



2021 Public consultation feedback summary for NCEA & TMOA subjects

(Education Report: Annex 1)

Summary of Feedback Received through Public Engagement on Proposed NCEA Subjects for NZC (Levels 2-3) and TMoA (Levels 1-3)

September 2021

Summary

This Annex summarises feedback received through public engagement on the proposed NCEA subjects derived from The New Zealand Curriculum (NZC, Levels 2 and 3) and Te Marautanga o Aotearoa (TMoA, Levels 1-3).

Contents

Executive Summary	3
Introduction	4
Overall Impressions of the NCEA Subject Proposals	6
Feedback on TMoA Subjects	7
Feedback on NZC Mātauranga Māori Subjects	11
Feedback on NZC Subjects by Learning Area	15
Learning Area 1: English	17
Learning Area 2: The Arts	19
Learning Area 3: Health and Physical Education	24
Learning Area 4: Learning Languages	27
Learning Area 5: Mathematics and Statistics	
Learning Area 6: Science	35
Learning Area 7: Social Sciences	37
Learning Area 8: Technology	42

Executive Summary

The Ministry of Education invited feedback from the public on the proposed NCEA subjects for The New Zealand Curriculum (Levels 2 and 3) and Te Marautanga o Aotearoa (Levels 1-3) between 16 June and 13 August 2021.

The Ministry of Education received a total of 2024 online survey responses, 20 written submissions, and summaries from 15 special interest group face-to-face engagements. Respondents were mainly secondary school teachers and groups of teachers, but other individuals and groups from throughout the education sector also participated in the survey, made submissions, and attended hui.

Respondents answered a set of general questions, and then were free to answer either all remaining survey questions, or only those questions about the Learning Area(s) of interest to them.

Around 50% of survey respondents supported the proposed changes to TMoA and NZC subject offerings in general.

There was a very high level of support for the subject proposals within TMoA, and for the new mātauranga Māori subjects in the NZC. Where concerns were raised about any of these subjects, these mostly concerned resourcing, maintaining the integrity of mātauranga Māori, supporting pathways, and ensuring equitable access.

Respondents to the questions about the Health and Physical Education Learning Area (NZC) also generally indicated a high level of support for the proposed subjects, particularly Outdoor Education. Within the NZC, however, the Arts and Technology Learning Areas attracted the most discussion. Respondents were concerned by the proposal to combine painting, printmaking and sculpture into one visual arts subject. Similarly, there was a lot of discussion about whether to offer three- or five-subjects in Technology and the implications of each option.

A wide variety of concerns, areas of support, and suggestions for further thinking about the subject lists in the other Learning Areas were received.

Introduction

Methodology

Public engagement was held for eight weeks from 16 June to 13 August 2021. A range of methods were used to encourage feedback from ākonga and their whānau, kaiako and the sector, industries and communities, and other interested parties. These included:

- An online survey in English and te reo Māori on overall impressions of the proposed subjects and specific questions on subjects from both curricula. Respondents could answer all survey questions, or only those of interest to them
- Face-to-face engagements with kura, subject associations, peak bodies, RAS subject expert groups, NCEA Panels and Advisory Groups, and partner agencies (NZQA)
- Email channels to receive written submissions from individuals and organisations.

Information and resources were provided on the NCEA.Education website and promoted through multiple channels to support public engagement. The information and resources included discussion documents, fact sheets, and in-depth analysis reports for each curriculum. The opportunity to provide feedback, and access to the supporting information and resources, was promoted through normal Ministry channels (e.g. Gazette, School Bulletin, and social media channels). In addition, direct email communications were sent to principals, principal nominees, peak bodies, and other sector and industry representative groups. Regional Offices and their networks were activated, and existing engagements were used to encourage feedback e.g., Teacher Only Days.

Level of participation

Feedback on the subject proposals was received in the form of 2024 survey responses, 20 submissions, and 15 face-to-face engagements.

Survey

Respondent Attributes	Total number
Role	
Kaiako/teacher	1165
Head of Department	521
Parent, whānau, or community member	178
Senior school leader	112
Other	111
Ākonga/student	101
Answering as	
An individual	1871
A group	153
School Type	
Secondary	1519
Composite (Year 1-15)	12
University	38
Intermediate	34
Full Primary	21
Non school	360

Table 1: A breakdown of survey respondents' attributes

Submissions

Submission from	Curriculum - Learning Area (Subject)
Te Rōpū Taniwha whakairo	TMoA Ngā Toi (Toi Whakairo)
Creative NZ	NZC The Arts (Mana Ōrite)
Dagmar Dyck	NZC The Arts (Implications for Pasifika)
Donna Tupaea-Petro	NZC The Arts (Implications for Māori)
Kirsty Grieve	NZC The Arts
Ray Thorburn	NZC The Arts
Waitaki Girls High School	NZC The Arts
Feilding High School	NZC Health and Physical Education (Outdoor Education)
Kavanagh College	NZC Learning Languages (ESOL)
TESOLANZ	NZC Learning Languages (ESOL)
NZAMT	NZC Mathematics and Statistics
NZSA Education Committee	NZC Mathematics and Statistics
VUW Data Sciences	NZC Mathematics and Statistics
ASAANZ	NZC Social Sciences
Ormiston Senior College	NZC Social Sciences (Media Studies)
Southland Girls College	NZC Social Sciences (Commerce)
Tokoroa Pacific Fono	NZC Social Sciences (Pacific Studies)
Tourism Educators Forum	NZC Social Sciences (Tourism)
Tourism Industry Aotearoa	NZC Social Sciences (Tourism)
Canterbury University	NZC Technology (Computational Thinking)

Table 2: Providers of written submissions by TMoA or NZC Learning Area (Subject)

Key themes from the submissions are included in Learning Area analysis.

Face-to-face engagements

While public feedback was predominantly sought through the online survey, delivering targeted faceto-face engagement with specific communities and groups was a critical aspect of ensuring that feedback was received from groups who may be harder to reach, or may be particularly impacted by the proposed changes.

Regional Ministry offices were encouraged to promote the public engagement materials to their communities and networks and, where it was possible and appropriate, regional staff led and helped to facilitate conversations within these networks.

Facilitators for face-to-face engagements provided a summary of outputs and feedback from each engagement. In some instances, participants at face-to-face engagements were supported to understand the proposals and then opted to provide feedback via the online survey.

A total of 15 face-to-face targeted engagements were delivered for proposed NCEA subjects. Face-toface engagements were undertaken with a range of key groups and organisations, including kura, subject associations, peak bodies, RAS subject expert groups, NCEA Panels and Advisory Groups, community groups and partner agencies (NZQA).

The key themes which follow capture the feedback from each engagement across various subjects and are organised by Learning Area. Where face-to-face engagement participants opted to provide feedback online, the analysis of that feedback has been captured as part of the survey response analysis.

Overall Impressions of the NCEA Subject Proposals

In the first section of the survey, respondents were asked to provide feedback on their overall impressions of the subject proposals by responding to four questions. All respondents were required to answer this part of the survey.

Overall support for the subject proposals

55.5% of respondents agreed or strongly agreed with the statement "I support the proposed NCEA subjects for NZC" and 29.7% disagreed or strongly disagreed. For the same question for TMoA subjects, 57% agreed or strongly agreed and 11.7% disagreed or strongly disagreed. This information is shown in Figure 1.

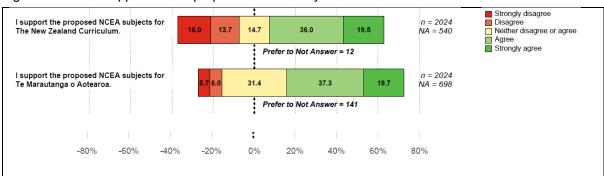
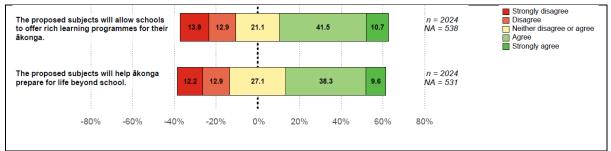


Figure 1: Overall support for the proposed NCEA subjects for the NZC and TMoA

Overall impressions of the implications of subject proposals for ākonga learning

The Ministry also asked respondents whether the proposed subjects will allow schools to offer rich learning programmes and help ākonga prepare for life beyond school. Responses are shown in Figure 2. No distinction is made by curriculum.

Figure 2: Overall impression of proposed subjects' impact on learning programmes and ākonga pathways beyond school



Feedback on TMoA Subjects

Feedback was received about proposed TMoA subjects through an optional section of the online survey available in te reo Māori and English.

Response statistics

There were 735 responses to survey questions about the proposed subjects for TMoA as shown in Table 3. Of particular note is the high level of engagement from kura and non-school groups.

	Survey acces	S	Comments		School type					
	ТМоА	TMoA information	Survey: Individual	Survey: Group	Written submission	Kura	1Y Primary	2Y Seconda ry	3Y Tertiary	Non- school
Number of respondents	735	893	562	36	1	10	26	493	23	52

Table 3: Response statistics for TMoA

Analysis of key themes

There was strong support for the proposed new subjects in the TMoA. 61.2% of respondents agreed or strongly agreed that teaching and learning in kura Māori would be supported by adding new subjects at Level 2 and 3 (i.e. offering specialisation), see Figure 3.

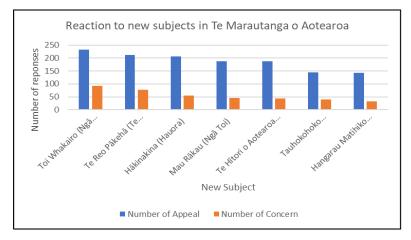
Figure 3: Percentage of respondents who agreed that teaching and learning in kura Māori will be supported by adding new subjects at Level 2 and 3 of TMoA



Subjects that appealed and those of concern

The Ministry invited the public to indicate any proposed TMoA subjects they approved of or had concerns about. Subjects that appealed outnumbered subjects of concern by approximately 3:1, as shown in Figure 4. Subjects with the greatest appeal were Toi Whakairo, Te Reo Pākehā, and Hākinakina. The proposed subjects of greatest concern were Mau Rākau and Toi Whakairo.

