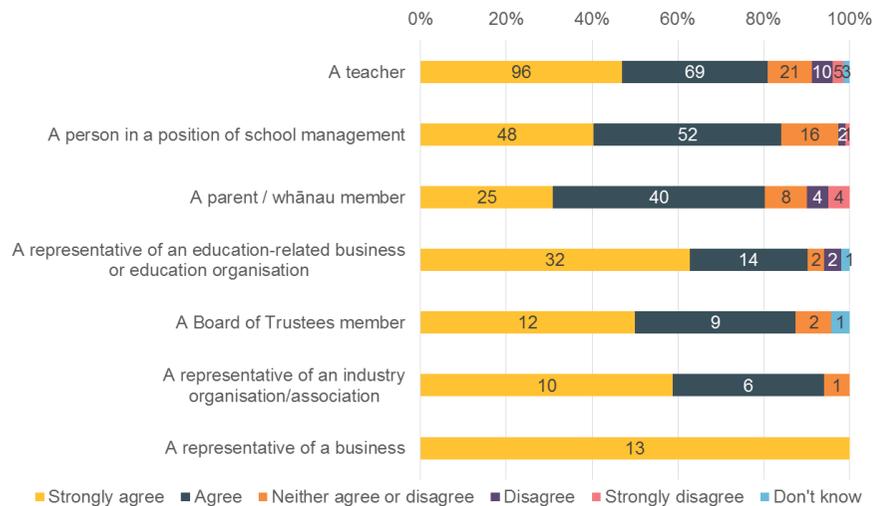
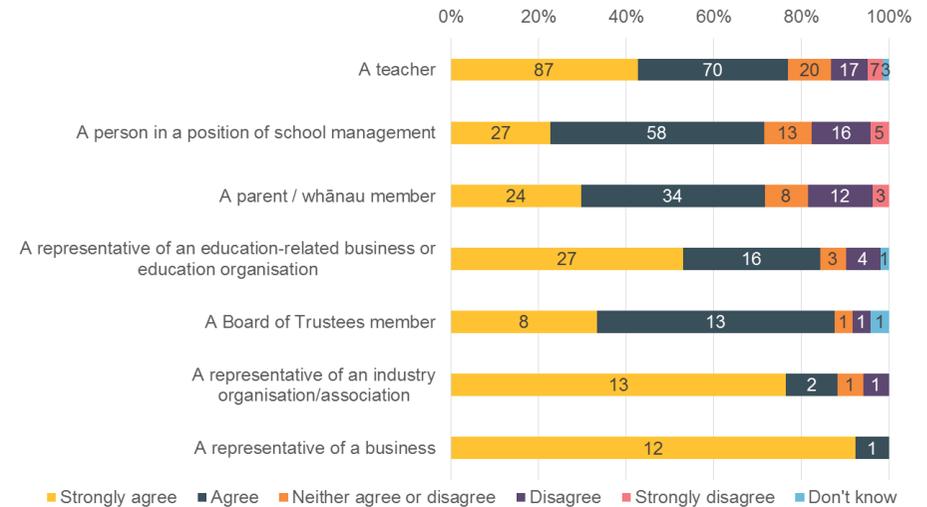


Figure 29. I have an understanding of basic concepts in computing, coding and information processing

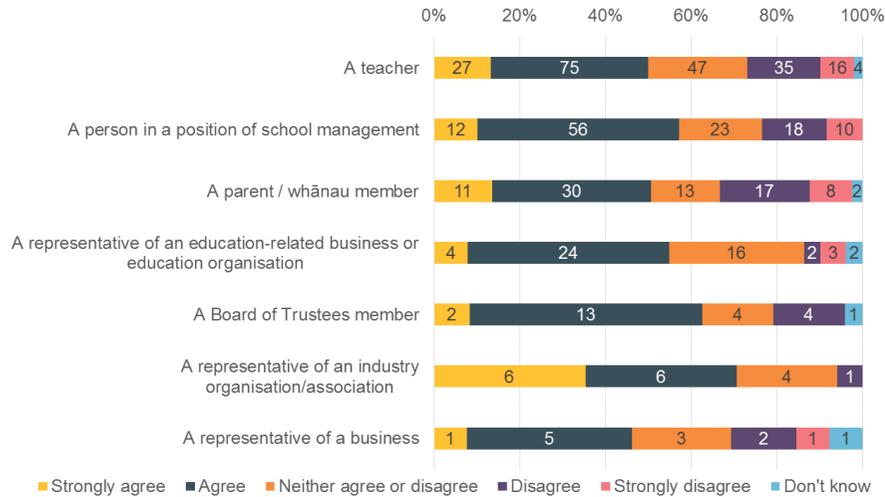


Level of information needed

About half of respondents (53 percent) agreed or strongly agreed with the statement: I feel well informed about the proposed new curriculum content (Figure 30). If this is the result for a group where many would have read the documentation and attended workshops, it is likely that further support and resources will be required to ensure the sector, business/industry and the public have improved knowledge of the proposed new curriculum content, what it means to them and how it is to be applied. The following sections go into more detail about the challenges identified by respondents and the support required.



Figure 30. I feel well informed about the proposed new curriculum content



Teachers

There was high agreement amongst teachers as to the significant challenge associated with teaching and integrating the proposed new curriculum content. Eighty-one percent of teachers agreed or strongly agreed that there would be significant challenges (Figure 31).

Conversely, 56 percent of teachers agreed or strongly agreed that they feel confident in teaching and integrating the proposed content.

The top three challenges indicated by teachers were existing workload, professional development and teaching personnel capability (Figure 32). Teacher capability was raised as an area of concern by 22 respondents in the final comments of the survey and in email submissions.

A range of other key challenges were noted by teachers, including time to implement and understand the proposed new curriculum content, access to hardware and an already crowded curriculum (Table 3).

Figure 31. To what extent do you agree with the following statements?

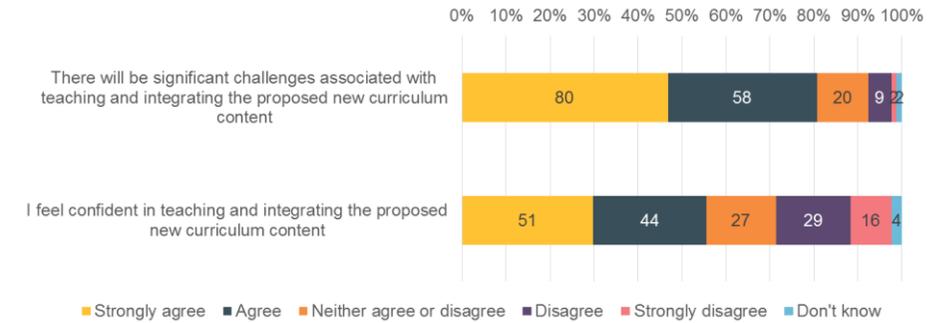


Figure 32. What are the top three challenges you anticipate from teaching and integrating the proposed curriculum content into your teaching?

