
Hune 2025

Ko ngā aratohu mō te mahinga pai rawa o te atamai hangahanga whakaputa i roto i te rangahau i Aotearoa

Te Apārangi

EXPLORE | DISCOVER | SHARE



Ngā Ihirangi

1.	Tirohanga Whānui	2
2.	Kupu whakataki	3
2.1	Horopaki rangahau i Aotearoa	3
2.2	He aha te GenAI?	4
2.3	GenAI me te mātauranga Māori	4
3.	Ngā Aratohu	4
3.1	Ngā mātāpono	4
	Ngā tūtohu mō te mahinga pai rawa atu o te GenAI i roto i te rangahau i Aotearoa	5
4.	He urupare āu mō ēnei aratohu?	9
5.	Ētahi atu pou tarāwaho, rauemi hoki	9
6.	Tohutoro	11
	Tāpirihanga 1: Ngā Whakamāramatanga	13
	Tāpirihanga 2: Ngā pou tarāwaho ā-ture me ngā aratohu e hāngai ana ki te GenAI	15

1. Tirohanga Whānui

1.1 Te Apārangi

[Ko Te Apārangi](#) he rōpū motuhake, monihua-kore e whakatairanga ana, e whakarato ana hoki i te rāngai rangahau o Aotearoa.

Ko tētahi tohutohu a te pāremata ki Te Apārangi he whakarato i te tūāhanga me ētahi atu tautoko mō ngā matea ngaio me te whakawhanaketanga o ngā kairangahau o te pūtaiao, te hangarau, me te akoranga aronui. Kei roto i tēnei ko [te ārahi mahinga rangahau](#).

1.2 Rōpū tohutohu

I whakawhanaketia ēnei aratohu me te āwhina a:

- Ahorangi Ali Knott, Te Whare Wānanga o Te Herenga Waka
- Ahorangi Tūhono Te Taka Keegan, Te Whare Wānanga o Waikato
- Ahorangi Giselle Byrnes, Te Whare Wānanga o Te Kunenga ki Pūrehuroa
- Dr Simon McCallum, Te Whare Wānanga o Te Herenga Waka
- Ahorangi Tūhono Mahsa Mohaghegh, te Wānanga Aronui o Tāmaki Makau Rau

E mihi ana mātou ki Ahorangi Tūhono Mele Taumoepeau (THW–VUW) me Lynell Tuffery Huria (Kāhui Legal). He mihi nui ki te rōpū o ngā kairangahau e 24 i tae atu ki tētahi awheawhe kia matapaki me te arotake i ngā aratohu.

1.3 Te take o ēnei aratohu

Ko tā mātou whāinga kia aro atu ngā kairangahau i Aotearoa ki ēnei Aratohu hei āwhina te whakatere i te horanuku e kuneroa wawe ana. Mā reira, e taea ai te whakawhirinaki ki te aronga hou me ngā painga mārama e tāpaetia ana e te atamai hangahanga whakaputa (GenAI), me te mōhio tonu ki ngā tūraru me te hiahia kia whakatūtūru i te matatika o te whakamahinga me te whakahaere a te tangata.

He mea marohi ēnei aratohu, ā, ko te kawatau ka panoni te tangata takitahi me ngā rōpū i ēnei aratohu kia tika mā ā rātou ake take, horopaki anō hoki.

1.4 Mā wā ēnei aratohu?

Mā ngā kairangahau katoa i Aotearoa e whakamahi ana i ngā taputapu GenAI, e whakaaro ana rānei kia whakamahia aua taputapu. Kei roto ko ngā wānanga tauwiwi, ngā whare wānanga, ngā Hinonga Rangahau Karauna, ngā rōpū rangahau Māori, me ngā rōpū rangahau Moana-nui-a-Kiwa, tae atu ki ngā kairangahau nō te ahumahi me ngā kairangahau motuhake.

1.5 Korahi

Ko te aronga o tēnei putanga o ngā aratohu ko ngā kaikawe GenAI e whakamahia ana kia waihanga i te kuputuhi, whakaahua, ororongo, ataata rānei.

Kei tua atu i te korahi ko [ngā tauira e tirohia ana, kāore i te tirohia, me te akoranga taunaki](#) (1). Ko te whakamahi o ngā taputapu GenAI me ngā pūhara i te mātauranga (te whakaako me te ako) me te

whakamahia ōkawahia o te GenAI e ngā hinonga rangahau me ngā kaituku pūtea rangahau, tae atu ki ngā whakamahinga ā-pāpori whānui o tēnei hangarau.

2. Kupu whakataki

Ko te atamai hangahanga whakaputa (GenAI) tētahi o ngā taputapu ā-hangarau e piki ana te whakamahia e ngā kairangahau. He maha rawa ngā kōwhiringa kia ahu whakamua, kia whakaterere hoki i te tūhuratanga me te tere o te rangahau, e taurima ana i ngā whakaaro hou me te whakaputa i te aronga hou. Mā ngā taputapu GenAI e whakaitia te roa o te mahi, ka whakapiki i te whāomo me te auaha, ka whakapai ake te tomopai (tirohia (2)), ā, ka whakangāwari i te tātari raraunga me te whakahaere (3,4). Heoi anō, kei roto i ēnei taputapu ngā tūraru ā-matatika ki te ngākau pono ā-rangahau¹. I Aotearoa, kei roto i ēnei tūraru ko te tūraru kia kaua e tutuki ngā herenga i raro i te Tiriti o Waitangi me te rangatiratanga raraunga Māori. He tūraru hoki pea ki te whakatairanga i te rangatiratanga raraunga o Te Moana-nui-a-Kiwa.