Figure 4: Proposed new TMoA subjects - Appeal vs Concern (by number of votes for each subject)



Most of the respondents who chose to comment expressed concerns rather than approval, and many touched on themes brought up in the survey responses for NZC Māori subjects (see Mātauranga Māori subjects in the next section). Respondents' concerns about the proposed new NCEA subjects derived from TMoA tended to fall under the following four categories:

1. Resourcing

- Māori experts are needed to teach tikanga-intense subjects so there is not a tokenistic approach. In some subjects like Mau Rākau, kaiako need to be male, further increasing the pressure on finding enough qualified staff.
- Support and PLD is needed for schools and teachers to implement these subjects.
- Material resourcing is needed, especially to pay for local specialists, e.g., carvers to teach Whakairo.

"MoE/as good Treaty partner will need to fund programmes -to ensure a pool of kaiako is established" Secondary principal

"a chance for our marae-based students to bring their knowledge into the school." Individual secondary kaiako

2. Pathways

• Some respondents could not see clear links between the suggested TMoA subjects and further education/careers.

"This seems to create a separate schooling system that I hope won't lead to outcomes where students when looking to opportunities outside of school are now unable to access" HOD

3. Mātauranga Māori integrity

- The importance of localised iwi and whānau consultation at all levels including moderation and NCEA.
- Appropriate cultural considerations around who should teach mātauranga Māori subjects
- Te Reo Pākehā having no place in a te ao Māori approach.

"If you are not privileging inherently kaupapa Māori subjects, you actually support the watering down of reo and Mātauranga that underpin kaupapa like this" secondary kaiako

4. Equitable access

- Not all schools will be able to offer the proposed subjects
- Most ākonga Māori are in mainstream schools these subjects need to be available to all, not just those in a Kaupapa Māori setting.
- 'Co-construct resourcing' so it is available across all schools.
- English Medium schools will have to 'up their game' to provide for students in these areas and not have mātauranga Māori relegated to "taha Māori".

Suggestions for other subjects

Survey respondents suggested additional subjects that could be offered: Rongoā, Music/Performing Arts, Entrepreneurship, Business, STEM, Mana Wāhine, Life skills, Psychology, Taonga Pūoro, Kaitiakitanga, Navigation, and Whakamahi whenua.

Choice of curriculum

Survey respondents were asked to indicate which curriculum the proposed Mau Rākau and Toi Whaikaro subjects should sit under. There was broad support to offer these two proposed new subjects under both the NZC and TMoA as shown in Figure 5.

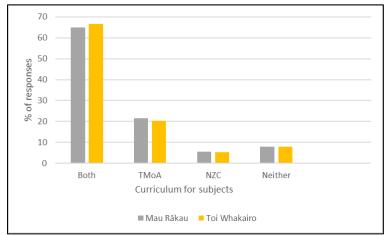


Figure 5: Preferred curriculum for Mau Rākau and Toi Whakairo

Further thoughts about TMoA

"That there needs to be community education around te mātauranga Māori - at a basic level people do not know about valuing Māori wisdom and knowledge in the same way that some parts of society value te mātauranga Pākehā". Individual secondary

"Include resourcing that are designed by Māori for Māori and funded equitably with the changes in NZC." Individual secondary "It is important to learn Health Education and Arts in Māori, they have rich culture and history that lies within that people of NZ especially the migrants should know and respect." HOD Intermediate

"It is the birthright of our ākonga Māori to access this mātauranga Māori regardless of which curriculum their school is following. These are both kaupapa that are strongly linked to Māori identity so they need to be offered throughout the motu." Individual secondary

Written submissions

Te Ropū Taniwha Whakairo, a group of eight kura with schools of Whakairo, submitted a written response as part of the public engagement period. The group expressed concern about how the artform could be appropriately taught and assessed within an achievement standard framework:

"Across all changes, whakairo should be preserved in its authentic state; this should not be, or ever be from a Westernised theoretical approach, but rather from our pūrākau, kōrero tuku iho, her-stories, whakapapa, tikanga, Iwi, hapū and toi."

Face-to-face engagements

An engagement at Te Kura Kaupapa Māori o Ngāti Kahungunu ki Heretaunga with approximately 30 kaiako and tumuaki Māori noted general support for all the options provided. Participants were particularly in favour of Te Hītori o Aotearoa, Te Reo Pākehā, Hangarau Matihiko, and Tauhokohoko.

Targeted wananga were also held with Te Rūnanga Nui o Ngā Kura Kaupapa Māori o Aotearoa (TRN) and Ngā Kura ā lwi o Aotearoa (NKAI) executives, as well as with the Māori Medium Secondary Qualifications Advisory Group (MMSQAG). These stakeholder groups were generally supportive of the proposed subject lists, but made it clear that such support was contingent upon the Ministry resourcing

all subjects appropriately. They noted that better resourcing and PLD for existing subjects and Wāhanga Ako is required, and also raised concerns that the proposed new subjects would place further pressure on already under-resourced parts of the sector. A second theme was the perceived overemphasis on the Arts and Ngā Toi - through the new subjects which the Ministry had chosen to propose - and whether this would come at the expense of STEM. NKAI, in particular, also wondered whether there was space for more vocational pathways in the subject offerings.

Feedback on NZC Mātauranga Māori Subjects

Mātauranga Māori subjects received feedback two ways; through an optional targeted *NZC* mātauranga Māori section of the online survey and through their *NZC* Learning Areas. This enabled viewing the subject feedback through two lenses. Overall, there was a high level of support for the proposed new subjects Māori in the NZC. Many responses echoed themes covered in the survey responses for TMoA subjects.

Response statistics

There were 555 responses to survey questions about the proposed subjects for *NZC* mātauranga Māori subjects. Table 4 shows the profile of responses. Of particular note is the high level of engagement by kura and non-school groups, and the high proportion of group responses.

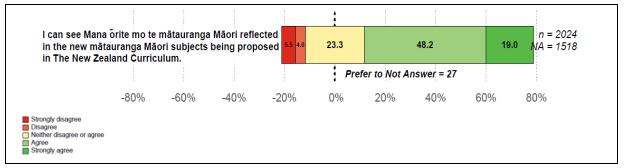
	Survey access	Comments			School ty	/pe			
	NZC Māori Learning Area	Survey: Individual	Survey: Group	Written submission	Kura	1Y Primary	2Y Secondary	3Y Tertiary	Non- school
Number of respond ents	555	510	44	0	9	14	447	32	53

Table 4: Response statistics for the proposed NZC mātauranga Māori subjects

Key observations about mātauranga Māori subjects in the NZC

506 survey respondents answered the question '*I* can see Mana ōrite mō te mātauranga Māori reflected in the new mātauranga Māori subjects being proposed in The New Zealand Curriculum.' Of these, 67.2% agreed or strongly agreed with this statement as shown in Figure 6.

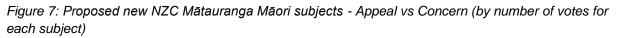
Figure 6: Number of respondents who agreed they can see Mana ōrite mō te mātauranga Māori reflected in the proposed new mātauranga Māori subjects for the NZC

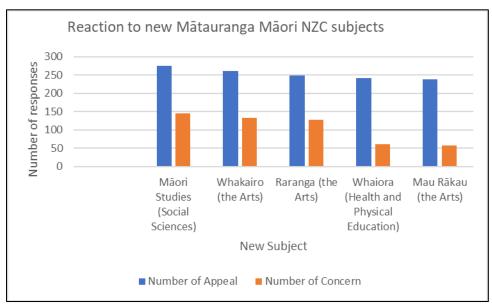


Subjects that appeal and those of concern

The Ministry also invited the public to indicate if there were subjects that were particularly appealing and proposed subjects that they had concerns about.

Figure 7 shows the number of respondents who indicated approval or concern for the NZC mātauranga Māori subjects. Support for all proposed mātauranga Māori NZC subjects was fairly even, with Māori Studies, Whakairo, and Raranga having the strongest appeal. Mau Rākau was the subject which respondents had most concerns about (146 responses).





While more respondents were in favour of the proposed subjects than concerned about them, as shown in the figure above, most comments in the open response part of this question focussed on areas of concern. These comments covered similar themes to those about proposed new TMoA subjects between, as summarised below:

1. Resourcing

Many comments addressed the need for sufficient numbers of kaiako numbers to deliver these new subjects, which could otherwise lead to workload issues for existing kaiako. Some wondered if Pākehā teachers should be allowed to teach the subjects at all, while others insisted that mātauranga Māori is tapu and a taonga – meaning that specialised tertiary training is essential. There were also many comments about PLD.

Some comments linked this concern to an existing struggle to get excellent Te Reo Māori teachers. Associated with this was a suggestion that the Ministry offer 6-month mātauranga Māori sabbaticals for teachers to upskill.

2. Pathways

Some respondents wondered about whether mātauranga Māori subjects would lead to university study. A few respondents thought the emphasis of the NZC should be on internationally recognised subjects.

"We need a clear pathway for teacher training in these areas, where teachers start at fair pay rate the same as their peers (Whare Waanaga degrees need recognition from Schools of Education). There needs to be significant investment in infrastructure for these subjects to thrive. Plant flax now, build specialist rooms, secure supplies of wood for carving, develop storage solutions for weaving projects, put money aside for equipping the rooms." Individual secondary

3. Protect Mātauranga Māori integrity

Similar to the TMoA curriculum Learning Areas, there were quite a few comments voicing concern about the protection of mātauranga Māori integrity. Some respondents about wanted to see Ngā Toi subjects

in a separate Learning Area, and many talked about the need to provide adequate resourcing to support to maintain the uniqueness in Māori identity.

"Whakairo and Raranga will need specialised teachers as very few Visual Arts teachers are likely to hold the deep knowledge required to teach these subjects. All [NZC Māori] subjects should sit within one new Learning Area to avoid them getting swallowed up and lost within the existing framework." Individual

4. Specific subject concerns

Some respondents thought that Whaiora should be integrated with Health to "Avoid dealing in a deficit way with Māori-related health".

There appeared to be overall general acceptance of the Ngā Toi disciplines Raranga, Mau Rākau and Whakairo, being introduced into the Arts Learning Area. However, the concern that the subjects should not be introduced at the expense of retaining Painting, Printmaking and Sculpture as separate disciplines, was commonly voiced.

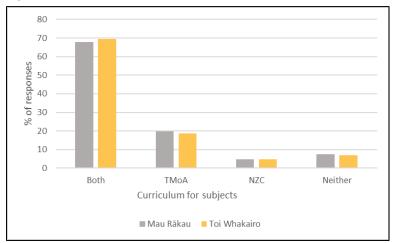
There were some thoughts around Mau Rākau fitting better within Health and Physical Education than the Arts, and Whakairo and Raranga being a better fit with Technology than the Arts.