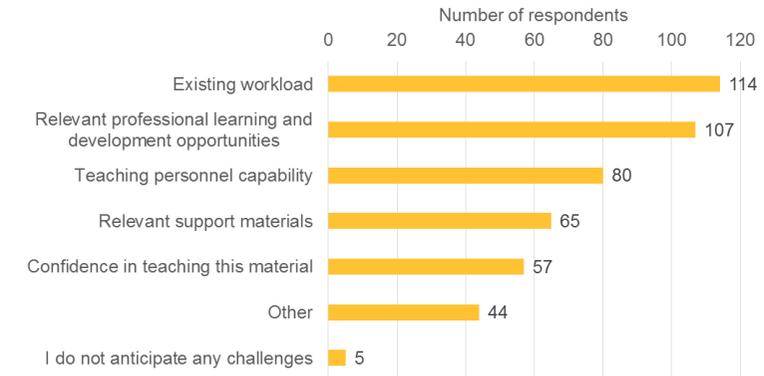


Table 3. Other key challenges indicated by teachers

Challenge	Response count
Time to implement and understand	6
Access to hardware and hardware support	5
Crowded curriculum, other urgent changes	5
Buy-in from all teachers. The mindset of all teachers and the need to improve the capability of all teachers was mentioned by 10 survey respondents/email submissions. Changes to initial teacher education were also called for to improve capability and buy-in.	4
Teacher release days	3
Integration and 'core' to the curriculum rather than an add on	3
School funding	2
Cost of time off for professional development; time for professional development	2
Equity of access across schools. Equity of access was commented on by 13 respondents in the final comments and email submissions.	1
Connection to higher education	1
Senior management support. Also mentioned by 4 survey respondents/email submissions.	1
Te Reo resources	1
Effect on other Technology subjects	1
Workload and stress on students	1
Integrating digital technologies with English as a second language	1
Limits creativity and planned cross-curricular projects	1
Student isolation	1
Relevance of the new curriculum content	1

In relation to support for teachers, in-person workshops were the most favoured, followed by in-school/kura professional development and e-learning modules (Figure 33). For those that suggested other types of support, time was the most common followed by teacher release time and resources (Table 4).

“Helpful teacher PD is when it happens on-site (so teachers don’t have to travel – and are comfortable in their own environment when taking on new concepts or locally with other schools to network / get new insight (like a COL)).”

Workshop attendee

“We need teacher-only days to implement this and bring teachers up to speed. This was useful in previous curriculums”

Workshop attendee

Figure 33. What support do you think you might need to strengthen your teaching practice and feel confident with the proposed content? Please select the top three

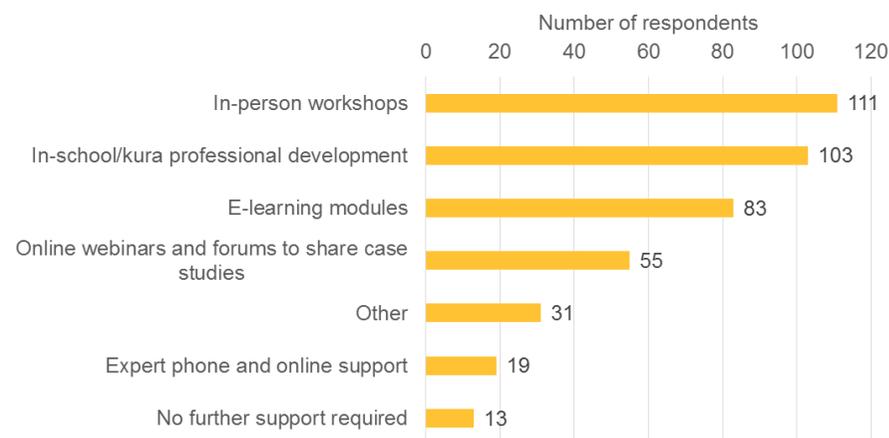


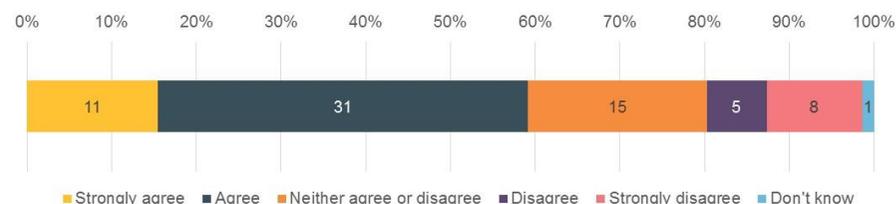
Table 4. Other support options indicated by teachers

Challenge	Response count
Time	8
Teacher release days; teacher release days to pass on knowledge to others	5
Resources (lesson plans, texts, tests, exams, curated videos, exemplars, powerpoints, teaching resources, unit plans)	5
Curriculum time allocation	1
Clustering with other kura/schools	1
Digital support based within the school	1
Facilitators working with schools on a sector-based level (eg primaries together, secondary together)	1
Confidence of all the teachers	1
In-class professional learning	1
Funding	1
Block courses, rather than one day courses; for those not from a computer science background	2
Open source	1
Clarity how this sits with other technology subjects	1
Integration of digital technology with English as a second language	1
Addition of media outcomes and creative design to learning outcomes	1

Parents and whānau members

Fifty-nine percent of parents and whānau members indicated that they felt confident in discussing the proposed new curriculum content at home (Figure 34).

Figure 34. I feel confident in discussing this proposed new curriculum content at home



When asked about support needed, most indicated they did not require further support. However, an almost equal number indicated workshops provided by their school might be needed (Figure 35). Other ideas for support included clarity in relation to how DT & HM sits alongside other subjects, safety testing in relation to wifi and adverse effects, joint parent and children workshop sessions, evidence in relation to implementation trials, information regarding application in special character schools and easy to follow material about what one needs to know as a parent.

One respondent commented that whānau and community partnership, and co-creation generally, is critical in ensuring school change, and therefore the implementation of the proposed curriculum. It was suggested that this partnership involve resource and opportunity for schools to partner with, and educate, whānau and community; as well as messaging and communication that supports and promotes the need for school change.