E marohi ana ēnei aratohu i ngā mātāpono me ngā tūtohu hei tautoko i te mahinga pai rawa atu o te GenAI i roto i te rangahau. Ka noho te aronga ki te Tiriti o Waitangi, te tōkeke, te tautika o te tomo, me te whai whakaarotanga ki ngā tirohanga me ngā kaimahi kanorau hei tāpare mō ēnei mātāpono. Ko te whāinga o ngā aratohu nei hei whakarato i ngā māramatanga aronga hou, motuhake hoki pea o te whakamahinga o te GenAI i roto i te horopaki rangahau e pāhekoheko ana ngā pūnaha mātauranga kanorau.

Kia mōhio mai, nā runga anō i te tere o te panoni o te hangarau GenAI ko ngā aratohu nei he mea panoni, engari he tika i te wā i tāngia ai (Hune 2025).

2.1 Horopaki rangahau i Aotearoa

E hāngai ana ēnei aratohu ki te horanuku rangahau motuhake o Aotearoa, e noho nei tō tātau horopaki ahurea, hītori motuhake hoki – tae atu ki te noho hei wāhanga o te hāpori rangahau ā-ao.

Ka aro atu te rangahau i Aotearoa ki ngā herenga o te Tiriti o Waitangi (7) me ngā [tikanga](#) o te ao Māori. Te whakahaumaru i ngā [taonga Māori](#), kei roto ko [te reo Māori](#), [te mātauranga Māori](#), me [te raraunga Māori](#), he kaupapa hira (8). [Ko te Kaupapa Māori rangahau](#) e ārahina ana e te tikanga, e arotahi ana ki te hāpori (9). He āhua ōrite ngā ahunga me ngā whakaarotau o te rangahau Moana-nui-a-Kiwa, engari he rerekē tonu (10).

Nā runga anō i te Tiriti o Waitangi hei tūāpapa mō Aotearoa, tae atu ki te wāhi e tū ai te motu nei me te hononga ki Te Moana-nui-a-Kiwa, ka puta mai te rangahau e urupare nei i te whānuitanga o ngā raruraru, e auaha ana hoki i ngā mātauranga hou hoki, waihoki ka noho te tangata ki te iho, ā, ka inea te tuku hua ki ngā hāpori, me te whakatairanga hoki i aua hāpori.

¹ He nui ngā tepenga, ngā tūraru, ngā wero, me ngā tūoho e pā ana ki ngā mōhiotanga ina whakamahia ai te GenAI i roto i te rangahau. Kei roto i ēnei ko te tika, te kōrero horihori, te tinihanga, te kohikohi raraunga, te mōtika rangatiratanga, te mana o te kaituhi, te whakaatu mana kaituhi, te papanga, te puatatanga, ngā matatika, te tōkeke, te haukume, te toihara, te whakahaere a te kaimahi, te matatapu, te tūmataiti me te haumaru(5,6).

2.2 He aha te GenAI?

Ko te **atamai hangahanga (AI)** e kōrero ana mō ngā pūrere e papatonoa kia tārua i te atamai tangata. E whakamahia ana te AI hei tātari i te raraunga kia mōhio ki ngā tauira me te tuku i ngā matapae nā runga anō i aua tauira.

Ko te Atamai Hangahanga Whakaputa (GenAI) he huinga iti o te AI. Hei urupare i ngā tohutohu a te tangata, te 'whāngai kupu' rānei, ka taea e te GenAI te waihanga i ngā ihirangi hou, pērā i te tuhinga, ngā whakaahua, te ataata, te oro, me te waehere. Ka pērā mā te whakaakohia ki ngā kohikohinga tino nui o ngā ihirangi onāiane – e waruhia ai i te ipurangi me ētahi atu mātāpuna. He kaupapa tino hou ngā hangarau GenAI mō te tino kōunga o te ihirangi: he uaua kia mōhio ki te rerekētanga o tēnei me te ihirangi nā te tangata i hanga.

2.3 GenAI me te mātauranga Māori

He rangapū i waenga i te iwi Māori me te Karauna te Tiriti o Waitangi, ā, he aronga ki te [tino rangatiratanga](#) me ngā herenga ki te [taonga Māori](#).

E āwangawangahia ana ngā taputapu GenAI nā te mea ka aro atu ki te [mātauranga Māori](#) – kei roto i tēnei taonga [te reo Māori](#) me [te raraunga Māori](#) – ahakoa kāore i whakaaetia e ngāi Māori, ā, me te karo i ngā herenga i raro i te Tiriti o Waitangi me te ware i ngā [mātāpono rangahau](#), [pērā i te tika me te mana](#).

Hei tauira, ahakoa ka taea e te nuinga o ngā taputapu GenAI onāiane e whakaputa reo Māori ana te tuku urupare ānō nei nō te tirohanga ao Māori, e ngaro ana i te nuinga te mata hunahuna ā-ahurea, ā-reo hoki, ā-reo ā-iwi, me ngā tirohanga ā-iwi motuhake. E whakamanahia ana aua taputapu e te whiunga o ngā mātāpono o te rangatiratanga raraunga Māori ki rahaki (11). Ina whakamahi ana te kairangahau i te GenAI ki te whakaputa i te reo Māori, i te raraunga Māori rānei me whai whakaaro ki ana herenga me te tepenga o ngā taputapu GenAI.