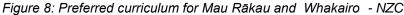
The following quote gives an ākonga perspective:

"... Mau Rākau is not an art it's fighting and weapons. It should be with haka and Te Reo where it would get taught by Māori teachers who know what they are talking about. Me and my mates would want to do whakairo paint print and sculpture so it's good to have the new subjects but not thru limiting paint print and sculpture." Individual ākonga

Curriculum derivation of subjects

Survey respondents were also asked to indicate which curriculum the proposed Mau Rākau and Toi Whaikaro subjects should sit under. There was broad support to offer these two proposed new subjects under both English and Māori medium curriculum as shown in Figure 8. Results are closely aligned for the same question in the *TMoA* survey.





Ideas for additional new Mātauranga Māori subjects

Survey respondents were asked what, if any, other mātauranga Māori subjects they would recommend being offered within the NZC. Suggestions included:

- Kaitiakitanga/Māori business
- Te Reo should be in NZC Māori curriculum
- Māori literature

- Rongoā Māori
- An 'English-type subject' covering waiata/korero
- Taiao (Environment)
- Mahinga Kai/Māra Kai
- Tukutuku (easier to manage than Raranga)
- Pūoro

Additional thoughts about the proposed mātauranga Māori subjects for NZC

Survey respondents were also given the opportunity to share any other thoughts about the proposed mātauranga Māori subjects for NZC. Responses included:

- Concerns about career pathways through mātauranga Māori subjects
- Concerns expressed that schools would opt out of offering these subjects based on their perceived view of what students need
- Assurance needed to be given that English medium schools were supported to teach standards derived from mātauranga Māori.

"Although our Maori student population is small the school has strong ties with Nga Haua. We have talked for many years about building a marae at school and I see this as a rich opportunity for students to contribute in the making." Individual secondary "Our whānau class would benefit from these subjects as well as all students to engage with Maori artforms in an authentic way." Individual secondary

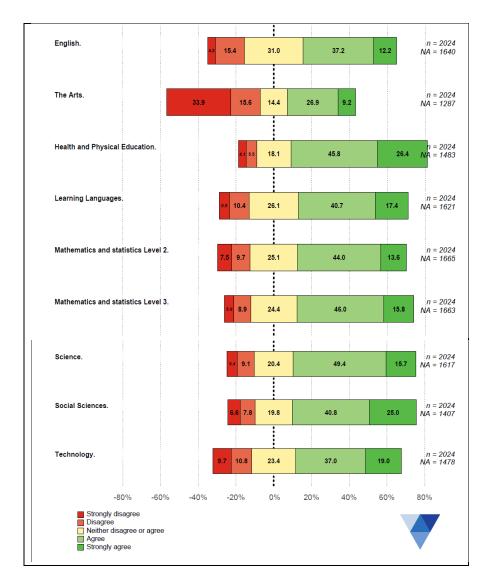
Feedback on NZC Subjects by Learning Area

Feedback on Significant Learning Covered by Learning Area

In the survey, the first question in each of the eight NZC Learning Areas asked respondents whether the proposed subjects "covered all the significant learning that should be available."

Figure 8 shows that from 2024 responses, there was a high level of agreement in most Learning Areas that the proposed subjects covered all the significant learning. The Health and Physical Education Learning Area had the highest level of agreement (72.2 % of respondents agreed or strongly agreed). In the Arts, Technology and, to a lesser extent, English the agreed/ strongly agreed was much lower (36.1%, 56%, and 49.4 % respectively).

Figure 9: Percentage of respondents who agreed that the proposed subjects in each Learning Area covered all the significant learning that should be available



Overall feedback on NZC subjects by Learning Area

The Arts and Technology Learning Areas received the greatest level of engagement from survey respondents. In the Arts, the overwhelming concern was about combining three existing visual arts subjects into one. In Technology, opinions were polarised about whether to offer three or five subjects, but the majority of respondents favoured the five-subject option.

Overall, concerns common to all learning areas were related to resourcing, maintaining of choice for ākonga - particularly in smaller schools - and establishing pathways to tertiary study and employment. A more detailed consideration of key comment themes is made in each of the learning area sections later in this document.

Face-to-face engagements

Feedback from 43 Canterbury West Coast Secondary Principals on NZC subject proposals indicated general support for specialisation at NCEA Levels 2 and 3. This group also reiterated some of the well-known challenges to implementing the NCEA change package, e.g., the potential for important learning and content to be omitted in favour of 'teaching to the standards' with only 4 standards for each subject. The group also voiced a concern that some teachers would struggle to implement Mana ōrite mo te mātauranga Māori. Participants expressed appreciation for the opportunity to feedback on the proposals that were 'not set in stone

Learning Area 1: English

There were 384 responses to survey questions about the proposed subject for English. Table 5 shows the profile of responses. English received fewer survey respondents than most other learning areas, possibly because it was the learning area with the least change.

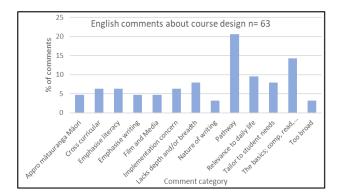
	Survey	Comments	Comments			School type			
	access								
	English Learning Area	Survey: Individual	Survey: Group	Written submissio n	1Y Primary	2Y Secondary	3Y Tertiary	Non- school	
Number of respondents	384	174	10	0	6	134	11	21	

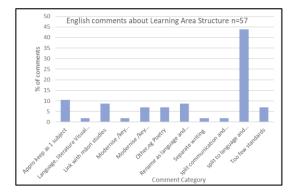
Table 5: Response statistics for the English Learning Area

Key observations about English

The vast proportion of comments about the structure of the English Learning Area concerned the idea of splitting English into two subjects, as can be seen in Figure 10. A variety of options were proposed, most commonly language and literature. Comments about course design were largely centred around thoughts about ākonga pathways, relevance to daily life, and ensuring ākonga leave school with capability in the basics, e.g., comprehension, reading, and writing.

Figure 10: Frequency distributions of comments in the English Learning Area

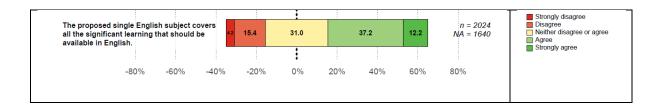




Analysis of key themes

Overall, there was a moderate level of support for the single English subject, as shown in Figure 11. 49.4% of those completing the English questions either agreed or strongly agreed that the single English subject covers all the significant learning that should be available in English. 19.6% of respondents either strongly disagreed or disagreed with the statement and 31% neither disagreeing nor agreeing.

Figure 11: Percentage of respondents who agreed that the proposed subject covered all the significant learning in the English Learning Area



Many of the comments were about the need for ākonga, especially those wanting to write at a professional level to develop the skills to write in a grammatically correct way Literature was often described as different and separate to language should be a separate subject. Only 10% of comments favoured keeping English as one subject, and some respondents wanted the Learning Area to separate written and visual learning to reflect the changing ways we use and consume in English.

Make the standards actually focus on English -books, film, poetry. NOT on static images and speeches. Static images are GRAPHIC DESIGN, and speech performance is a PERFORMING ART. English should be about building love and skills in reading and writing. Not talking and drawing. Individual secondary

I think splitting English into specialist areas such as 'English Literature' and 'English Language' (the way Cambridge and the International Baccalaureate do) would allow for greater specificity of content and a more tailored learning experience. Individual secondary

The most common theme in comments about course design was how students are supported or prepared for their pathway towards achieving NCEA and beyond school into work or tertiary education. Many of these comments were around making the study of English an attractive, useful, and interesting option.

"Look at how this English can be contextualised to pathways, to provide learning opportunities that create meaning for learners e.g. why do I need to know how to do 'formal writing'? Well in the Primary Sector, it is because contextualise the context for the assessment too." Central Economic Development Agency

Some comments (in equal numbers) focussed on keeping the Learning Area relevant and tailored to \bar{a} konga and their daily lives, and basic grounding in literacy – a greater focus on English language required for the workforce.

Learning Area 2: The Arts

There was a high level of public interest in the subject proposals for the Arts learning area. In total there were 745 responses to the survey questions, and a total of 540 respondents provided written comments to back up their survey responses. Table 6 shows the profile of responses. Of note is the large proportion of secondary school kaiako engaging in this learning area.

	Survey access	Comments			School type			
	Arts Learning Area	Survey: Individual	Survey: Group	Written submission	1Y Primary	2Y Secondary	3Y Tertiary	Non- school
Number of respondents	745	498	42	4	2	454	21	15

Table 6: Response statistics for the Arts Learning Area

Key observations about the Arts

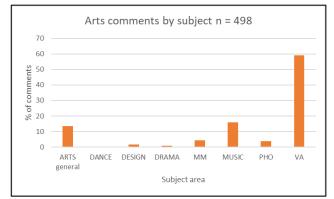
In general comments in free text questions of the survey in the Arts were extensive and frequently included multiple points.

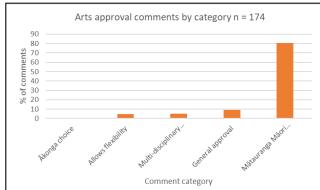
As shown in Table 7 and Figure 12, most of the comments received were about the visual arts; the majority of these expressed disagreement with the proposed Visual Arts subject. Other comment themes expressing concern about subject proposals centred upon the inclusion of film within photography and the separation of music into two subjects.