Figure 35. What support do you think you might need to better understand the proposed new curriculum content and how it affects you and your child? Please select the top two

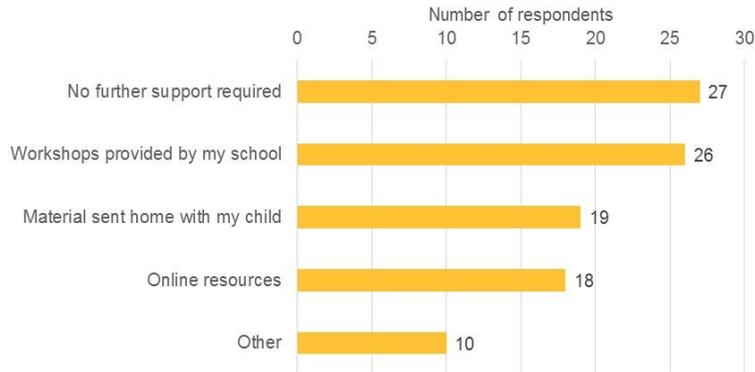
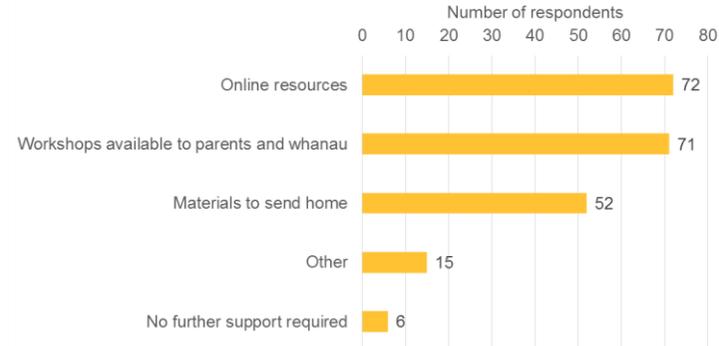


Figure 36. What support do you think you might need to inform and engage your community in the proposed new curriculum content?



School management and Board of Trustee members

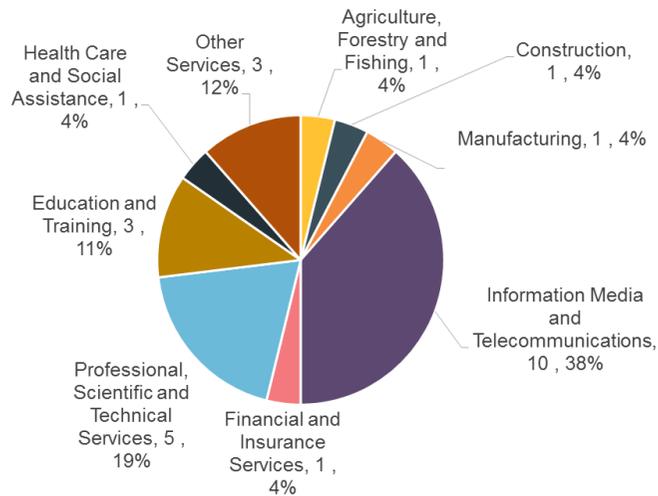
When school management and Board of Trustee members were asked about what support they might need to inform and engage their community, online resources and workshops for parents were top of mind (Figure 36). Interestingly, there appears to be a mismatch between what parents and whānau members would like and what school management and Board of Trustee members think is required in relation to online resources. That is, online resources are least favoured by parents and whānau members, but most favoured by school management and Board of Trustee members.

Businesses and industry associations

Nine out of 22 businesses and industry associations indicated that they did not require further support (Figure 38). It should be noted that there were relatively small numbers of businesses and industry associations represented in the submissions (Figure 37).



Figure 37. What industry sector does your business primarily identify with? What industry sector does your organisation represent? n = 27



It was encouraging that many businesses and industry associations were keen to offer various sorts of support to help schools implement the proposed curriculum (Figure 39). Mentorships and site visits were the support options that were the most popular.

Interestingly, a few respondents commented that the proposed curriculum content appeared to have too much input from business and industry (and jobs and the economy). A similar number thought that there should be closer links between business and education.

Figure 38. What support might you need to better understand the proposed new curriculum content and how it affects you, your business, and/or your sector?

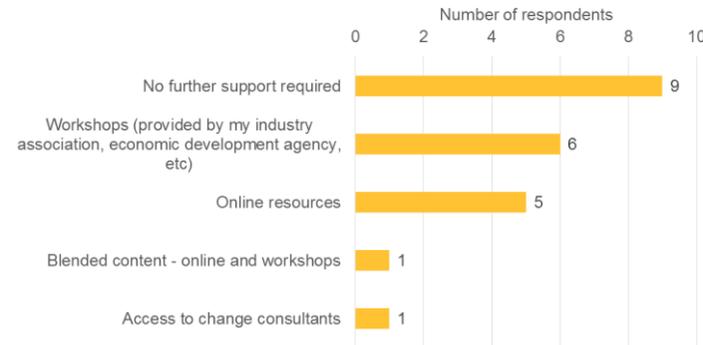
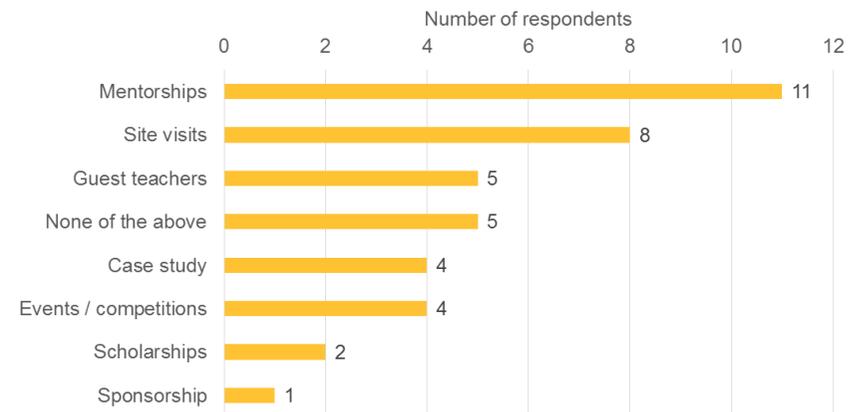


Figure 39. What support might you consider offering a school to help it teach and integrate the proposed new curriculum content? Select all that apply



CONCLUSIONS

The Ministry of Education invited submissions on the proposed new curriculum content in Digital Technologies and Hangarau Matihiko over July and August 2017. A range of submissions were received:

- 655 responses via an online survey
- over 2,000 workshop attendees
- 33 email responses.

Overall, the majority of respondents agreed with the intent and direction of the documents (approximately 70 percent). Respondents and workshop attendees thought there were some areas of omission or areas that could be strengthened, particularly in relation to digital citizenship, fluency and literacy. Further, there was much discussion of more emphasis on “soft skills” such as collaboration and problem solving rather than coding and computing. Additionally, there was some discussion on whether the Digital Technologies strand should be integrated or a standalone learning area, and whether it is well future-proofed.