3. Ngā Aratohu

E tuku ana ēnei aratohu i ngā tūtohu mō te mahinga pai rawa atu o te GenAI i roto i te rangahau i Aotearoa. Ka aro atu ki ngā *Living Guidelines on the Responsible Use of Generative AI in Research* (3)² o te European Commission me tā UNESCO *Guidance for Generative AI in Education and Research* ³(12), ā, kua aro hoki ki ngā whakaaro onāiane i ngā whare wānanga o Aotearoa (13) e pā ana ki te haepapa me te matatika o te whakamahi i te GenAI.

3.1 Ngā mātāpono

3.1.1 Te whakaute i ngā aronga me ngā tirohanga o ngāi Māori pērā i whakahuatia ai i roto i te Tiriti o Waitangi (7).

² CC-BY 4.0 (1)

³ CC-BY-SA 3.0 IGO

I raro i te atikara tuarua o te Tiriti o Waitangi e mea ana kei ngāi Māori te 'tino rangatiratanga' ki ō rātou 'taonga katoa' (7). I raro i tēnei atikara me waiho ki ngāi Māori te whakahaere o ngā taonga Māori, tae atu ki te mātauranga Māori, te reo Māori, me te raraunga Māori.

E hiahiatia ana kia whai whakaaro tonu ki te Tiriti o Waitangi me ana mātāpono ina kuneroa ana te GenAI (14).

3.1.2 Whāia ngā mātāpono matua o te ngākau pono ā-rangahau

Pērā i te whakahuatanga i roto i [the Research Charter for Aotearoa New Zealand](#) (15) me [the Code of Professional Standards and Ethics in Science, Technology, and the Humanities](#) (16)⁴. Mō ngā aratohu Moana-nui-a-Kiwa, tirohia (17).

Ngā tūtohu mō te mahinga pai rawa atu o te GenAI i roto i te rangahau i Aotearoa

Kia haepapa, kia matatika hoki te whakamahi o te GenAI i roto i te rangahau, me pēnei ngā kairangahau:

3.2.1 Kia mōhio, kia whakaute hoki ko ngā raraunga Māori, tae atu ki te mātauranga Māori me te reo Māori, he taonga. Kua riro i ngāi Māori ngā matatika i raro i te Tiriti o Waitangi ki te whakahaeretanga mana urungi me te whakahaumarū.

- Me whai ngā whakataunga a ngā kairangahau e pā ana ki te GenAI ki ngā mātāpono o [te rangatiratanga raraunga Māori](#) (11).
- Ko te kairangahau e whakamahi ana i ngā taputapu GenAI e whakauruhia ana te raraunga Māori ka noho haepapa kia whakatūturu kāore e riro i tētahi taputapu GenAI te rangatiratanga o te raraunga Māori, tae atu ki te mātauranga Māori me te reo Māori (13).
- Ina whakaaro ana ngā kairangahau kia whakaarumoni i tētahi putanga i te whakamahinga o te taputapu GenAI e whakauru ana i te raraunga Māori, e hiahiatia ana te whakaaetanga tūao, mārama i mua a ngā kaitiaki Māori e pā ana ki te āheinga me te whakamahi o ngā raraunga Māori, me ngā tikanga tōkeke, tautika hoki e tuari ana i ngā painga (13).

3.2.2 Kia noho haepapa mō ngā putanga rangahau

- E noho haepapa ana ngā kairangahau ki te ngākau pono o ngā ihirangi⁵ e whakaputaina ana e ngā taputapu GenAI, me te tautoko rānei o aua taputapu.

⁴ I whakawhanaketia ngā uara Māori i te tau 2019 e te rōpū mahi o Te Apārangi. Kei roto ko Ahorangi Tahu Kukutai, Ahorangi Tūhono Maui Hudson, Ahorangi Tūhono Maria Bargh, Ahorangi Tūhono Hēmi Whaanga, Dr Hinemoa Elder, Dr Dan Hikuroa, Marino Tahi, me Moe Milne hei whakauru ki te Code of Professional Standards and Ethics me te Research Charter o te Apārangi.

⁵ Me kaua e waihangatia, e whakatekahia, e whakatapehatia, e tārua whānakotia rānei ngā ihirangi. He taipitopito anō kei roto i te Wāhanga 3.1 o The European Code of Conduct for Research Integrity, <http://www.doi.org/10.26356/ECOC>, ALLEA 2023.

- Ko te kawatau kia pūmau ngā kairangahau ki te ahunga arohaehae i te whakamahinga o ngā putanga i whakaputaina ai e te AI whakaputa, ā, e urupare ana ki ngā tepenga o ngā taputapu, pērā i ngā tepenga ā-ahurea, te haukume, ngā pōhewanga⁶, me ngā hapa.
- Ehara ngā pūnaha GenAI i ngā kaituhi, i ngā hoa kaituhi rānei. Ko te tikanga o te hunga tuhi he kahawhiri me te haepapa, ā, nā reira ka nōho kē ki ngā kairangahau tangata.