Table 7: Number of points raised by respondents that expressed concern, by subject, in the Arts Learning Area

				Subject A	rea			
Concern category	ARTS general	DESIGN	DRAMA	MMĀORI	MUSIC	PHOTOG	VISUAL ARTS	Grand Total
Ākonga choice	21			1	6		98	126
Combined disciplines	45	1			5	1	270	322
Content	5	3	4		28		3	43
Design conceptual not just process	13	1					5	19
Disadvantages Māori and Pasifika ākon	5						41	46
Duplicates learning	2	2			1	1	2	8
Mātauranga Māori concerns	10			6	1		13	30
Must be cross curricular	1							1
Pathways	12				6		51	69
Photography/film issues	22				1	16	21	60
PLD	2			3	1	1	6	13
Resourcing	8		1	6	7		18	40
Separate subjects inflexible					16			16
Subject name	1				10	1		12
Teacher skills/employment	11		1	3	2		43	60
Too many subjects					2		2	4
Grand Total	157	7	6	20	86	20	573	870

Figure 12: Frequency distributions of comments by subject and comments supporting change in the Arts



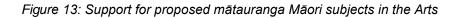


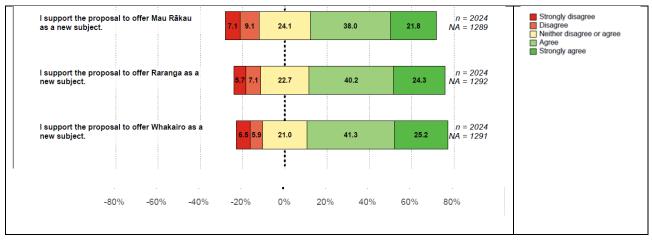
We **shape** an **education** system that delivers **equitable** and **excellent outcomes** He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**

Analysis of key themes

Mātauranga Māori Subjects

Within the Arts Learning Area there were considerably fewer comments expressing approval for the proposed changes. One proposal that did gain a high level of support though was offering new mātauranga Māori subjects, Raranga, Whakairo, and Mau Rākau.





Support for these subjects was, however, often accompanied by a secondary concern. The comment below is typical of this:

Although I agree with the introduction of Māu Rakau, Whakairo and Raranga, I believe these should sit alongside Te Reo Māori in the new proposed Learning Area, due to the interconnected nature of these subjects. Sprinkling them throughout the curriculum will mean they are not taught by specialists. This Learning Area should be lead by Māori to ensure tikanga is passed on. I also feel resourcing could be an issue.... My tutors talk of the shortage of te reo Māori teachers and this was certainly the case at my secondary school. From experience, I believe it will be challenging for local schools to find teachers of whakairo, raranga and mau rākau. Individual ākonga

There were also a number of themes in common with feedback from the NZC mātauranga Māori section of the survey. Some respondents questioned the introduction of the three mātauranga Māori subjects if this was to be at the expense of the separate Painting, Printmaking and Sculpture disciplines. There were questions around teaching of these disciplines and if it would be appropriate for those without specialist arts or cultural backgrounds to teach mātauranga Māori subjects. Questions were also raised as to whether there would be an adequate number of qualified teachers available or in training to deliver these subjects. Some respondents were concerned about respecting lwi protocols around which ākonga could participate in which discipline. A number of respondents suggested that Mau Rākau would fit better in Physical Education than the Arts, or whether mātauranga Māori subjects would sit better in a different curriculum area (e.g., Te Ao Māori) alongside Te Reo to better uphold the mana of the subjects.

Visual Arts

The proposal to offer the disciplines of Painting, Printmaking and Sculpture under one Visual Arts subject received multiple comments– the majority of which were against the idea. Figure 14 shows that most respondents (51.3%) strongly disagreed or disagreed with the statement "The proposal for

the visual arts subject has the right balance between specialised assessment and flexibility to explore multiple artistic media" (25.9% agreed or strongly agreed with the statement)

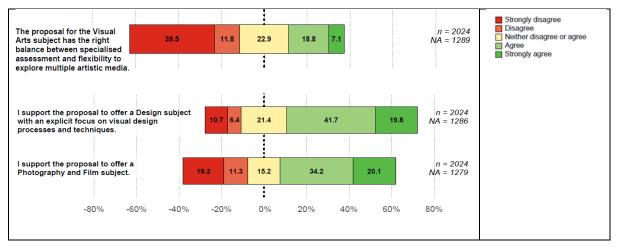


Figure 14: Support for proposed Design, Photography and Film, and Visual Arts subjects in the Arts

This disagreement tended to be based upon a perception that the Visual Arts subject would force schools to combine painting, printmaking, and sculpture into one course. Respondents thought that the single subject would have a negative impact on ākonga choice and pathways, disadvantage Māori and Pacific ākonga, and lead to resourcing issues and teacher job losses. Other frequent observations about the proposed subject included:

- skills, materials, and processes involved in Painting, Printmaking, and Sculpture are too dissimilar to be taught under one subject
- Painting, Printmaking and Sculpture are equitable arts subjects which do not require devices and may be offered at a relatively low cost to schools and students
- incorporating three subjects within one subject will further marginalise the smaller disciplines of Printmaking and Sculpture; low numbers in these are not a valid reason for combining the disciplines
- combining disciplines contradicts the idea of 'specialised opportunity' at NCEA Levels 2 and 3
- Printmaking is key to success for many Pacific students for whom the discipline aligns with traditional art processes
- tertiary pathways would be narrowed or removed.

The following comment reflects several of these themes:

'From experience teaching L3 Painting & Sculpture students in a co-joined class the quality of learning outcomes is diminished as students are unable to focus with sufficient depth of thought and process to complete both subjects to the best of their abilities. Using one proposal to be explored through different processes has not helped. It would be impossible to teach 3 different subjects within the same course to the level required for NCEA and Tertiary after that." Individual secondary

Design

The majority of comments on Design preferred keeping the subject as is. There were fears that the proposed subject pushes Design too far towards technology and commercial applications, rather than centring the disciplines artistic and conceptual approach.

Photography and Film

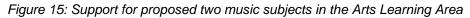
Respondents suggested that the use of the term 'film' is confusing and outdated. Photography and film are separate disciplines, and to add film to photography would involve too much required technical knowledge and equipment. Schools may be unable to fund technical equipment, leading to inequitable

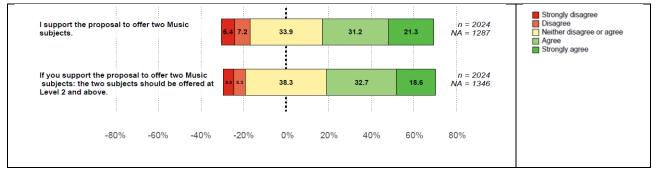
outcomes for students. Furthermore, Media Studies already has a film-making component so if the proposed subject included film, there would be an overlap. Some comments suggested the proposed subject should be renamed as Digital Arts, or Photography and Moving Image. Written submissions from four groups made similar observations.¹

"Film is already part of Media Studies and Photography already includes Moving Image so what is the justification for change here? How will this new Photography and Film subject be assessed and under what umbrella will it sit? What impact will this have on Art Departments across the country?" Individual secondary

Music

Most comments were favourable to splitting Music into two subjects, citing flexibility and breadth of opportunity for ākonga. This was consistent with responses to specific survey questions about music, as can be seen in Figure 15.





Concerns about the proposed two music subjects included a suggestion that most schools will be unable to offer two separate subjects, which leaves decisions to be made about ignoring one strand of the curriculum or somehow combining the two. The proposed Music Representation subject was seen as a move towards being a practical rather than academic option, offering no meaningful pathways. One respondent describes the negative impact of splitting the music course into two subjects as follows:

Other subjects

"We have split the course in our school into music studies and performance and have found that this has not worked well for most students. The knowledge base is limited in some, others will perform only what they know and others will dip into all sorts of things and finish almost nothing without rigorous teacher systems" Individual secondary

Existing subjects Art History, Dance, Drama, and Te Ao Haka did not receive significant feedback.

Written submissions

As noted, four groups provided written submissions relating to the Arts. All emphasised that the Arts encourage creativity; well-being and higher order thinking skills. Many of the points raised by submitters also echoed those of comments made by survey respondents but had a stronger emphasis on the potential implications of the subject proposals for the teaching workforce.

Potential implications for the teaching workforce raised by submitters included the fact that many senior arts practitioners support their own artistic practice through teaching. Submitters expressed concerns that combining Painting, Printmaking, and Sculpture could impact on practitioners of these artistic disciplines by reducing the demand for specialised teachers in schools.

We **shape** an **education** system that delivers **equitable** and **excellent outcomes** He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**

¹ Waitaki Girls High school, ANZAAE, Creative New Zealand, Ray Thorburn (Artist)

Support was voiced for the inclusion of mātauranga Māori subjects in the Arts and for formally engaging pūkenga (specialists) in the development and delivery of the proposed subjects.

One submission was received in support of the single Visual Arts subject. It noted that 'the proposed changes are a necessary step in refocusing arts role in education but are constrained by fine arts thinking'.

Face-to-face engagements

Face-to-face engagements held with subject associations, teachers, and other sector groups found strong opposition to a single Visual Arts subject. It was noted that keeping these three visual arts disciplines separate would support subject flexibility for both schools and students. Participants in these engagements also noted the high costs of running Photography and Design, which could mean that these standalone subject options are not offered in some schools, leaving only one subject to credential learning within the visual arts.

As suggested by survey respondents above, low numbers in Printmaking and Sculpture were not seen as a valid reason for combining the disciplines by face-to-face engagement participants. Some participants also suggested that in low-decile schools, ākonga Māori and Pacific 'feel better' in externals for Painting, Printmaking, and Sculpture than they do in external assessments for other subjects; so, this is where they gain credits. Participants suggested that the consolidated Visual Arts subject, and the NCEA Change Package setting of fewer, larger standards, together mean that there would be less opportunity to credential bespoke programmes of teaching and learning. They also highlighted how combining the three existing subjects could marginalise some students, particularly as the standalone subjects Painting, Printmaking, and Sculpture do not require a device to be successful (unlike Design and Photography).

Participants felt that limited teacher training in specific fields would mean that teachers are less confident teaching the three disciplines as one subject than their own discipline separately. Concern was raised that the proposed changes would then lead to an increase in teacher workload because of the need to upskill.

Possible impact on ākonga Māori and Pacific was also raised as a significant issue, with many participants noting that Painting, Printmaking, and Sculpture allow for a strong connection to cultural conventions for these groups. It was highlighted that for Pacific learners in particular, Painting, Printmaking, and Sculpture provided opportunities to connect with their culture, and that Art was often a place of safety for these students. Concern was raised that consolidation of the Arts subject would take away opportunities for Pacific learners to make these important cultural connections.

In terms of Mana ōrite mō te mātauranga Māori, all participants valued the inclusion of Whakairo, Raranga, and Mau Rākau. ANZAAE also noted that they are currently in the process of developing Te Ao Māori resources for Painting, Printmaking, and Sculpture.