In relation to Hangarau Matihiko, a question some had was whether it should be treated as a separate curriculum, particularly as the Hangarau Matihiko consultation document had content that would benefit students being taught in an English medium school, and that the document also had different and broader concepts that are not as well covered in the English medium documentation.

While there was general enthusiasm for the proposed curriculum content, there was less confidence in relation to implementation. About 40 percent of teachers thought the consultation document was clear in relation to how it might be used in practice and integrated. There were many comments and submissions received in relation to appropriate resources and resourcing in

general (for example, funding for hard and soft infrastructure and resources, relief teachers, specialist teachers, and ongoing professional development).

The key challenges voiced by teachers, those in school management and Board of Trustee members were workload, professional development and teacher capability. The types of support sought were in-person workshops, in school/kura professional development and e-learning modules. Funding for professional development/teacher release, resources and hardware/software was also mentioned specifically.

Many submitters commented that the timetable for implementation of the proposed content is too rushed, not allowing teacher capability to develop and for them to gain familiarity with the curriculum content. Some suggested that the documented could be released as a living document, with ongoing consultation with the sector as it is implemented.

On the whole, the sections of the consultation document and the exemplars were clear to submitters. How all the elements fit together and with the Technology learning area were broadly regarded as relatively easy to understand. Student progressions were also regarded as reasonably clear. However, there were many comments related to the introduction of ‘progress outcomes’ into the curriculum and clarity sought as to how they are linked to Achievement Objectives and curriculum levels.

In relation to broader outcomes, about half of the respondents thought the new curriculum content set up students well for the future, whether that be in further study, employment or interacting in a digital world.

There were a number of areas where further clarification was sought:

- Whether Digital Technologies and Hangarau Matihiko is compulsory for Year 9 / Year 10



- progress outcomes (as discussed above)
- Application of Digital Technologies and Hangarau Matihiko to Steiner Waldorf schools and Partnership Schools | Kura Hourua
- Linkages with Te Whāriki
- The research and evidence underpinning the curriculum content.

It should be noted that a high proportion of parent/whānau member submissions were associated with special character schools, which have skewed the parent/whānau member results. Submitters also had high self-rated digital literacy, which may not be the case for the general sector and public. Care should be taken before attempting to generalise the results to the wider sector and public.



APPENDIX 1: THE SURVEY (ENGLISH)

Note that these surveys do not contain the skip logic, actions and piped values that were used to ensure only appropriate questions were asked of respondents (based on answers to previous questions).



Digital Technologies | Hangarau Matihiko

Digital Technologies | Hangarau Matihiko curriculum content consultation

Welcome to the online survey seeking feedback on the proposed Digital Technologies | Hangarau Matihiko curriculum content.

We want to ensure that the proposed new curriculum content will work for teachers, kaiako, schools and kura, so our students can achieve the best possible learning outcomes. We need your feedback to ensure we have got it right. Your feedback will also be invaluable for determining the support leaders and teachers will need to effectively implement the new curriculum content in their schools and kura.

A few things you should know:

- We encourage you to think ahead as to how this proposed curriculum content will impact on the learning of New Zealanders over the next 5 to 10 years. The proposed curriculum content is available online at <https://education.govt.nz/ministry-of-education/consultations-and-reviews/digital-technology-consultation/>
- We estimate it will take about 10-20 minutes to complete the survey.
- You do not have to complete all the questions in one go. If you start it and want to come back to it later, click on "save and continue later" and you will be asked to supply an email address where a unique link to your survey will be sent to allow you to return where you left off.
- Your responses to this survey are confidential. Survey analysis and reporting will highlight and explore key themes, but will not identify individual respondents.
- All responses will be held securely by MartinJenkins, the independent consultancy contracted by the Ministry of Education to conduct this survey.
- The survey will close at **5:00pm on Sunday 3 September 2017**.

Thank you for taking time to complete this survey. We value your feedback.

If you wish to complete the survey in Te Reo Māori, please select the language option at the top of this page.

Questions?

Please direct any questions you have about the survey to digi.tech@education.govt.nz

1. To make sure we ask you the most relevant questions, please indicate in what capacity you are responding to this survey: *

- A teacher
- A person in a position of school management
- A Board of Trustees member
- A representative of an education-related business or education organisation
- A parent / whānau member
- A representative of a business
- A representative of an industry organisation/association
- A student
- Other - Please specify

2. Please indicate the one level of the education system you belong to, or have in mind, when responding to this survey: *

- Early childhood education
- Primary
- Intermediate
- Secondary
- Higher and vocational education
- Other - Please specify



Overall intent and direction

Page description:

3. To what extent do you agree or disagree that the following statements reflect your view of the intent and direction of the proposed material? *

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Don't know
The intent and direction set out in the proposed new content contributes to what New Zealand students need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It provides schools enough flexibility to integrate and adapt the curriculum over time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is likely to have a positive impact on students' competency in thinking, using language, symbols and texts, and participating in and contributing to communities of the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Alignment with the curriculum

4. To what extent do you agree or disagree with the following statements? *

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Don't know
The proposed new content reflects the vision of the New Zealand Curriculum and Te Marautanga o Aotearoa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The linkages between the proposed new content and the rest of the New Zealand Curriculum and Te Marautanga o Aotearoa are clear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Curriculum design

5. In relation to curriculum design, please indicate how useful the proposed content is in relation to: *

	Extremely useful	Moderately useful	Somewhat useful	Slightly useful	Not at all useful	Don't know
Articulating the links between the proposed curriculum content and what you currently teach	<input type="radio"/>					
Understanding how to integrate the proposed curriculum content into my Technology programmes	<input type="radio"/>					
Illustrating how schools and kura could consider integrating the proposed new curriculum content into their teaching	<input type="radio"/>					

Curriculum design

6. In relation to curriculum design, please indicate how useful the proposed content is in relation to: *

	Extremely useful	Moderately useful	Somewhat useful	Slightly useful	Not at all useful	Don't know
Understanding how to integrate the proposed curriculum content into my Technology programmes	<input type="radio"/>					
Illustrating how schools and kura could consider integrating the proposed new curriculum content into their teaching	<input type="radio"/>					

Curriculum design

7. In relation to curriculum design, please indicate how useful the proposed content is in relation to: *

	Extremely useful	Moderately useful	Somewhat useful	Slightly useful	Not at all useful	Don't know
Illustrating how schools and kura could consider integrating the proposed new curriculum content into their teaching	<input type="radio"/>					



Clarity

Page description:

8. How easy to understand were the following parts? - Revised Learning Area Statement



★

- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know

9. How easy to understand were the following parts? - Computational Thinking for Digital Technologies



★

- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know



10. How easy to understand were the following parts? - Designing and Developing Digital Outcomes



- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know

11. How easy to understand were the following parts? - Progress outcomes for Computational Thinking for Digital Technologies



- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know



12. How easy to understand were the following parts? - Progress outcomes for Designing and Developing Digital Outcomes

The screenshot shows a document with several columns of text, each representing a different level of progress outcome. The text is dense and appears to be a list of criteria or standards for digital design and development.