3.2.3 Kia kōataata te whakamahi o te GenAI

- Ka whakaatu atu te kairangahau he aha ngā taputapu GenAI i āta⁷ whakamahia ai i roto i tana hātepe rangahau. Tērā pea, kei roto i te whakaaturanga, hei tauira, te ingoa, te putanga, te rā, ā, he pēhea i whakamahia ai, me te pānga ki te hātepe rangahau. Ina hāngai ana, me whakawātea e ngā kairangahau te whāurunga (ngā tohuāki), kia whai i ngā mātāpono o te rangahau tuwhera.
- Ka aro atu ngā kairangahau ki te āhuetanga matapōkere o ngā taputapu GenAI, arā te tūpononga kia whakaputa i ngā putanga rerekē ahakoa he ōrite te whāurunga.
- Ka whāki, ka matapaki rānei ngā kairangahau i ngā tepenga o ngā taputapu GenAI e whakamahia ana, tae atu ki ngā haukume pea i roto i te ihirangi e whakaputaina ana, tae atu ki ngā mahi whakamauru.

Kei te ōkawa haere ngā herenga kōataata i roto i te whakaputanga kura wānanga, pērā i te matapaki ki [Wāhanga 3.2.9](#).

3.2.4 Kia āta aro atu ki ngā take e hāngai ana ki:

- **te rangatiratanga raraunga** (8). Kei roto i tēnei ko [te rangatiratanga raraunga Māori](#) (8), [te rangatiratanga raraunga Moana-nui-a-Kiwa](#) (17), me [te rangatiratanga raraunga Iwi Taketake](#) (18)
- **tūmataiti**
- **matatapu**
- **ngā mana whakairo hinengaro**

ina tuari ana i ngā mōhiohio rahirahi, e whakahaumarutia ana rānei ki ngā taputapu GenAI

- E mārama ana ngā kairangahau ki ngā tikanga o [te rangatiratanga raraunga Māori](#) (8), [te rangatiratanga raraunga Moana-nui-a-Kiwa](#) (17), me [te rangatiratanga raraunga Iwi Taketake](#) (18)
- E mārama ana ngā kairangahau ki te tikanga ā-hangarau, ā-matatika e pā ana ki te tūmataiti, te matatapu me te mana whakairo hinengaro. Hei tauira, ka tirohia e ngā kairangahau ngā kōwhiringa tūmataiti o ngā taputapu, mā wai te taputapu e whakahaere (ngā rōpū tūmatanui, tūmataiti rānei, ngā kamupene, te mea, te mea), e whakahaeretia ana te taputapu ki hea, me ngā tikanga mō ētahi mōhiohio e tukuna atu. Ko te whānui pea o tēnei ko te [ngā taiao kati](#), [te taurima i runga i te tūāhanga kiritoru me te tūmataiti e oatihia ana](#), tae atu ki ngā pūhara e tuwhera ana ka whai urunga ki te ipurangi (tirohia [Tāpiritanga 1](#)). Ka whakatūturu ngā kairangahau e whāia ana ngā herenga matatapu, ā, e arohia ana, e whakautea ana, e whakahaumarutia ana hoki ngā mana whakairo hinengaro.

⁶ Ko te tikanga o te 'Pōhewanga' ko te whakaputahia o ngā mōhiohio teka, nenekara, hē rānei e ngā tauira reo nui (ngā LLM), e ētahi atu pūnaha GenAI rānei.

⁷ Ko ngā tauira o ngā whakamahinga whai pāpātanga nui pea ko te whakamārama i te tātari raraunga, te tuhi i te arotake mātākōrero, te tautuhi i ngā āputa rangahau, te waihanga i ngā whāinga rangahau, me te whakawhanake i ngā whakapae.

- Me mōhio tonu ngā kairangahauko te whāurunga e whakaputaina ana, e tīkina ake rānei (kuputuhi, raraunga, tohuāki, whakaahua, te mea, te mea) e whakamahia ai pea mō ētahi atu take, pērā i te whakangungu i ngā tauira GenAI. Ka whakahaumaru i ngā mahi kāore anō kia whakaputaina, rahirahi rānei mā te kore e tukuatu ki tētahi pūnaha AI tuihono, hāunga he oati kāore te raraunga e whakaputaina, e whakamahia anōtia hoki /rānei .
- E whakaute ana ngā kairangahau i ngā kaiwhakarato o ngā raraunga kāore anō kia whakamahia, ā, tae atu ki te whakatūturu kāore ō rātou tika e whakahēngia ana, ā, ka whai painga rātou i te whakamahinga o ō rātou raraunga. Ka tūpato ngā kairangahau kia kaua e whakarato i ngā raraunga matawhaiaro ki ngā pūnaha GenAI tuihono hāunga i whakaaetia tūaotia e te kaupapa o te raraunga (tangata takitahi, kiritōpū rānei) i mua i runga i te mōhio, ā, e mōhio ana ngā kairangahau ki te whāinga mārama mō te whakamahinga o te raraunga matawhaiaro, kia whakatūturu i te tautuku ki ngā ture whakahaumaru raraunga⁸.