Out of scope feedback

ANZAAE proposed a change to the NZC so that there is a Te Ao Māori Learning Area. They did not believe that Mau Rākau, Raranga, and Whakairo should be housed in existing Learning Areas. Concerns were also raised about the NCEA Change Package settings of a 50:50 internal/external assessment split, given the preferred mode of assessment in low-decile schools has been internals. Participants saw this policy setting as gravely impacting low-decile, high density schools, as well as small, rural schools, such as those from the East Coast and Northland regions.

Learning Area 3: Health and Physical Education

There were 547 responses to survey questions about the proposed subjects for the Health and Physical Education Learning Area. Table 8 shows the profile of responses. Of note is the high level of interest from the tertiary sector and non-school respondents, e.g., outdoor education providers.

	Survey access	Comments			School type			
	Health & PE	Survey: Individual	Survey: Group	Written submission	1Y Primary	2Y Secondary	3Y Tertiary	Non- school
Number of respondents	547	253	24	1	8	203	27	39

Table 8: Response statistics for the Health and Physical Education Learning Area

Key observations about Health and Physical Education

Overall, there was a high level of support for the subject proposals in this Learning Area. Comments supporting change outnumbered other comments: out of 277, 161 were in support of the proposals, 58 expressed concerns, and 45 were about content.

The graphs summarising comment categories for the Health and PE Learning Area, in Figure 16 below, show that the largest proportion of comments were about Outdoor Education. Most of these comments supported the proposal for Outdoor Education as a standalone subject.

Comments expressing concern centred mostly around content crossover between subjects and/or across different learning areas. Other concerns raised were the high costs of outdoor education, and therefore equity issues, and the perceived need for teacher support and PLD.

While out of scope for this engagement, there were many comments which included content suggestions such as allowing cross-curricular choice and emphasising practical skills.

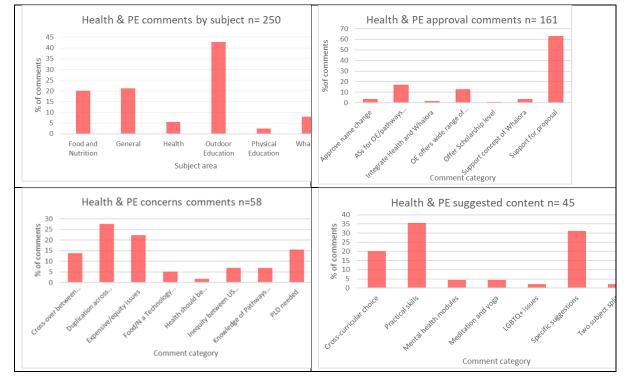
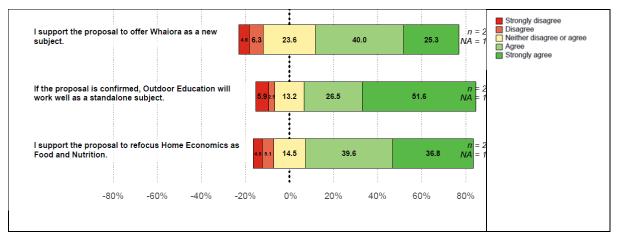


Figure 16: Frequency distributions of comments made by Health and Physical Education Learning Area respondents

Analysis of key themes

Figure 17 shows specific responses to the three questions in the Health and PE section. As noted, Outdoor Education as a standalone subject was popular, with 78.1% of respondents approving or strongly approving of the proposal and just 8.4% rejecting it. There was also a high level of support for Whaiora as a new subject, (65.3% approved or strongly approved, with 11.1% in the disapproval categories) and the suggestion to refocus Home Economics as Food and Nutrition received strong support.

Figure 17: Support for proposed Whaiora, Outdoor education and Food and Nutrition subjects in the Health and Physical Education Learning Area



Whaiora

The small number of comments made about Whaiora were largely positive, but there were some suggestions that this proposed new subject should be combined with existing subject Health. A few of these comments expressed concern around duplication of learning across the two subjects. Content suggestions for the proposed subject included mental health, meditation, LGBTQ+ issues, and sexuality education.

Outdoor Education

There was strong support for Outdoor Education as a standalone subject, with more industry/non-school submissions received than for any other subject in the *NZC*.

The main themes arising from non-school comments were about how the proposed subject would support clearer tertiary pathways. Most respondents approved of the introduction of Achievement Standards to credential Outdoor Education, and the possibility that the subject could contribute to University Entrance. A small percentage of respondents wanted to retain access to Unit Standards, however, to appeal to less academic ākonga or those wanting either a practical emphasis or workbased training. Equity issues were raised in several comments, for example:

"Having previously taught outdoor education, I know the struggle in trying to beg, borrow and steal achievement standards from other subjects just to make your subject 'legitimate'. Being a subject in its own right will make OE much more accessible not only for students, but also teachers and schools" Individual secondary

A number of comments emphasised the importance of using local contexts and mātauranga Māori within Outdoor Education.

Food and Nutrition

A significant number of comments pointed out the importance of retaining the practical elements of Food and Nutrition, while maintaining pathways to tertiary study. There was near-unanimous approval for the proposed name change. A commonly expressed concern was about the potential for duplication in content across the proposed subjects and consequent tension, for example with Technology.

Written submissions

"The beauty of Food and Nutrition is the practical application of real life concepts and skills and the potential cross-overs into many different subject areas. I would also hate to see students not be able to cook at school in levels 2-3 because of a "reduced emphasis on food preparation". These life-skills are important for all New Zealanders to have, and are not being taught at home." Individual secondary

There was one written submission - a letter of support for Outdoor Education as a subject.²

Face-to-face engagements

Canterbury West Coast Secondary Principals supported the name change of Food and Nutrition, as well as the proposal for Outdoor Education as a stand-alone subject with achievement standards.

² Feilding High School

Learning Area 4: Learning Languages

There were 402 responses to survey questions and 259 comments about the proposed subjects for Learning Languages. Table 9 shows the profile of responses. Learning Languages received a relatively low numbers of survey respondents, mostly coming from secondary school Kaiako; a significant proportion of which were from groups.

	Survey	Comments			School type			
	access							
	Learning languages	Survey: Individual	Survey: Group	Written submission	1Y Primary	2Y Secondary	3Y Tertiary	Non- school
Number of respondents	402	234	25	2	8	205	13	16

Table 9: Response statistics for the Learning Languages Learning Area

Key observations about Learning Languages

The largest proportion of the comments were general in nature, as shown in Figure 18, but, significantly, one quarter of comments expressed approval for offering ESOL as a subject. While out of scope, there was also a reasonable level of support for making Te Reo Māori a compulsory subject.

The most frequent concerns respondents raised were about Mandarin as the Chinese language subject name, issues with Comparative Language, reintroducing Latin, and resourcing.

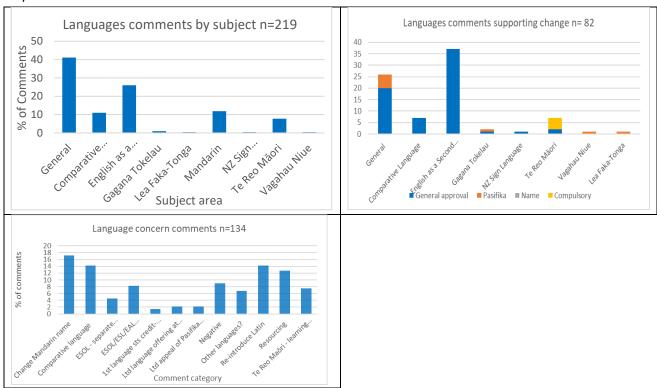


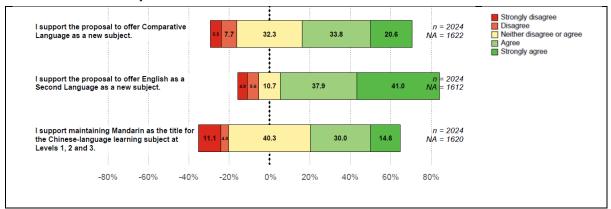
Figure 18: Frequency distributions of comments made by Learning Languages Learning Area respondents

Analysis of key themes

Figure 19 shows support for the three Learning language questions posed in the survey. Overall, there was a lot of support for offering English as a Second language as a new subject (78.9% approved or

strongly approved), and a moderate level of support for Comparative Language. Retaining Mandarin as a subject title was not a popular option.

Figure 19: Support for proposed Comparative Language and English as a second language subjects, and Mandarin as a subject title



Many comments were centred around inadequate resourcing for language learning, or limited access to languages in schools. Some pointed out that first-language students used language subjects for credit farming. Meanwhile, some respondents thought Pacific languages could 'not wait' to be introduced, but others thought there was too much emphasis on these areas. The removal of Latin as a subject was mentioned in 19 comments.

Te Reo Māori

Most comments about Te Reo Māori called for it to be made a compulsory subject in schools. A few respondents questioned the practicality of the language for all, and others thought it should be its own Learning Area to reflect commitments under Te Tiriti o Waitangi.

"the signal is definitely publicly sent that the Māori language (and therefore by default Māori culture) is literally not as important as English by lumping it together under "Other languages" Individual secondary

English as a second language

Of the 54 comments about ESOL, 48 were in favour of the proposed subject and ongoing support for the acquisition of the English language. Reasons for concern related to the subject's naming and placement in Learning Languages, given it is not technically a language and does not match language curriculum levels.

Comparative Languages

There were a range of comments about Comparative languages, mostly favourable in sentiment, but with concerns about workload and resourcing. Some queried the relationship between the subject and the NZC, and there were multiple questions around practicality including how to define students' fluency, as well as numerous comments declaring there was not enough information provided about the proposed subject.

Mandarin as title for Chinese-language learning

Some respondents did not want Mandarin as the subject name, citing inappropriateness and possible diplomatic issues. For example, one respondent thought it inappropriate to suggest that Mandarin represents all Chinese cultures. "Modern Standard Chinese" was one suggestion we received for renaming the subject.

Other language suggestions

Some respondents expressed a desire for new subjects to support Hindi, Cantonese, Tagalog, Fijian, I-Kiribati, Afrikaans, Tuvaluan, and sign language.

Face-to-face engagements

An engagement with the Subject Expert Groups (SEG) for Asian, European, and Pacific languages on the proposed Comparative Language subject found that SEG members were supportive of the subject in principle but thought it would be crucial to ensure consistency between schools in the way this subject is implemented.