- *
- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know

13. How easy to understand were the following parts? - Sample exemplars for Computational Thinking for Digital Technologies

The screenshot shows a document with several examples of computational thinking. It includes a flowchart, a diagram with colored dots, and a speech bubble. The text is dense and appears to be a list of criteria or standards for digital technologies.

- *
- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know



14. How easy to understand were the following parts? - Ngā Ariā o Ngā Whakatupuranga Hangarau Matihiko Arareo Māori



- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know
- Not applicable

15. How easy to understand were the following parts? - Te Tangata me te Rorohiko



- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Don't know
- Not applicable



16. In relation to the consultation document, how easy to understand was: *

	Very easy	Easy	Neutral	Difficult	Very difficult	Don't know
How all the elements of the changes fit together?	<input type="radio"/>					
How the elements of the changes fit with the existing Technology Learning Area?	<input type="radio"/>					

Student progression

17. To what extent do you agree with the following statements? *

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Don't know
The proposed new curriculum content helps me to understand my/student progress in Computational Thinking for Digital Technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The proposed new curriculum content helps me to understand my/student progress in Designing and Developing Digital Outcomes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The proposed new curriculum content shows a clear pathway from Year 1 to Year 13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Employment and lifelong learning

18. To what extent do you agree with the following statements? *

The proposed new curriculum content provides good grounding for: *

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Don't know
Engaging in a digital world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Further training or study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employment in the digital technologies and digital-technologies related sectors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employment in other sectors that utilise digital technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. The proposed new curriculum content is relevant to my industry *

- Strongly agree
- Agree
- Neither agree or disagree
- Disagree
- Strongly disagree
- Don't know

Description of the Technology Learning Area

20. How might we reflect digital technology learning in the name of the Technology Learning Area? *

- Prefer no name change
- Add 'digital' to the name in some form
- Other - Please specify
- No preference

Challenges

21. To what extent do you agree with the following statements? *

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Don't know
I feel well informed about the proposed new curriculum content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my everyday life, I am confident using new devices, applications and software and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have an understanding of basic concepts in computing, coding and information processing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Challenges

22. To what extent do you agree with the following statements? *

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Don't know
There will be significant challenges associated with teaching and integrating the proposed new curriculum content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident in teaching and integrating the proposed new curriculum content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. To what extent do you agree with the following statement? *

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Don't know
I feel confident in discussing this proposed new curriculum content at home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. What are the top three challenges you anticipate from teaching and integrating the proposed Digital Technologies | Hangarau Matihiko curriculum content into your teaching? Please select up to three options. *

- Existing workload
- Confidence in teaching this material
- Teaching personnel capability
- Relevant professional learning and development opportunities
- Relevant support materials
- Other - Please specify
- I do not anticipate any challenges



Support needed

25. What support do you think you might need to strengthen your teaching practice and feel confident with the proposed Digital Technologies | Hangarau Matihiko content? Please select the top three *

- Expert phone and online support
- Online webinars and forums to share case studies
- In-person workshops
- In-school/kura professional development
- E-learning modules
- Other - Please specify
- No further support required

Support needed

Page description:

26. What support do you think you might need to inform and engage your community in the proposed new curriculum content? Please select the top two *

- Online resources
- Workshops available to parents and whanau
- Materials to send home
- Other - Please specify
- No further support required

Support needed

Page description:

27. What support do you think you might need to better understand the proposed new curriculum content and how it affects you and your child? Please select the top two *

- Online resources
- Workshops provided by my school
- Material sent home with my child
- Other - Please specify
- No further support required

28. What support do you think you might need to better understand the proposed new curriculum content and how it affects you? Please select the top two *

- Online resources
- Workshops provided by my school
- Material to take home and/or discuss with others
- Other - Please specify
- No further support required



29. What support do you think you might need to better understand the proposed new curriculum content and how it affects you? Please select the top two *

- Online resources
- Workshops
- Material to digest and/or discuss with others
- Other - Please specify
- No further support required

Support needed

Page description:

30. What support might you need to better understand the proposed new curriculum content and how it affects you, your business, and/or your sector? Please select your top option *

- Online resources
- Workshops (provided by my industry association, economic development agency, etc)
- Other - Please specify
- No further support required

31. What support might you consider offering a school to help it teach and integrate the proposed new curriculum content? Select all that apply *

- Site visits
- Case study
- Scholarships
- Mentorships
- Sponsorship
- Guest teachers
- Events / competitions
- Other - Please specify
- None of the above

Please tell us more about you:

Page description:

32. What city or district are you in?

Please start entering your area, and the text box will auto-suggest options *



33. What is the size/roll of your school? *

- 0-25
- 26-99
- 100-199
- 200-299
- 300-399
- 400-499
- 500-599
- 600-699
- 700-799
- 800-899
- 900-999
- Over 1,000
- Don't know

34. What industry sector does your business primarily identify with? *

- Agriculture, Forestry and Fishing
- Mining
- Manufacturing
- Electricity, Gas, Water and Waste Services
- Construction
- Wholesale Trade
- Retail Trade
- Accommodation and Food Services
- Transport, Postal and Warehousing
- Information Media and Telecommunications
- Financial and Insurance Services
- Rental, Hiring and Real Estate Services
- Professional, Scientific and Technical Services
- Administrative and Support Services
- Public Administration and Safety
- Education and Training
- Health Care and Social Assistance
- Arts and Recreation Services
- Other Services
- Not Elsewhere Included

35. What industry sector does your organisation represent? *

- Agriculture, Forestry and Fishing
- Mining
- Manufacturing
- Electricity, Gas, Water and Waste Services
- Construction
- Wholesale Trade
- Retail Trade
- Accommodation and Food Services
- Transport, Postal and Warehousing
- Information Media and Telecommunications
- Financial and Insurance Services
- Rental, Hiring and Real Estate Services
- Professional, Scientific and Technical Services
- Administrative and Support Services
- Public Administration and Safety
- Education and Training
- Health Care and Social Assistance
- Arts and Recreation Services
- Other Services
- Not Elsewhere Included

36. Which ethnic group(s) do you belong to? *

New Zealand European includes European descent and indirect European descent (from countries such as the US, Canada,

South Africa and Australia)

- New Zealand European
- Māori
- Pacific Peoples
- Asian
- Middle Eastern/Latin American/African
- Other - Please specify



37. Which iwi do you identify with? Please start entering your iwi, and the text box will auto-suggest options *

38. Have you attended a Ministry of Education workshop on the proposed new curriculum content for Digital Technologies | Hangarau Matihiko?