3.2.5 Ka whakaute i ngā ture o Aotearoa me ngā tūtohu o te Rōpū Whakamana i Te Tiriti o Waitangi e hāngai ana, tae atu ki ngā ture ā-ao, pērā ki ngā mahi rangahau riterite (tirohia [Tāpirihanga 2](#))

- Me mārama te putanga e whakaputaina ana e GenAI ki te whakahaumaru ā-ture o ngā mana whakairo hinengaro me ngā raraunga matawhaiaro.
- He tūtohu kei roto i ngā pūrongo WAI 2522 me WAI 262 nā Te Taraipiunara o Waitangi e kōrero ana mō ngā herenga e pā ana ki te whakahaumarutanga o te mātauranga Māori, tae atu ki te raraunga Māori me te reo Māori (19,20).
- Ina whakamahi ana i ngā putanga o te GenAI, ka aro atu ngā kairangahau ki te pitomata mō te tārua whānako (kuputuhi, waehere, whakaahua, te mea, te mea). Ka whakapūmau ngā kairangahau i ngā mātāpuna o ngā mōhiohio, ā, ka whakaute i te tuhinga a tangata kē, e tohutoro ana mō te mahi ina tika ana.
- Me whai whakaaro ki ngā pou tarāwaho me ngā mātāpono o te ture ā-ao, pērā i Te Whakapuakitanga a te Rūnanga Whakakotahi i ngā Iwi o te Ao mō ngā Tika o ngā Iwi Taketake, tae atu ki te raraunga Iwi Taketake me ngā reo taketake (Tirohia te Atikara 31 (21)).

3.2.6 Kia ū ki te ahunga arohaehae, hangarau, matatika hoki ki te whakamahi i te GenAI

- E mārama ana ngā kairangahau ki ngā tepenga o te GenAI, pērā i ngā pōhewanga me te haukume.
- Ka mahi ngā kairangahau kia whakamauru i ngā putanga kino o te GenAI kāore i whakaarohia. Me mahi hoki rātou kia whakamahi i te GenAI hei whakapiki i te tautika, te kauawhi, me te tomopai – kia whai hua nga hapori me ngā āheinga me ngā matea kanorau.
- Kia āta whakaarohia e ngā kairangahau ngā pāpātanga ā-taiao o te GenAI:
 - Ka kaha whakapau ngao te GenAI, ā, me whakaaro e pā ana ki te toitūtanga.
 - Kia whakahōnore i te Tiriti o Waitangi me whakahaumaru i te taiao.

⁸ https://commission.europa.eu/law/law-topic/data-protection/eu-data-protection-rules_en;
<https://www.privacy.org.nz/privacy-act-2020/privacy-principles/>

3.2.7 Kia ako tonu me pēhea e nui ai ngā painga o ngā taputapu GenAI

- Me mōhio ngā kairangahau ki ngā mahinga pai rawa atu, tae atu ki te uru ki te whakangungu. E whakatenatenahia ana hoki rātou kia tuari i ō rātou pūkenga me ō rātou hoamahi me ētahi atu kaiwhaipānga hoki.
- Me whakawātea tautika te mātau GenAI me te āheinga ki ngā taputapu onāiane ki ngā tāngata katoa, ā, he haepapa nō ngā kairangahau kia whakatūturu i te āheinga mō ētahi atu tāngata.

3.2.8 Kia āta whakaaro, kia kōataata hoki ina tino whakamahi ana i ngā taputapu AI, GenAI hoki ⁹ i roto i ngā mahi rahirahi e pā pea ai ki ētahi atu kairangahau, rōpū rānei, pērā i ngā arotake hoapā me ngā arotake o ngā marohi rangahau.

- Ka kore pea e tōkeke te aromatawai ina whakamahi ana i ngā taputapu GenAI nā ngā tepenga o ēnei taputapu (pērā i ngā pōhewanga me te haukume).
- Ina karo ana te whakamahi GenAI ka whakahaumaru i te mahi taketake kāore anō kia whakaputaina o ngā hoa kairangahau i te tūpono huranga, whakaurunga rānei ki te tauira GenAI.

3.2.9 Kia mōhio ki ngā kaupapahere o ngā kaitā e pā ana ki te Gen AI

- He rerekē ngā kaupapahere o ngā kaitā me ētahi atu wāhi kura wānanga mō te GenAI, ā, he auau te panoni.
- Me aro ngā kairangahau ki ngā kaupapahere o ngā rōpū e mahi ana rātou, ā, e pāhekoheko ana rātou.

⁹ Hei tauira ehara te whakamahi i te GenAI kia rapu i ngā mōhiotia whakamārama mō tētahi arotake i te tino whakamahinga, engari he tino whakamahinga te tuku i te aromatawai o te pepa.

4. He urupare āu mō ēnei aratohu?

Ka waihangā pea te GenAI i ngā tūponotanga me ngā tūraru kāore e taea te matapae me te tino mārama ināianei. Nā runga anō i te āhuatanga hou me te tere kuneroa o te hangarau GenAI, e whakatenatenahia ana te urupare haere tonu i te hāpori rangahau kia hou tonu ēnei aratohu.

Ko te ārahi ā-ringa kia whakamahi i ēnei mātāpono i roto i te huringa katoa o te rangahau e whakawhanakehia ana.