Participants felt that the benefits of the proposed subject were that it would foster equity, recognise the diversity of Aotearoa New Zealand, and support identity building for other languages. It also would provide better pathways for native speakers of other languages to get NCEA credits instead of taking second-language courses or scholarship courses. In addition, the proposed subject could provide an avenue to recognise prior learning and support cross-language learning and interculturality. Participants also felt that it might provide a literacy pathway for Vocational Entrance.

Despite the support for the subject in principle, participants noted that it would be a challenge to find subject and language specialists for more obscure languages. Sourcing and training teachers will require resourcing and PLD. Participants also questioned who would deliver this course in the schools where, for example, there are up to 50 languages spoken by students

Participants questioned the practicality of delivering the course. For example, students of Comparative Language would likely remain in already small Level 3 language classes, which would add another layer of complexity for the teacher. Participants highlighted several areas that were still unclear and needed to be clarified, including which teachers and language departments would be responsible for the delivery of the subject, what the specific focus of the subject would be, and how it would be assessed and moderated.

They highlighted that it was unclear whether the proposed subject was language-focused, or translationfocused, and felt that this needed to be further clarified before the development of the proposed subject takes place. Some teachers also raised concerns about this subject potentially taking students out of their current classes: would students who were taking a Level 3 course because of their advanced language skills then be required to take comparative languages instead?

Written submissions

Three groups provided written submissions on learning languages.³ Their submissions are summarised collectively below.

There was strong support for the introduction of ESOL as an NCEA subject. Respondents thought:

- ESOL achievement standards would make a positive impact on NZ born, migrant, refugee and international students' ability to pass NCEA
- The possibility of ESOL being recognised as a UE subject would raise expectations of students and staff
- Robust quality control and high-quality assessments would be supported
- The proposed subject would help to meet current goals of the government's plans for international education

The introduction of two additional Pacific languages was welcomed and the exploration of further languages recommended (e.g., Hindi, Tagalog), especially with the availability of digital platforms. It was recommended that English for Academic Purposes (EAP) be considered as a new NCEA subject and recognised as a pathway towards tertiary studies

Concerns about the status quo for ESOL were raised, including:

• Under-resourcing, lack of PLD, teacher workload

³ Asian languages SEG, Kavanagh College, TESOLANZ

We **shape** an **education** system that delivers **equitable** and **excellent outcomes** He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**

- Lack of supporting materials such as content and assessment materials
- That the subject name should be ESL, not ESOL

Submitters wanted to know:

- If the proposed Comparative Language subject was language-focused or about translation and language literacy
- What credentialling Comparative Language students would be eligible for
- How assessment in Learning Languages would be handled.

Learning Area 5: Mathematics and Statistics

There were 355 responses to survey questions about the proposed subjects for Mathematics and Statistics. Table 10 shows the profile of responses. Of note was the number of comprehensive submissions received, high level of engagement in face-to-face hui, but less survey completion than in other Learning Areas.

	Survey	Comments			School typ	School type			
	access								
	Maths &	Survey:	Survey:	Written	1Y	2Y	3Y	Non-	
	Stats	Individual	Group	submission	Primary	Secondary	Tertiary	school	
	Learning								
	Area								
Number of	355	213	20	4	18	151	6	16	
respondents									

Table 10: Response statistics for the Mathematics and Statistics Learning Area

Key observations about Mathematics and Statistics

The graphs in Figure 20 show the level of support in respondent survey comments for the subject proposals in this Learning Area. There were 24 comments expressing approval and 84 comments in disagreement or expressing concerns about the proposed subjects. The largest proportion of the comments were about multiple subjects and Applied Mathematics. Approval comments were mostly generally agreeing with, or about benefits in pathways as a result of the proposed new subject, Applied Mathematics.

Respondents frequently made suggestions about specific content. A range of concerns were raised and these are expanded on in the next section.

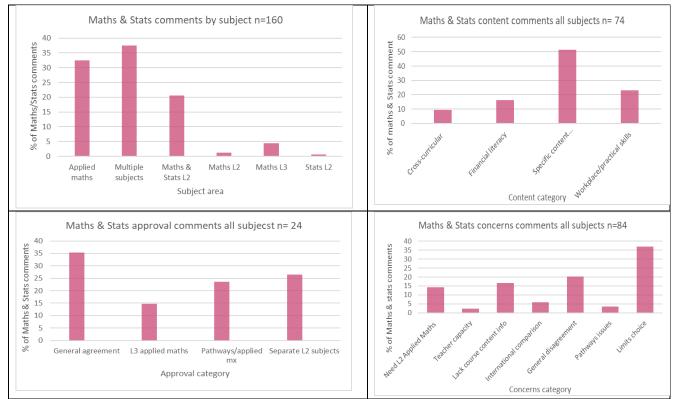
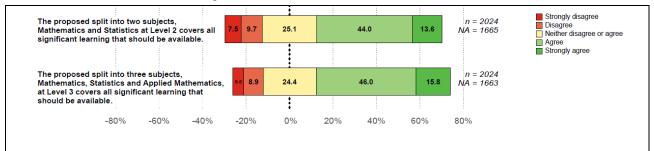


Figure 20: Frequency distributions showing analysis of comments about the proposed Mathematics and Statistics subjects

Analysis of key themes

Figure 21 shows the level of support for the two Mathematics and Statistics questions posed in the survey. 57.6% of those responding to the Mathematics and Statistics part of the survey approved or strongly approved of the 2-subject option at Level 2 (17.2% disagree or strongly disagree) and 61.8% approved or strongly approved of the 3-subject option at Level 3 (13.9% disagree or strongly disagree).

Figure 21: Support for proposal to offer two subjects at Level 2 and three subjects at Level 3 in the Mathematics and Statistics Learning Area



Applied Mathematics

There was general support for the introduction of Applied Mathematics at Level 3, and a range of views emerged including:

- Some respondents saw Applied Mathematics as supporting practical skills, leading to trades etc., while others thought the proposed subject had an emphasis on computer-based mathematics and a pathway into university computer sciences.
- The subject encourages cross-curricular learning
- There should be links between Applied Mathematics at school and how it operates at university e.g., algebra and calculus are more useful than linear programming and networks as preuniversity background.
- Subject would need to include aspects of Calculus required for relevant tertiary courses.
- Financial literacy was mentioned in a number of submissions as desirable content.
- Some wanted Applied Mathematics at Level 2 (or even Level 1) to focus on workplace skills.

Mathematics and Statistics at Level 2

There were opposing views between support for splitting the subject at Level 2, and preference for a single Level 2 subject. Few reasons were given in comments supporting the split (4), but a substantial range of reasons were given by those respondents supporting retention of a single subject (13), as follows:

- Splitting the subject:
 - \circ $\,$ allows for courses better suited to student needs but may be difficult for schools to manage $\,$
 - creates specialisation too early the goal of the new changes is meant to be avoiding early specialisation
 - o would lead to gaps in students' mathematical knowledge statistics alone is insufficient
 - limits ākonga pathways if wrong subject selection is made at Level 2 and ākonga at end of Year 11 seldom know what might be needed for a particular career
 - o eliminates present flexibility within courses
- One subject:
 - would help ākonga pursuing math/science centric L2 programme fitting in an extra subject
 - \circ reduces breadth of cover
 - students should continue to develop algebraic thinking at Level 2.

Mathematics Level 3

There was general agreement with this proposed subject, but a few concerns were raised including:

- A possible loss of flexibility as appropriate courses can already be constructed from available standards
- Questioning whether 4 standards would provide opportunity to specialise
- Ensuring calculus standards are relevant to all tertiary requirements
- Teacher capacity where a school department has only one strength (either statistics or mathematics).

Written submissions

There were four written submissions,⁴ which are summarised below. Submitters expressed a high level of support for the proposal to offer two subjects from Level 2: Mathematics and Statistics. However, some concerns about the proposal were also raised:

Pathways

- Ākonga need to cover both areas to approach either Mathematics or Statistics at Level 3.
- Splitting at Level 2 could mean progression in Statistics without necessary core algebraic and graphing skills
- If only one course is completed at Level 2, ākonga may not be prepared to do Applied Mathematics at Level 3
- A single subject at Level 2 would keep options open for ākonga at Level 3 and beyond
- Two mathematics subjects at Level 2 makes it increasingly difficult for mathematics-oriented ākonga to include an arts subject in their programme.

Flexibility

- Most submissions included some reference to the current flexibility possible with the existing range of standards
- Splitting means two different subjects and possibly more work for ākonga
- 8 standards across two subjects would enable mixing and matching to make hybrid courses favoured by a number of respondents enables design of course to suit cohort, to ensure preparation for any Level 3 option.
- Endorsement should still be available for a hybrid course
- Teachers enjoy teaching a diverse course

Structural issues

- Small schools with only one class at Level 2 would find it impossible to cater for Level 3 choices
- Specialisation at Level 2 can lead to the idea that statistics is 'easier' which leads to issues at Level 3.

"The depth of content available in Level 2 statistics makes it difficult to create consistently engaging learning experiences, which is usually offset by including some Level 2 mathematics standards. The prospect of structuring an entire year of studying only Level 2 statistics in an engaging manner is daunting. I think this change will result in frustrated teachers, a weaker mathematics education for students engaging with Level 2, and reduce interest in taking Level 2 mathematics for students who find mathematics a bit difficult."

Submitters were also supportive of an Applied Mathematics subject at Level 3. The proposed subject was seen by some as 'more engaging for less mathematically-minded students.' Other themes included:

- reference to the current flexibility possible with the existing range of standards
- difficulty for small schools to offer three mathematics subjects pick and choose essential
- whether Applied Mathematics would elements of calculus and statistics
- that the proposed subject would need to involve algebra and calculus to some degree

We **shape** an **education** system that delivers **equitable** and **excellent outcomes** He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**

- whether a subject involving 'odds and ends' (e.g. Linear Programming etc) would have any value for tertiary pathways
- that the proposed subject should be introduced from Level 2 to ensure appropriate progression to Level 3
- that some of content suggested for Applied Mathematics (e.g. Linear Programming) would still be needed in other mathematics subjects.

'Applied Maths is really important in today's world. Logic, numerical analysis, suggestions above all good but how about mechanics? This new App Mat subject has strong connections to technology and logic and with mechanics to physics. It could be a very exciting option for many students. Spreadsheet design, simulation design and modelling (Covid is a good example of this)

While broadly supportive, submitters did raise some concerns about the three-subject option:

- Applied Mathematics will appeal to more students than Statistics
- A Data Science subject is needed
- Would be better to have two subjects with a wide variety of standards in order to create courses to suit ākonga needs
- 'The current structure is flexible and robust. Allow schools to design their own math courses from a list of standards.'