If you haven't and are interested in attending a Ministry of Education workshop on this content, please register for a workshop at www.conference.co.nz *

- Yes
- No

Final comments

Page description:

39. Please add any comments that would help to clarify the information you have given, or any other comments you have on the proposed new Digital Technologies | Hangarau Matihiko curriculum content.

Thank You!

Thank you for taking our survey. Your response is very important to us.



APPENDIX 2: THE SURVEY (MĀORI)



Digital Technologies | Hangarau Matihiko

Hangarau Matihiko hei whakawhiti kōrero mō ngā tuhinga marautanga

Nāu mai ki te tiro whānui e kimi whakaaro nei mō ngā kōrero marautanga hou mō te Hangarau Matahiko.

Kei te tino hiahia mātou kia mōhio mena e pai ana ngā kōrero hou mā ngā kaiako me ngā kura, kia taea ai e ā tātou ākonga ngā otinga pai rawa. Mā ā koutou whakahoki kōrero e tika ai ā mātou mahi. He mea tino whaitake hoki ā koutou whakahoki kōrero hei whakarite i te momo tautoko e tika ana mō ngā kaiarataki me ngā kaiako hei whakamahi i ngā kōrero marautanga hou i roto i ngā Kāhui Ako me ngā kura.

Kia mōhio mai koutou:

- I a koutou e whakautu ana i ngā pātai me tiromahuta koe ki ngā tau e 5 ki te 10 kei te heke mai, ā, whakaarohia ngā pānga o ēnei kōrero marautanga ki ngā ākonga i Aotearoa nei. Ka wātea mai ngā kōrero marautanga hou i <https://education.govt.nz/ministry-of-education/consultations-and-reviews/digital-technology-consultation/>
- 10 - 20 meneti noa iho te roa o te wā māu hei whakaoti i tēnei tiro whānui
- Ehara i te mea kia oti katoa ngā pātai i te wā kotahi. Me ka timata koe, ā, ka hiahia kia waiho mō tētahi wā whakamahi ai, pāwhiria "Kōwhiria he reo kē", ā ka pātaia koe mō tētahi Imēra mōu kātahi ka tukuna he hononga i-tua mōu ki te tiro whānui nei, kia āhei ai koe kia hoki ki te wāhi i mutu ai koe.
- Ka noho matatapu āu whakautu. Ka puta i ngā mahi tātari me ngā pūrongo ngā kaupapa matua, engari ko ngā ingoa tangata ka noho huna tonu.
- Ko ngā urupare katoa ka āta pupuritia e te rōpū kaikirimana ka riro māna e tiaki ēnei mahi mō te taha ki te Tāhuhu o te Mātauranga.
- Kati ai te tiro whānui nei ā te **5.00 karaka, Rātapu 3 Mahuru 2017**.

Tēnā rawa atu koe mōu i whai wā ki te whakaoti i tēnei tiro whānui. Me mea tino whaihua ōu whakaaro.

Me tohu te whakautu e hāngai ana engari koa i ngā wāhi ka tohutohua kia tohu i étahi whakautu.

Me he whakaaro atu anō ōu hei tuku mai me Imēra ki: digi.tech@education.govt.nz

1. He aha te tūranga e tika ana mōu? *

- Kaiako
- Kaiarataki Kura
- Mema Poari Kaitiaki
- Kei tētahi whakahaere kaupapa mātauranga
- Whānau
- Māngai pakihi
- Māngai ahumahi/whakahaere
- Ākonga
- Étahi atu – tuhia mai

2. Tohua te reanga e hāngai ana ki a koe: *

- Kura kōhungahunga
- Kura tuatahi
- Kura waenga
- Kura tuarua
- Kura wānanga, ahumahi
- Étahi atu – tuhia mai



Te koronga me te ahunga whānui

3. Tirohia te kōrero i raro nei, ka tohu ai i te urupare e hāngai ana ki ōu whakaaro. *

	Tino whakaae	Whakaae	Kāore i te whakaae, whakahē rānei	Whakahē	Tino whakahē	Aua
Ko te koronga me te ahunga kei te kōrerotia i roto i te tuhinga whiriwhiri kōrero he mea whai koha ki ngā hiahia o ngā ākonga Māori	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ko tāna he tuku kia āhua ngāwari tā te kura whakaunu, whakahāngai hoki i te marautanga i roto i te huringa o te wā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tērā tonu pea he pānga pai tōna ki te āheinga o te ākonga ki te whakaaro, ki te whakamahi reo, ki te tohu me te tuhi, kia whai wāhi ai, kia whai koha ai hoki ki ngā kāhui ako	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Tōna hāngai ki te marautanga

4. Tirohia te kōrero i raro nei, ka tohu ai i te urupare e hāngai ana ki ōu whakaaro. *

	Tino whakaae	Whakaae	Kāore i te whakaae, whakahē rānei	Whakahē	Tino whakahē	Aua
E whakaata ana te Wāhanga Ako Hangarau hou i te tino kaupapa o Te Marautanga o Aotearoa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kia kitea mai ngā hononga i waenga i te tuhinga marautanga hou me ērā atu wāhanga o Te Marautanga o Aotearoa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Te hoahoa marautanga

5. Mō te hoahoa marautanga me tohu mai he pēhea te whaihua o ngā tuhinga whiriwhiri kōrero e pā ana ki: *

	Tino whaihua	Tōna whaihua	Āhua whaihua	Iti te whaihua	Kāore i te whaihua	Aua
Te whakaatu i ngā hononga i waenga i ngā tuhinga marautanga hou me ērā kōrero kei roto i tō marautanga	<input type="radio"/>					
Te whakamārama me pēhea te whakauru ngā tuhinga marautanga hou ki te kaupapa o te Hangarau me ngā hōtaka whānui	<input type="radio"/>					
Te whakauru, te whakahāngai hoki i ngā tuhinga marautanga hou hei hoahoa i te marau ā-kura mō ā koutou ākongā	<input type="radio"/>					

Te hoahoa marautanga

6. Mō te hoahoa marautanga me tohu mai he pēhea te whaihua o ngā tuhinga whiriwhiri kōrero e pā ana ki: *

	Tino whaihua	Tōna whaihua	Āhua whaihua	Iti te whaihua	Kāore i te whaihua	Aua
Te whakamārama me pēhea te whakauru i ngā tuhinga marautanga hou ki te kaupapa o te Hangarau me ngā hōtaka whānui	<input type="radio"/>					
Te whakauru, te whakahāngai hoki i ngā tuhinga marautanga hou hei hoahoa i te marau ā-kura mō ā koutou ākongā	<input type="radio"/>					