Īmēra: expertadvice@royalsociety.org.nz

5. Ētahi atu pou tarāwaho, rauemi hoki

- European Commission: 'Living guidelines on the Responsible Use of Generative AI in Research', March 2024: https://research-and-innovation.ec.europa.eu/document/2b6cf7e5-36ac-41cb-aab5-0d32050143dc_en
- [Guidance for generative AI in education and research | UNESCO](https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research): <https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>
- [Royal Society Te Apārangi. *Mana Raraunga Data Sovereignty*. Dec 2023:](https://www.royalsociety.org.nz/what-we-do/our-expert-advice/all-expert-advice-papers/mana-raraunga-data-sovereignty/) <https://www.royalsociety.org.nz/what-we-do/our-expert-advice/all-expert-advice-papers/mana-raraunga-data-sovereignty/>
- Royal Society Te Apārangi. Research Charter for Aotearoa New Zealand: <https://www.royalsociety.org.nz/what-we-do/research-practice/research-charter/research-charter-aotearoa-new-zealand/#4955>
- Royal Society Te Apārangi. Code of Professional Standards and Ethics in Science, Technology, and the Humanities: <https://www.royalsociety.org.nz/who-we-are/our-rules-and-codes/code-of-professional-standards-and-ethics/code-of-professional-standards-and-ethics-in-science-technology-and-the-humanities/>
- Prime Minister's Chief Science Advisor, Dec 2023: Capturing the benefits of AI in Healthcare: <https://www.pmcsa.ac.nz/artificial-intelligence-2/ai-in-healthcare/>
- Massey University Te Kūhenga ki Pūrehuroa, Use of Artificial Intelligence in Assessment Policy: [Use_of_Artificial_Intelligence_in_Assessment_Policy.pdf \(massey.ac.nz\)](https://www.massey.ac.nz/documents/2046/Generative_Artificial_Intelligence_GenAI_Usage_Guidelines_for_Staff.pdf)
- Massey University Te Kūhenga ki Pūrehuroa, Generative Artificial Intelligence (GenAI) Usage Guidelines for Staff: https://www.massey.ac.nz/documents/2046/Generative_Artificial_Intelligence_GenAI_Usage_Guidelines_for_Staff.pdf

- **AI Forum NZ: Trustworthy AI in Aotearoa report:** <https://aiforum.org.nz/reports/trustworthy-ai-in-aotearoa-the-ai-principles/>
- **EU: Trustworthy AI: Ethical principles for AI systems. From Ethics Guidelines for Trustworthy AI by the EU high-level expert group on AI:** <https://op.europa.eu/en/publication-detail/-/publication/d3988569-0434-11ea-8c1f-01aa75ed71a1>
- **AI Researchers Association: White paper: Aotearoa New Zealand Artificial Intelligence, A strategic approach 2024:** https://www.airesearchers.nz/site_files/28243/upload_files/AotearoaNewZealandAI_AStrategicApproach_2024Edition_HIGHRES.pdf?dl=1
- **New Zealand Public Service AI Framework** <https://www.digital.govt.nz/standards-and-guidance/technology-and-architecture/artificial-intelligence/public-service-artificial-intelligence-framework>
- **KU Leuven University: Using generative artificial intelligence as a researcher:** <https://research.kuleuven.be/en/integrity-ethics/integrity/practices/genAI>
- **Association for Computing Machinery (ACM): Principles for the development, deployment, and use of generative AI technologies:** <https://www.acm.org/binaries/content/assets/public-policy/ustpc-approved-generative-ai-principles>
- **International Association of Scientific, Technical and Medical Publishers (STM): Generative AI in Scholarly Communications – Ethical and practical guidelines for the use of Generative AI in the Publication Process** <https://www.stm-assoc.org/wp-content/uploads/STM-GENERATIVE-AI-PAPER-2023.pdf>

6. Tohutoro

1. Bowen JA, Watson CE. *Teaching with AI: A Practical Guide to a New Era of Human Learning*. American Association of Colleges and Universities. American Association of Colleges and Universities; 2024.
2. Morris MR. AI and accessibility. *Communications of the ACM*. 2020;63(6): 35–37. <https://doi.org/10.1145/3356727>.
3. European Commission. Living guidelines on the responsible use of generative AI in research | Research and innovation. In: 2024. https://research-and-innovation.ec.europa.eu/document/2b6cf7e5-36ac-41cb-aab5-0d32050143dc_en [Accessed 26th August 2024].
4. Byrnes G, Lovreglio R. *Opinion: Navigating through quicksand? Using GenAI ethically*. Te Kunenga ki Pūrehuroa - Massey University of New Zealand. <https://www.massey.ac.nz/about/news/opinion-navigating-through-quicksand-using-genai-ethically/> [Accessed 26th August 2024].
5. Tabassi E. *Artificial Intelligence Risk Management Framework (AI RMF 1.0)*. Report number: NIST AI 100-1, 2023 Jan [Accessed 11th February 2025]. p. NIST AI 100-1. <https://doi.org/10.6028/NIST.AI.100-1>. [Accessed 11th February 2025].
6. Palmer J. How to harness AI's potential in research — responsibly and ethically. *Nature*. 2024;632(8027): 1181–1183. <https://doi.org/10.1038/d41586-024-02762-2>.
7. *Te Tiriti o Waitangi, The Treaty of Waitangi*. Archives New Zealand. <https://archives.govt.nz/discover-our-stories/the-treaty-of-waitangi> [Accessed 13th May 2020].
8. Royal Society Te Apārangi. *Mana Raraunga Data Sovereignty*. 2023 [Accessed 13th February 2025]. <https://www.royalsociety.org.nz/assets/Mana-Raraunga-Data-Sovereignty-web-V1.pdf> [Accessed 13th February 2025].
9. Smith LT. Kaupapa Māori research - Some Kaupapa Māori principles. In: *Kaupapa Rangahau A Reader: A Collection of Readings from the Kaupapa Māori Research Workshop Series*. Te Kotahi Research Institute; 2015. p. 46–52. <https://researchcommons.waikato.ac.nz/entities/publication/571b43c8-5422-47ee-873c-40821c81f0bb> [Accessed 31st January 2025].
10. Naepi S. Pacific Research Methodologies. *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.566>
11. Te Mana Raraunga. *Te Mana Raraunga Māori Data Sovereignty Principles*. 2018 [Accessed 16th May 2023]. <https://static1.squarespace.com/static/58e9b10f9de4bb8d1fb5ebbc/t/5bda208b4ae237cd89ee16e9/1541021836126/TMR+Ma%CC%84ori+Data+Sovereignty+Principles+Oct+2018.pdf> [Accessed 16th May 2023].
12. *Guidance for generative AI in education and research | UNESCO*. <https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research> [Accessed 13th February 2025].
13. Te Kunenga ki Pūrehuroa Massey University. *Generative Artificial Intelligence (GenAI) Usage Guidelines for Staff*. 2024. https://www.massey.ac.nz/documents/2046/Generative_Artificial_Intelligence_GenAI_Usage_Guidelines_for_Staff.pdf