Face-to-face engagements

Canterbury West Coast Secondary Principals expressed support for adding Applied Mathematics as a new subject.

Learning Area 6: Science

There were 410 responses to survey questions about the proposed subjects for the Science Learning Area. Table 11 shows the profile of responses.

	Survey	Comments			School type			
	access							
	Science	Survey:	Survey:	Written	1Y	2Y	3Y	Non-
	Learning	Individual	Group	submissio	Primary	Secondary	Tertiary	school
	Area			n				
Number of respondents	410	212	14	0	6	179	11	30

Table 11: Response statistics for the Science Learning Area

Key observations about Science

The graphs in Figure 22 show the level of support in respondent survey comments for the subject proposals in this Learning Area. Comments of approval were mostly about general agreement with the proposed subjects, Science as a new subject at Levels 2 and 3, keeping Agricultural and Horticultural Science as one subject, although this was not unanimous.

Respondents frequently made suggestions about specific content e.g., emphasising practical skills in relation to Environmental Science and splitting Agricultural and Horticultural Science. A range of concerns were raised, and these are expanded on in the next section.

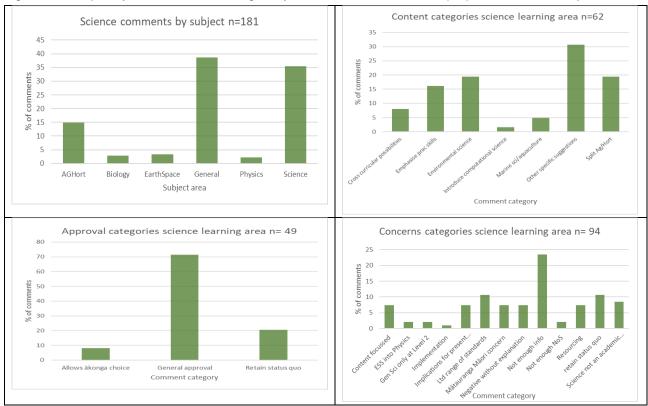


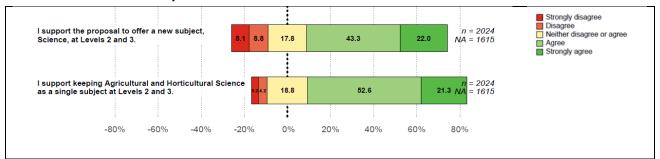
Figure 22: Frequency distributions showing analysis of comments about the proposed Science subjects

Analysis of key themes

Figure 21 shows the level of support for the two Science questions posed in the survey. Overall, there was a high level of support for the subject proposals in this Learning Area. 65.3% of those responding to the Science part of the survey approved or strongly approved of the proposal to offer Science as a subject at Levels 2 and 3 (16.9% disagree or strongly disagree) and 73.9 % approved or strongly

approved of keeping Agricultural and Horticultural Science as one subject (7.4 % disagree or strongly disagree).

Figure 23: Support for proposal to offer a Science subject at Level 2 and 3 and status quo for Agriculture and Horticulture science subject



General

- Many submissions commented on the lack of detail making response difficult
- Teacher resourcing was frequently raised as an issue
- There was a range of additional subject or content suggestions, e.g., marine science, aquaculture, introductory computational science, environmental science, traditional Māori scientific thought and process, scientific thought and process, and science communication
- Offering Science as a subject would enable ākonga choice
- There were some requests for inclusion of Human Biology
- Assurance was sought that Physics pre-requisites for courses such as Engineering will be offered.

Concerns and questions raised

- A range of responses centred around the contention that Science would not constitute an academic pathway/would become 'science for dummies'
- Assurance was sought around exclusions between General Science and specialties
- Will the Nature of Science be ignored in specialist subjects if it is covered in General Science?
- What are the implications for existing composite courses?
- What is the role of mātauranga Māori?
- An opportunity to construct a course that enables entry to certain career paths, e.g., nursing.

Agricultural and Horticultural Science

- Eight comments favoured splitting the subject into two reasons: different content areas; significance of these areas for NZ economy
- Five comments were in favour of status quo and teacher resourcing was a major issue. Specialisation was thought to be better at tertiary level
- Best subject for emphasis on practical skills.

Learning Area 7: Social Sciences

There were 626 responses to survey questions about the proposed subjects for the Social Sciences Learning Area. Table 12 shows the profile of responses. Of particular note is the relatively high proportion of group, tertiary, and non-school respondents. This reflects the considerable input from the tourism and tertiary sectors, both in the form of survey responses and written submissions.

	Survey access	Comments			School type			
	Social Sciences	Survey: Individual	Survey: Group	Written submission	1Y Primary	2Y Secondary	3Y Tertiary	Non- school
Number of respondents	626	307	26	7	9	238	38	19

Table 12: Response statistics for the Social Science Learning Area

Key observations about Social Sciences

Overall, there was general approval for Māori Studies, Pacific Studies, Media Studies, Tourism, Agribusiness, and Environment and Societies. Figure 24 shows frequency distributions of comments made by respondents in the Social Science part of the survey. The first graph shows that key themes were about Tourism, large comments exploring a range of subjects and Commerce. Respondents frequently made content suggestions, and there were multiple comments about what the content should be for refocused subjects Environment and Societies, and People and Societies.

Tourism comments were by far the most frequent and included many positive and negative perspectives on the subject. There was also a large area of concern about Commerce, including out of scope comments about NCEA Level 1 subject decisions. A range of other concerns were raised, and these are expanded on in the next section

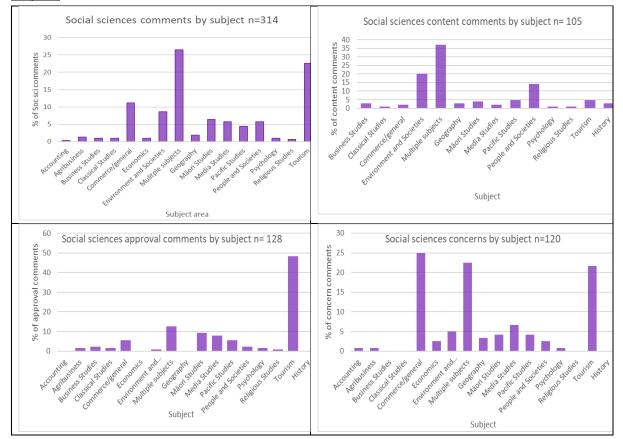


Figure 24: Frequency distributions showing analysis of comments about the proposed Social Science <u>subjects</u>

We **shape** an **education** system that delivers **equitable** and **excellent outcomes** He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**

Analysis of key themes

There was strong support for the proposal to offer Māori Studies and Pacific studies as new subjects. (79.4%, and 74.6% agree or strongly agree respectively).

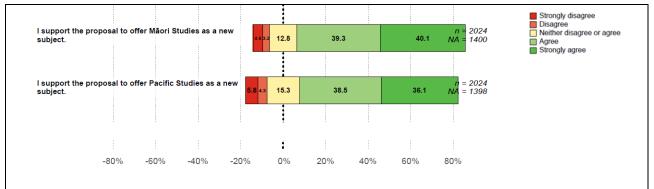


Figure 25: Support for proposal to offer Māori Studies and Pacific Studies as new subjects

Respondent comments about Māori Studies included:

- It would encourage normalisation of te ao Māori (and this should be name of the subject)
- Treaty obligations apply across all subjects
- It should be a Learning Area in its own under Mātauranga Māori and Te Reo Māori me ona Tikanga.

Respondent comments about Pacific Studies included:

- The subject requires a University Entrance pathway
- Pacific Studies might fit better in the Learning Languages Area
- The subject is a lesser priority than Māori Studies to encourage a focus on biculturalism

Figure 26 shows the level of support for new subject Tourism, and refocused subjects Environment and Societies, and People and Societies. The level of approval is consistent with comments made by respondents. There was near unanimous support for the proposal to introduce Tourism as a new subject, and little concern about the refocus of the two Environment and Societies, and People and Societies subjects.

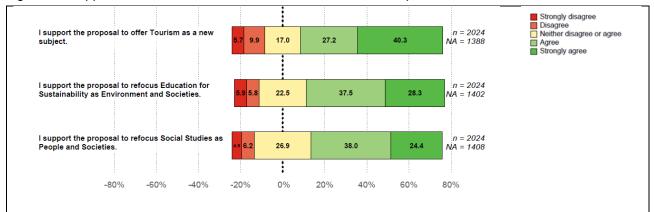


Figure 26: Support for Tourism, Environment and Societies and People and Societies

Introducing Tourism as an NCEA subject was generally agreed to support tertiary pathways, to remove the disconnect between Tourism in schools and expectations of tertiary providers, and to be of importance to the Tourism industry in New Zealand.

"The tourism sector for too long has been viewed by many as the 'dumb subject'. This is in reality not the case when operating in the tourism sector. As a company we seek to employ and need to employ big thinkers". AJ Hackett Bungy NZ AJ Hacket Bungy NZ "The addition of the new subjects is Social Sciences is a positive step and will empower our ākonga. I am particularly happy to see these three subjects introduced as NCEA subjects as it will give validity to the subjects and students learning experiences ". Individual Secondary Teacher

Geography, Environment and Societies, and People and Societies

Several respondents saw Environment and Societies as part of Geography. Supporting it as a standalone subject was felt to dilute or undermine Geography. To avoid this, it was suggested that extra standards instead be offered within Geography.

Several respondents were concerned about the potential of losing the focus on sustainability by renaming Education for Sustainability as Environment and Societies and shifting the emphasis to people without mention of the role of technology in sustainability.

Around half of the respondents who commented about the proposal to refocus Social Studies as People and Societies suggested a name change – mostly to Sociology; one to Humanities. A few other respondents preferred to retain the current name Social Studies.

Out of scope

Commerce (including Accounting, Economics, Agribusiness, Business Studies) raised 43 comments including:

- Commerce subjects should be in a separate Learning Area
- Effects of Level 1 Consolidation on Level 2 Achievement Standards
- Young Enterprise should be encouraged
- The role of financial literacy

Written submissions

Four written submissions were received for the Social Sciences.⁵ General points raised by submitters included:

- Approval for Media Studies being retained at Levels 2 and 3
- Support for new proposed subjects Māori Studies and Pacific Studies
- Uncertainty about Commerce remaining in the Social Sciences

The proposal to refocus **Social Studies** as **People and Societies** raised some useful debate. Themes included:

- Implications of renaming subject
 - People and Societies does not link clearly to the established bodies of knowledge from which the subject content derives and does not align with the language used in tertiary settings.
 - Should be called 'Social, Cultural and Political Studies' to foreground culture as a significant part of the course

We **shape** an **education** system that delivers **equitable** and **excellent outcomes** He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**

⁵ Southland Girls College, Tourism Educators Forum, Tourism Industry Aotearoa, and Association of Social Anthropologists of Aotearoa NZ.

- Scope of subject:
 - o Should include Sociology, Political Science, Sociocultural Anthropology
 - o Potential crossovers with Tourism, Environment and Societies, and Geography
 - o Include study of power (how it affects people and societies), globalisation, migration

There was strong support for the introduction of **Tourism**:

- Addresses negative perceptions of tourism education as being a drop-out subject
- Introduces a Social Science subject that will engage ākonga
- Offers exciting opportunities to engage in contemporary debate and developments in the world
 of work
- Enables transitions to further study and employment; explore roles as global citizens
- Industry/education partnerships are a natural fit
- Provides clearer pathways to further education and employment
- Several NZ universities offer world-ranked courses in Tourism Management, yet ākonga who arrive at university have often been discouraged from Tourism study at secondary level.
- Tourism conceptually distinct from other NCEA subjects
- Tourism roles require critical, innovative, analytical, and creative thinking behind the scenes as well as front-line
- Comments about cultural tourism's significance.

Out of scope

Some submitters also outlined issues for Levels 2 and 3 arising from Level 1 changes. These included:

- Uncertainty about how Levels 1-3 fit together until a subject matrix is introduced
- The current Level 1 Commerce not preparing students for Level 2 Accounting or Agribusiness
- Concerns about implementation timeline and lack of resourcing
- Individual schools feeling lack of input; information days where subject experts and teachers can meet regarding standards were suggested.

Face-to-face engagements

The Ministry hosted targeted talanoa with Pacific Communities to ensure that there was robust and sufficient feedback on the proposal to introduce Pacific Studies as an Achievement Standard in NCEA Levels 2-3. Four talanoa were hosted with approximately 40 participants including current Pacific Studies teachers, university Pacific Studies academics, parents, and community members and leaders, as well as students who had either done Pacific Studies in secondary school or were currently majoring in Pacific Studies at university.

Participants were overwhelmingly in favour of the proposal to offer Pacific Studies as an NCEA subject. They felt that the proposal for Pacific Studies as an NCEA Achievement Standard was long overdue, noting that Pacific learners will soon make up a majority of the schooling population.

Pacific students highlighted the importance of Pacific Studies in affirming identity and making cultural connections through learning about the Pacific in a decolonial, Pacific way. This would result in life-long learning and encourage Pacific young people to question, debate and engage in important discussions that impact them and their communities. Pacific young people, teachers, parents and community members that provided feedback believed that Pacific Studies should be a multi-disciplinary subject that will strengthen pathway opportunities for Pacific learners into further employment, training or education.

While participants were supportive of the proposal, concerns were raised around how, when, and who the subject would be developed by. Generally, participants felt Pacific Studies should be made available as soon as possible but also noted that it was critical that the development of the subject be done in a culturally safe and sustaining way. Pacific voices should guide the process and in collaboration with Pacific families and communities.

It was also emphasised that if Pacific Studies were to be offered as an Achievement Standard subject, significant PLD would be required to support the appropriate delivery of the subject by practitioners, specifically those who are not Pacific. This is important in order to uphold the mana of the subject. Pacific participants felt that it is important that the proposed Pacific Studies subject does not homogenise Pacific peoples, and instead covers not only the uniqueness of the Pacific region but also the diversity of the peoples, cultures, and societies of which it is composed.

In a separate face-to-face engagement with the Canterbury West Coast Secondary Principals, participants questioned whether the Social Studies Learning Area was the appropriate place for commerce subjects and suggested the possibility of these having their own Learning Area. Participants were supportive of retaining Media Studies at Levels 2 and 3, as well as the introduction of Māori Studies and Pacific Studies.

Most participants supported Tourism having achievement standards, however some did note that Tourism teachers may want to retain industry-owned unit standards. A couple of participants suggested the repositioning of Social Studies as Sociology.

Learning Area 8: Technology

There were 548 responses to survey questions about the proposed subjects for the Technology Learning Area. Table 13 shows the profile of responses. The substantial number of responses reflects both the learning area's complexity and the varied opinions on how technology learning should be divided up into subjects.

	Survey access	Comments			School type			
	Technology Learning Area	Survey: Individual	Survey: Group	Written submission	1Y Primary	2Y Secondary	3Y Tertiary	Non- school
Number of respondents	548	366	27	0	9	337	17	3

Table 13: Response statistics for the Technology Learning Area

Key observations about Technology

Overall, comments received were comprehensive, varied, and deeply considered. Comments about specific subjects are uniformly spread across the subjects as shown in Figure 27. Respondents who made comments showed a distinct preference for the 5-subject proposal over the 3-subject option, which was consistent with the responses to survey questions about the 3- or 5-subject options, see Figure 28.

Figure 27: Frequency distributions showing analysis of comments about the proposed Technology subjects

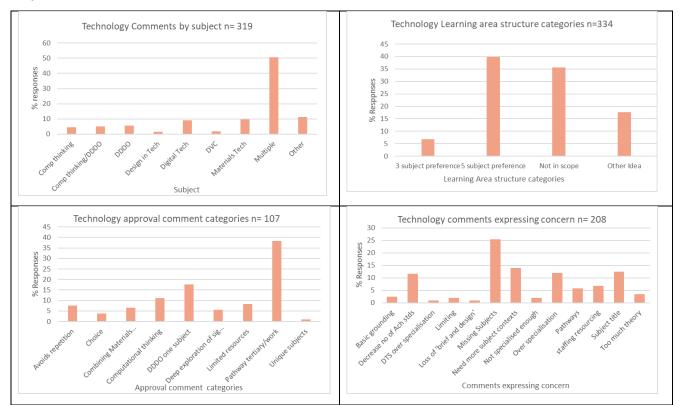
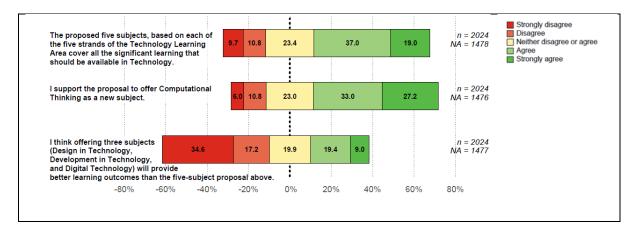


Figure 28: A summary of responses to Technology Learning Area questions



Analysis of key themes

Key comments in favour of or against the **3-subject and 5-subject options** are summarised below:

1. Three-subject support:

- Is broad, supports ākonga choice and allows flexibility to design rich learning programmes
- Allows for contextual understanding rather than fragmentation
- Treats Materials Technology and Processing Technology as being on a continuum
- Keeps Computational Thinking and DDDO together (both are needed at university)
- Separation of subjects feels like splitting up different stages of Technology.

2. Three-subject concerns:

- Is restrictive; it would impact on what schools can offer and could result in job losses
- Splits design from development in Technology
- Would discourage students from taking Technology subjects
- Reduces learning opportunities for Māori and Pacific learners
- Over-simplifies Technology skill development would be lost.

3. Five-subject support:

- Allows for greater specialisation and enhanced choice and pathways for ākonga
- Allows ākonga to select several Technology subjects
- Specialised subjects are more manageable for teachers
- Preference for Food and hard materials to be stand-alone subjects
- Design and DDDO and Computational Thinking are different subjects
- Allows all technology subjects to incorporate designing and developing outcomes.

4. Five-subject concerns:

- Doubles up on learning
- More subjects will increase staffing challenges (Technology teachers are hard to find)
- Forces small/medium sized schools to choose between Technology subjects.

Additional subjects (robotics and electronics) or different subject combinations were suggested by some respondents. A four-subject option was proposed, which combined Designing Digital Outcomes with Computational Thinking, alongside DVC, Materials, and Processing Technology.

Alternative subject names were suggested by some respondents. For example, Computer Science rather than Computational Thinking, Designing and Developing Digital Solutions or Technologies rather than Outcomes, and Food Technology rather than Processing Technology.

There were also a range of general concerns raised in the Technology Learning Area. These included ensuring that practical learning such as coding was supported to enhance ākonga pathways and enable ākonga to deepen their learning in specialist areas while also making connections across their other subjects.

"Given the careers and world scene I think it is really important to know that DVC, digital solutions and computational thinking all have important separate roles to play, both as generic subjects to support wider learning and careers (e.g., medical science using digital models/processing data/developing solutions) as well as there being huge specialist areas in these disciplines, e.g., product designers, programmers, graphic designers." Individual composite school "Computational Thinking as a separate subject is essential! This would not fill well into design/development. Materials and Processing need to be separate, otherwise it is not possible for a student to study 2 types of technology (e.g., textiles technology and food)" -Individual secondary school

Including an additional Electronics Technology

Face-to-face engagements

Canterbury West Coast Secondary Principals believed that Food Technology and Hard Materials should be separate standalone subjects. It was also noted that, to give choice and allow for specialisation, five subjects are preferred over three.

Feedback from Technology SEGs and Technology Subject Associations found that participants broadly preferred having the five-subject option. However, it was raised that the subjects offered should allow students to:

- develop skills in emerging technologies and practices
- do projects that cut across Technological Areas
- develop broad and transferable skills
- participate in multiple Technology courses within a school.

Participants believed the proposed subjects would allow schools to offer rich learning programmes that would help ākonga prepare for life beyond school. However, it was noted that the benefits of the proposed subjects would be dependent on schools having sufficient standards available to teach a broad range of courses and programmes. The suite of subjects would also need to allow for emerging technologies and practices, and for students to do projects that cut across Technological Areas.

An inconsistent approach (proposing a new General Science subject while removing Generic Technology) was noted with the suggestion this could be rectified by offering equivalent subjects which focussed on the Nature of Science and Nature of Technology strands respectively.

The need for a curriculum and suite of standards that is future focussed, linked to subjects outside of Technology, inclusive of mātauranga Māori and supported by PLD was also emphasised.