Te hoahoa marautanga

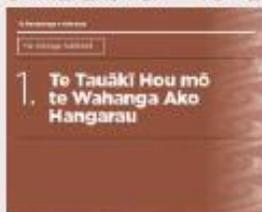
7. Mō te hoahoa marautanga me tohu mai he pēhea te whaihua o ngā tuhinga whiriwhiri kōrero e pā ana ki: *

	Tino whaihua	Tōna whaihua	Āhua whaihua	Iti te whaihua	Kāore i te whaihua	Aua
Te whakauru, te whakahāngai hoki i ngā tuhinga marautanga hou hei hoahoa i te marau ā-kura mō ā koutou ākongā	<input type="radio"/>					



Mārama

8. He ngāwari, he pēhea rānei te whakamārama i ēnei wāhanga o te tuhinga e whai ake nei? – Te Tauāki Hou



- Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua

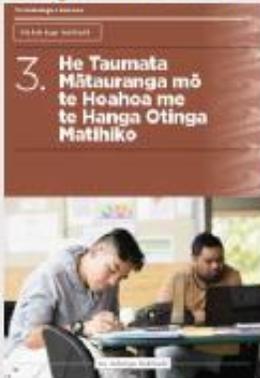
9. He ngāwari, he pēhea rānei te whakamārama i ēnei wāhanga o te tuhinga e whai ake nei? Te Whakaaro Rorohiko



- Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua



10. He ngāwari, he pēhea rānei te whakamārama i ēnei wāhanga o te tuhinga e whai ake nei? - Te Hoahoa me te Hanga Otinga Matihiko



- Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua

11. He ngāwari, he pēhea rānei te whakamārama i ēnei wāhanga o te tuhinga e whai ake nei? He Taumata Mātauranga mō ngā Ariā Whakaaro Matihiko



- Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua



12. He ngāwari, he pēhea rānei te whakamārama i ēnei wāhanga o te tuhinga e whai ake nei? - He Taumata Mātauranga mō te Tangata me te Rorohiko



- Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua

13. He ngāwari, he pēhea rānei te whakamārama i ēnei wāhanga o te tuhinga e whai ake nei? - Sample exemplars for Computational Thinking for Digital Technologies

- * Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua



14. I pēhea nei tō mārama ki ēnei wāhanga e whai ake nei? - Ngā Ariā o Ngā Whakatupuranga Hangarau Matihiko Arareo Māori



- Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua
- Kāore i te hāngai

15. I pēhea nei tō mārama ki ēnei wāhanga e whai ake nei? - Te Tangata me te Rorohiko



- Tino ngāwari
- Ngāwari
- Kore itaha
- Uaua
- Tino uaua
- Aua
- Kāore i te hāngai



Mārama

16. Mō te tuhinga whiriwhiri kōrero, he mārama noa ki a koe: *

	Tino ngāwari	Ngāwari	Kore tītaha	Uaua	Tino uaua	Aua
Ngā panonitanga katoa me te hono o tētahi ki tētahi?	<input type="radio"/>					
Ngā panonitanga katoa me te hono o tētahi ki tētahi?	<input type="radio"/>					

Tā te Ākonga Kauneke

17. He pēhea nei te kaha o tō whakaae ki ngā kōrero e whai ake nei? *

	Tino whakaae	Whakaae	Kāore i te whakaae, whakahē rānei	Whakahē	Tino whakahē	Aua
He āwhina kei ngā tuhinga marautanga hou mōku kia noho mārama au ki te kauneke a te ākonga i te Whakaaro Rorohiko mō te Hangarau Mathiko	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
He āwhina kei ngā tuhinga marautanga hou mōku kia noho mārama au ki te kauneke a te ākonga i te Hoahoa me te Hanga Otinga Mathiko	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hei roto i ngā tuhinga marautanga hou, e mārama ana te huarahi ako mai i te Tau 1 ki te Tau 13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Te whiwhi mahi me te ako mauroa

18. He pēhea nei te kaha o tō whakaae ki ngā kōrero e whai ake nei? Kei ngā tuhinga marautanga hou he āwhina pai mō te: *

	Tino whakaae	Whakaae	Kāore i te whakaae, whakahē rānei	Whakahē	Tino whakahē	Aua
Whai wāhi ki te ao mathiko	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whai akoranga, whakangungutanga rānei i waho atu i te kura	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whai mahi i roto i ngā rāngai hangarau mathiko	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whai mahi i ērā atu rāngai e whakamahi nei i ngā hangarau mathiko	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Whakamōhio mai mena kua kaha ake te whaihua o ngā tuhinga marautanga hou ki tō rāngai/pakihi? *

- Tino whakaae
- Whakaae
- Kāore i te whakaae, whakahē rānei
- Whakahē
- Tino whakahē
- Aua

Te Whakaahuatanga o te Wāhanga Ako Hangarau

20. Me aha te ingoa te 'Wāhanga Ako Hangarau', hei whakatairanga i ngā mahi ako i te hangarau mathiko? *

- Waiho te ingoa kia pērā tonu
- Mā te tāpiri i te kupu "digital" ki te ingoa
- Tētahi atu – whakamārama mai
- Kāore he aha ki a au

Ngā wero

21. He pēhea nei te kaha o tō whakaae ki ngā kōrero e whai ake nei? *

	Tino whakaae	Whakaae	Kāore i te whakaae, whakahē rānei	Whakahē	Tino whakahē	Aua
Mārama pai au ki ngā tuhinga marautanga hou	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tino mōhio au ki te whakamahi pūrere, taipānga me ngā pūmanawa me ngā ratonga	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paku noa taku mōhio ki ngā ariā taketake mō te rorohiko, ngā waehere me te tukatuka mōhiohio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Ngā wero

22. He pēhea nei te kaha o tō whakaae ki ngā kōrero e whai ake nei? *

	Tino whakaae	Whakaae	Kāore i te whakaae, whakahē rānei	Whakahē	Tino whakahē	Aua
He nui, he maha ngā wero e pā ana ki te whakaako me te whakauru i ngā tuhinga marautanga hou	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E āhei ana au ki te whakaako ki te whakauru hoki i ngā tuhinga marautanga hou nei	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. He pēhea nei te kaha o tō whakaae ki te kōrero e whai ake nei? *

	Tino whakaae	Whakaae	Kāore i te whakaae, whakahē rānei	Whakahē	Tino whakahē	Aua
E āhei ana ahau ki te matapakī i ngā tuhinga marautanga hou i tōku kāinga	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. He aha ki ō whakaaro ngā tino wero e toru ka heipū ake i te whakaako me te whakauru i ngā tuhinga marautanga Hangarau Matihiko ki āu kaupapa ako? *

- Aku mahi o nāianei
- Ko te mōhio pai ki te whakaako i ēnei kaupapa
- Ko te āheinga o ngā kaiako
- Ko ngā mahi whakangungu
- Ko ngā rauemi āwhina
- Étahi atu – tuhia mai
- Kāore pea he wero mōku

Kei te hiahia āwhina

25. He aha ngā momo āwhina, tautoko rānei e tika ana māu hei whakapakari i ō mahi akoako i roto i te Wāhanga Ako Hangarau Matihiko? Tohua ngā tino mea e toru *

- Tautoko ā-waea mai i tētahi mātanga
- Ngā akoranga ā-ipurangi me ngā rōpū whakawhiti kōrero mō ngā take wānanga
- He papamahi ā-tinana
- He kaupapa whakangungu ā-kura
- He kaupapa i-akoranga
- Étahi atu – tuhia mai
- Kāore i te hiahia āwhina



Kei te hiahia āwhina

26. He aha ngā momo āwhina, tautoko rānei e tika ana hei kōrerotanga māu ki tō hapori, e hāngai ana ki ngā tuhinga marautanga hou? Tohua ngā mea e hāngai ana *

- Rauemi ipurangi
- Papamahi mā ngā mātua me ngā whānau
- Ngā tānga kōrero hei tohatoha
- Étahi atu – tuhia mai
- Kāore he āwhina i te hiahiatia

28. He aha ngā momo āwhina, tautoko rānei e tika ana mōu kia noho mārama ai koe ki ngā tuhinga marautanga hou? Tohua ngā mea e rua e tino hāngai ana. *

- Rauemi ipurangi
- Papamahi mā ngā mātua me ngā whānau
- Ngā tānga kōrero hei tohatoha
- Étahi atu – tuhia mai
- Kāore he āwhina i te hiahiatia

Kei te hiahia āwhina

27. He aha ngā momo āwhina, tautoko rānei e tika ana mōu kia noho mārama ai koe ki ngā tuhinga marautanga hou me tōna pānga ki āu ākongā? Tohua ngā mea e hāngai ana *

- Rauemi ipurangi
- Papamahi mā ngā mātua me ngā whānau
- Ngā tānga kōrero hei tohatoha
- Étahi atu – tuhia mai
- Kāore he āwhina i te hiahiatia

29. He aha ki ō whakaaro ngā momo āwhina e tika ana māu, e mārama pai ai koe ki ngā kaupapa hangarau matihiko hōu kei roto i te marautanga, me te hāngai o ērā whakahoutanga ki a koe?

Whiriwhiria kia rua o ēnei āwhina e hāngai pō ana ki a koe *

- Rauemi ipurangi
- He papamahi
- He kōrero, he pānui rānei hei wetewete, hei wānanga hoki māu ki ētahi atu
- Étahi atu – tuhia mai
- Kāore he āwhina i te hiahiatia



Kei te hiahia āwhina

30. He aha ngā momo āwhina, tautoko rānei e tika ana mōu kia noho mārama ai koe ki ngā tuhinga marautanga hou me tōna pānga ki tō pakihi, ki tō rāngai rānei? Tohua te mea e tino hāngai ana *

- Rauemi ipurangi
- He papamahi
- Ētahi atu – tuhia mai
- Kāore he āwhina i te hiahiatia

31. He aha ngā momo tautoko e tika ana hei āwhina i te kaiako ki te whakaako me te whakauru i ngā tuhinga marautanga hou? Tohu ngā mea e hāngai ana *

- Te toro wāhi mahi
- Take wānanga
- Karahipi
- Kaitohutohu
- Pūtea āwhina
- Kāiako torotoro
- Kaupapa / Whakataetae
- Ētahi atu – tuhia mai
- Karetahi

Kōrero mai anō mōu

32. Kei tēhea tāone, rohe koe e noho ana? *

33. Mena kei tētahi kura koe, tokohia ngā ākonga o te kura? *

0-25
26-99
100-199
200-299
300-399
400-499
500-599
600-699
700-799
800-899
900-999
Nui atu i te 1000
Aua

34. Mena he māngai koe nō tētahi whakahaere, tētahi ahumahi rānei, tuhia mai te ingoa o te rangai? *

- Agriculture, Forestry and Fishing
- Mining
- Manufacturing
- Electricity, Gas, Water and Waste Services
- Construction
- Wholesale Trade
- Retail Trade
- Accommodation and Food Services
- Transport, Postal and Warehousing
- Information Media and Telecommunications
- Financial and Insurance Services
- Rental, Hiring and Real Estate Services
- Professional, Scientific and Technical Services
- Administrative and Support Services
- Public Administration and Safety
- Education and Training
- Health Care and Social Assistance
- Arts and Recreation Services
- Other Services
- Not Elsewhere Included

35. Nō tēhea rāngai ahumahi tō koutou whakahaere? *

- Agriculture, Forestry and Fishing
- Mining
- Manufacturing
- Electricity, Gas, Water and Waste Services
- Construction
- Wholesale Trade
- Retail Trade
- Accommodation and Food Services
- Transport, Postal and Warehousing
- Information Media and Telecommunications
- Financial and Insurance Services
- Rental, Hiring and Real Estate Services
- Professional, Scientific and Technical Services
- Administrative and Support Services
- Public Administration and Safety
- Education and Training
- Health Care and Social Assistance
- Arts and Recreation Services
- Other Services
- Not Elsewhere Included

36. Nō tēhea iwi matāwaka koe? *

Pākehā includes European descent and indirect European descent (from countries such as the US, Canada, South Africa and Australia)

- New Zealand European
- Māori
- Pacific Peoples
- Asian
- Middle Eastern/Latin American/African
- Other - Please specify



37. Ko wai tōu iwi? Whakaurua te ingoa o tōu iwi, ā, ka puta ake ētahi iwi hei kōwhiringa māu *

38. Kua tae atu rānei koe ki tētahi papamahi a te Tāhuhu o te Mātauranga mō ngā tuhinga marautanga hou mō te Hangarau Matihiko? *

- Āe
- Kāo

He kōrero whakamutunga

39. Mena he kōrero atu anō āu mō ngā tuhinga marautanga hou o te Hangarau Matihiko, tēnā koa tuhia mai:

Tēnā rawa atu koe

Tēnā rawa atu koe mōu i whai wāhi mai ki tēnei tiro whānui