14. Prime Minister's Chief Science Advisor, Kaitohutohu Mātanga Pūtaiao Matua ki te Pirimia. *Capturing the benefits of AI in healthcare for Aotearoa New Zealand*. 2023 Oct [Accessed 17th October 2024]. <https://bpb-ap-se2.wpmucdn.com/blogs.auckland.ac.nz/dist/f/688/files/2023/12/PMCSA-AI-healthcare-LONG-REPORT-FINAL-pdf-version-v3.pdf> [Accessed 17th October 2024].
15. *Research Charter for Aotearoa New Zealand*. Royal Society Te Apārangi. <https://www.royalsociety.org.nz/what-we-do/research-practice/research-charter/research-charter-aotearoa-new-zealand/> [Accessed 2nd September 2024].
16. Royal Society Te Apārangi. *Code of Professional Standards and Ethics in Science, Technology, and the Humanities*. <https://www.royalsociety.org.nz/who-we-are/our-rules-and-codes/code-of-professional-standards-and-ethics/code-of-professional-standards-and-ethics-in-science-technology-and-the-humanities/> [Accessed 18th October 2024].
17. *Pacific Data Sovereignty: Reclaiming Pacific Data*. <https://pacificdatasovereignty.com/> [Accessed 13th February 2025].
18. GIDA. *Indigenous Peoples' Rights in Data*. Global Indigenous Data Alliance. <https://www.gida-global.org/data-rights> [Accessed 13th February 2025].
19. Waitangi Tribunal. *Wai 262 Report: Protecting and Nurturing Taonga Māori*. <https://www.wai262.nz/ko-aotearoa-tenei> [Accessed 26th October 2023].
20. Waitangi Tribunal. *Wai 2522*. <https://www.justice.govt.nz/assets/WT-Wai-2522-2.5.0009-TPPA.pdf> [Accessed 31st August 2023].
21. United Nations. *United Nations Declaration on the Rights of Indigenous Peoples*. United Nations; 2008. https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf [Accessed 2nd February 2023].

Tāpirihanga 1: Ngā Whakamāramatanga

Research and descriptions of the terms in Appendix 1 have been supervised by Dr Simon McCallum using a variety of AI tools including ChatGPT o3, Gemini 1.5 pro with Deep Research, and Perplexity.ai. All content was reviewed and corrected to ensure accuracy.

Closed environments

A closed environment is a computing or communication ecosystem where access and interaction are tightly controlled and limited. In such an environment, the system's components (programmes), data (email, files, web access), and operations (processes and meetings) are limited to a defined boundary with little or no interaction with external systems.

Key characteristics:

- **Restricted access:** Only approved users, applications, or devices can access the environment.
- **Centralised control:** A single entity or a tightly governed group manages updates, security, and system modifications.
- **Isolation:** The environment is typically isolated from the broader internet or external networks, reducing exposure to external threats.
- **Enhanced security:** The limited interface with external systems can reduce vulnerabilities and simplify compliance with strict security or regulatory requirements.

Example contexts:

- Enterprise networks with strict firewall rules.
- Specialised industrial control systems that operate in isolated networks.

Hosting on a third-party infrastructure with guaranteed privacy

This refers to a situation where an organisation places its data or applications on servers or cloud services managed by an external provider, with the assurance that strong measures are in place to protect the confidentiality and integrity of the data. Despite not controlling the physical infrastructure, the organisation receives contractual or technical guarantees that its information will remain private. This is the common approach by most companies and anyone using Cloud services such as Office365, Amazon AWS, or Google Drive.

Key characteristics:

- **Third-party management:** The physical or virtual infrastructure is owned and maintained by an external service provider.
- **Privacy guarantees:** The service provider commits (often through contractual agreements and technical safeguards) to ensure data confidentiality. This might involve end-to-end encryption, strict access controls, and compliance with relevant privacy regulations.
- **Risk management:** While relying on a third party, the organisation mitigates risks through service-level agreements (SLAs), audits, and compliance certifications that verify the provider's security practices.
- **Data sovereignty considerations:** There may be additional assurances about where data is stored and how it is handled to meet legal and regulatory requirements.

Example contexts:

- Cloud storage services that provide encrypted storage with clear privacy policies.
- Managed hosting environments used by financial institutions where data privacy is critical.
- SaaS platforms that operate under rigorous data protection standards.

Open internet-accessible platforms

An open internet-accessible platform is a system or service that is available over the public internet without significant restrictions on user entry or data access. Such platforms are designed to be broadly accessible, often encouraging a wide range of interactions and content sharing among users.

Key characteristics:

- **Wide accessibility:** Anyone with an internet connection can access the platform, typically without needing specialized credentials or belonging to a closed group.
- **Interoperability:** Open platforms often support integrations and interactions with other systems or services, fostering an ecosystem of applications and content.
- **Transparency and collaboration:** These platforms frequently promote open standards and allow users to contribute content, data, or services, which can encourage community-driven development.
- **Security considerations:** Despite their openness, these platforms often implement security measures (such as user authentication, encryption, and monitoring) to protect against malicious activities while balancing ease of access. However, the protection is often not backed by liability clauses for failure to secure data.

Example contexts:

- Social media networks that allow public profiles and content sharing.
- Public forums or collaborative platforms like open-source project repositories.
- Web services that provide APIs for developers to build upon, such as mapping or weather data services.

Tāpirihanga 2: Ngā pou tarāwaho ā-ture me ngā aratohu e hāngai ana ki te GenAi

This appendix provides an overview of the legal frameworks relevant to GenAI for research in Aotearoa New Zealand.

The information was collated by Dr Simon McCallum using Gemini Advanced 1.5 Pro with Deep Research (19 December 2024). The prompt used was: “When writing policy around generative AI for research in NZ, what are the relevant legal frameworks already in NZ law that need to be taken into consideration?”

Legal Framework	Description	Relevant Sections/Principles	Key Considerations for Generative AI Research	Link
Privacy Act 2020	Governs the collection, use, and disclosure of personal information.	IPP 1, IPP 3, IPP 12	Data anonymisation and de-identification techniques when using personal data to train AI models.	https://www.legislation.govt.nz/act/public/2020/0031/latest/LMS23223.html
Copyright Act 1994	Protects original works,	Sections 2, 14, 21	Ensuring ownership and copyright of	https://www.iponz.govt.nz/get-ip/copyright/legislation/

Legal Framework	Description	Relevant Sections/Principles	Key Considerations for Generative AI Research	Link
	including those generated by AI.		AI-generated outputs, avoiding infringement of existing works.	
Patents Act 2013	Protects inventions, but AI cannot be named as an inventor.	Sections 5, 10, 15	Determining inventorship and ownership of AI-generated inventions.	https://www.legislation.govt.nz/act/public/2013/0068/latest/DLM5390802.html
Fair Trading Act 1986	Prohibits misleading or deceptive conduct.	Sections 9, 13, 14	Ensuring accurate and transparent information about AI-powered products or services.	https://www.legislation.govt.nz/act/public/1986/0121/latest/DLM96439.html

Legal Framework	Description	Relevant Sections/Principles	Key Considerations for Generative AI Research	Link
Consumer Guarantees Act 1993	Provides guarantees regarding the quality of goods and services.	Sections 6, 7, 21	Meeting consumer guarantees for AI-powered products or services.	https://www.legislation.govt.nz/act/public/1993/0091/latest/DLM311042.html
Algorithm Charter for Aotearoa New Zealand	Sets out principles for the ethical use of algorithms in government.	All principles	Applying ethical principles to the use of AI in research, including transparency and accountability.	https://data.govt.nz/toolkit/data-ethics/government-algorithm-transparency-and-accountability/algorithm-charter/
Public Service AI Framework	Provides advice to public service agencies on the	All sections	Considering best practices for data privacy, transparency, and human	https://www.digital.govt.nz/standards-and-guidance/technology-and-architecture/artificial-intelligence/public-service-artificial-intelligence-framework

Legal Framework	Description	Relevant Sections/Principles	Key Considerations for Generative AI Research	Link
	responsible use of AI.		oversight in AI research.	

International legal frameworks and guidelines

- OECD AI Principles:** These principles promote responsible stewardship of trustworthy AI that respects human rights and democratic values. <https://www.oecd.org/en/topics/ai-principles.html>
- UNESCO Recommendation on the Ethics of AI:** This recommendation provides a framework for ethical AI development and use, addressing issues such as human rights, diversity, and sustainability. <https://www.unesco.org/en/artificial-intelligence/recommendation-ethics>
- EU AI Act:** The EU AI Act is the first comprehensive legal framework on AI, categorising AI systems based on risk and imposing obligations on developers and deployers. While not directly applicable in New Zealand, it may influence future AI regulation in the country. <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>
- Council of Europe AI Convention:** This treaty aims to create a legal framework for AI that promotes innovation while managing risks. <https://www.privacyworld.blog/2024/09/ai-convention-a-global-framework-for-ai-principles/>
- United Nations Declaration on the Rights of Indigenous Peoples:** This declaration is a comprehensive international human rights document on the rights and freedoms of Indigenous peoples. https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf