Te reo o te rangatahi

An explorative study of rangatahi exposure to, and use of, te reo Māori

NZCER
Rangahau Mātauranga o Aotearoa

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Table of Contents

Tables

He mihi

Tēnā rā koutou ngā mātua tūpuna nā koutou rā tēnei taonga, te reo Māori, i tuku mai ki a mātou, otirā ki te reanga whakatupu. Koutou te hunga mate ki a koutou. Nō reira, tēnā koutou.

Ka huri ki te kanohi ora. E te reanga whakatupu, koutou te hunga rangatahi tēnā koutou. E kore e mimiti te mihi ki a koutou e hāpai nei i te reo o rātou mā, o tātou mā. Me i kore koutou kua whai te reo rangatira i ngā tūpuna ki tua o te ārai. Kua kitea e mātou te kaha o ō koutou aroha ki te reo Māori. Nō reira, kōrerotia, waiatatia. Tukuna ki āu tamariki mokopuna kia rere Māori tonu atu, ake, ake, ake.

We are deeply grateful to the rangatahi and their whānau who, for the love of te reo Māori, generously gave their time and invited us into their homes and lives to share their kōrero. Thank you.

We would like to mihi to Te Mātāwai, for their insight and forethought to sponsor an exploratory study on te reo o te rangatahi. Opportunities to undertake studies of this type are as rare as the studies are important. Nō reira, tēnā rā koutou.

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Glossary

acceptable (correct)	Use of language (e.g., a phrase) that is acceptable to highly proficient, adult speakers of that language as correct.
allophones	Different sounds that have the same meaning in words, e.g., the meaning of the word is the same whether 'h' is used in northern mita, or 'wh' is used in other regions in pronunciation of the word 'whakamate'. Thus, /h/ and /f/ are allophones.
body language (see also te reo ā-tinana)	A catch-all term for many modes of non-verbal communication that include orientation, gaze, gesture, facial expression, whistles, and eye talk.
communicative function	The reason or purpose for saying a particular utterance. For example, the communicative function of "Nau mai" is to greet someone (even though its grammar makes it an imperative or command).
concordances	Lists of utterances or parts of utterances that contain a particular focus word. In Chapter 5, there are concordances of *ai, kau, tonu, rawa,* and other particles.
corpus (plural corpora)	A collection or body of spoken or written language for linguistic analysis.
density	The number of connections or communicative links in a context, divided by the maximum number of possible links, shown as a percentage. The more participants who communicate with one another, the higher will be the density of a context (de Laat, Lally, Lipponen, & Simons, 2007).
fluency	How quickly and easily a person's language flows. Fluency is one component of proficiency.
grammar (syntax)	Structural conventions in sentences or phrases of a language (e.g., word order).
lexical/grammatical	The use of particular forms (e.g., words) within the grammatical structure of a language.
lexicalise; lexicalisation	The process of new word formations through, for example, a number of lexical parts coming to be considered and used as a single unit word. For example, "iho" may be becoming lexicalised in the phrase "tuku iho".
lexicon	The vocabulary of a language, an individual, or a group of speakers.
linguistic nudge	The reasons or motives for people to switch from one language into another.
linguistic repertoire	All aspects and content of the languages (and other communicative modes) a person knows and can draw on to express themselves.
mita	A regional variation or dialect of te reo Māori.
modern adult usage	Post 1970s revitalisation-period usage by proficient adult speakers of te reo Māori.
modes of communication	The many forms of communication that people use to communicate, including language. Other modes include orientation, gaze, spatial proximity (how close you stand apart from another person), stance (e.g., bending to lower your height to show respect), formation (e.g., lining up).

modifiers	Words that modify or provide more information about a nominal or verbal phrase (e.g., expressing intensity, diminishing, otherness).
nominalising suffix	A suffix that turns a word into a noun.
nominalisation	The formation of nouns, usually by adding a suffix to an existing word. In Māori, this usually involves the application of a suffix (e.g., -tanga) to a verb.
particle	A grammatical term for a function word (term other than content words such as nouns, verbs, and adjectives). Particles typically encode grammatical categories including tense, mood, and aspect. In te reo Māori, all particles accompany a content word. Common Māori particles include *ka, kia, hei, kei te, e, i,* and *kua.*
passivisation	Turning a word into a passive verb form. In te reo Māori this usually occurs with a passive suffix.
phonetics	The sounds of speech/talk, in particular their study and systematic classification.
phonology	The sounds of a language, including phonemes and intonation.
productive	Using an item (e.g., a word or suffix) in an utterance that the speaker may never have heard before, i.e., to produce a new sentence or phrase.
styles	Speakers of robust languages use a range of different 'styles' of their language(s) with different social groups or individuals. These include regional varieties or dialects, but also smaller sub-group styles.
te reo ā-karu	Communicating with the eyes, e.g., pūkana.
te reo ā-tinana	ommunicating with the body, e.g., gestures.
te reo ā-tuhi	Written te reo Māori: communicating with writing.
te reo ā-waha	Spoken te reo Māori: communicating by speaking.
te reo ā-whio	Communicating by whistling.
tokens	The number of times a word type occurs in data. For example, in the sentence "Kei te moe te kurī" there are two tokens of te and one token each of *kei, moe,* and *kurī.*
type/token ratio (TTR)	The total number of unique words (types) divided by the total number of words (tokens) in a text or language sample.
unacceptable	Use of language (e.g., a phrase) that is, or would be, rejected as incorrect by highly proficient adult speakers of that language.
utterance	A thing that a person says in one speech turn, e.g., one or more sentences, part of a sentence, or a single word.
word types	Different words, e.g., in the sentence "Kei te moe te kurī" there are four word types.

1. He kupu whakataki

Te Wāhanga—NZCER was commissioned by Te Mātāwai to undertake an exploratory research project into rangatahi exposure to and use of te reo Māori. We used a kaupapa Māori mixed-methods approach. The research focuses on a particular group of rangatahi who are Māori, who were able to kōrero Māori "fairly well" to "very well", and who were recruited through whakawhanaungatanga. Nineteen rangatahi from four iwi regions, aged between 13 and 23 years took part. The study took place from January 2019 to February 2020.

The research questions for this study focus on rangatahi exposure to, and their use of, te reo Māori (ā-waha, ā-tuhi, ā-tinana). The research questions are:

1. How are rangatahi using te reo Māori?
2. How are rangatahi being exposed to te reo Māori?
3. What is the frequency of rangatahi use of, and exposure to, te reo Māori in particular contexts?
4. What sort of reo Māori are rangatahi using, and what are they saying?
5. What motivates/affects rangatahi use of te reo Māori?

Te Reo o te Rangatahi adds to the existing body of knowledge about Māori language revitalisation, in ways that may be useful to language advocates, planners, and others working to revitalise our language.

Using six data-gathering approaches produced rich datasets including video and audio recordings, collages, fieldnotes and reflections, and a small corpus of natural spoken language from rangatahi. Our analytical approach involved qualitative methods (including thematic analysis) and quantitative methods (including lexical/grammatical analysis).

Key findings

Rangatahi were exposed to and using te reo Māori ā-waha in public and private spaces in the research contexts. They used te reo Māori mostly with a few people with whom they had reo Māori relationships, including whanaunga, friends, and kaiako. The ambient language around rangatahi varied from almost all te reo Māori to a mix of Māori and English in private contexts, but in public places it was mostly English.

Rangatahi heard and saw more te reo Māori at Māori events, where organisers were actively promoting te reo Māori. However, overall rangatahi were exposed to less ambient reo Māori and te reo Māori ā-tuhi than English in public places.

In public and private spaces, rangatahi were using te reo Māori proficiently for complex daily and communicative functions. Some rangatahi were highly proficient, and some had strong commitments to te reo Māori. This is a cause for some optimism regarding reo Māori revitalisation. A mix of factors, related to people, environment, and rangatahi aspirations, helped motivate rangatahi to use te reo Māori.

Results and findings from the study are not generalisable to the broader population. Rather, they provide valuable insights into how rangatahi are being exposed to te reo Māori and how they are using the language, and indicates ways that they can be further supported.

Report outline

Chapter 1 has given a brief background to the study and outlined its key findings. Chapter 2 outlines the research methodology, including data-gathering and data analysis approaches, and briefly overviews a small amount of relevant literature. The third chapter introduces the contexts where the research took place, and the rangatahi who we met within each context. Chapters 4, 5, and 6 present the results, findings, and discussion that address the five research questions. Finally, key findings are presented and discussed in Chapter 7.

Verbatim quotes, and images of the rangatahi and contexts, lend real-life depth to the analysis discussion.

Technical terms, and other useful terms, are bolded in their first appearance in the report. These terms are defined in a glossary of terms at the front of the report.

2. Background, methodology, and terminology

Background

Te Reo o te Rangatahi is a study commissioned by Te Mātāwai. Its aim was to explore rangatahi exposure to, and use of, te reo Māori, and to contribute to our understanding of how to support rangatahi to use te reo Māori.

There are very few studies that have explored the oral language of rangatahi Māori, including Benton's (1979) study of changes in language use in Tūhoe. Very little natural reo Māori spoken-langage data from rangatahi have been collected and analysed. The MAONZE corpus (Watson, Maclagan, King, Harlow, & Keegan, 2016) contains hour-long interviews of rangatahi speaking Māori. To date, analyses of these data have focused on phonetics rather than the lexical, grammatical, or social aspects of Māori language use. To our knowledge, Te Reo o te Rangatahi is the first exploratory study of rangatahi use of te reo Māori.
The general literature on Māori language revitalisation (see King, 2018; Olsen-Reeder, Hutchings, & Higgins, 2017, and the references therein) often discusses and highlights the importance of using Māori in the home, education, media, and government sectors. Some recent PhD theses (Martin, 2013; Poutu, 2015; Tamati, 2016; Tocker, 2015) have focused on kura kaupapa Māori and their graduates. Muller (2016) looked at the importance of whānau, and others have focused on te reo Māori in kōhanga reo (Royal-Tangaere, 2012; Skerrett-White, 2003). Hunia's (2016) thesis documents first-language acquisition of te reo Māori by very young children. Kelly's (2014) thesis describes features of non-standard grammar attested in the language of tertiary students learning Māori.

Other important Māori language revitalisation research literature (Hohepa, 1999; Hond, 2013; Pihama & Matamua, 2017) provides useful descriptions of key issues for language revitalisation and highlights important areas for planning and further research. The current study focuses on rangatahi exposure and use, and their motivations to kōrero Māori, with the purpose of contributing understanding and support of te reo Māori revitalisation.

Methodology

The study is framed by kaupapa Māori methodology and uses a mixed-methods approach to data collection and analysis. The study was led by kairangahau from Te Wāhanga working with Peter Keegan from the University of Auckland.

Kaupapa Māori

Taking a kaupapa Māori approach to this study means that the research must contribute to positive and transformational outcomes for Māori. In the context of rangatahi use of te reo Māori, it was important to learn about Māori language outcomes that are meaningful for rangatahi and their whānau. Asking rangatahi about their moemoeā or aspirations for te reo Māori gave us baseline data, and a focus for any transformational change that may arise from, or be supported by, this research.

Our approach to data gathering, analysis, and report writing was guided by seven kaupapa Māori practices listed by Linda Smith (1999, p. 120).

- aroha ki te tangata (a respect for people)
- kanohi kitea (being seen face to face)
- titiro, whakarongo ... kōrero (look and listen before speaking)
- manaaki ki te tangata (share with others, be good hosts, be generous)
- kia tūpato (be cautious)
- kaua e takahia te mana o te tangata (do not trample on the mana of others)
- kaua e mahaki (do not flaunt your knowledge).

Three further kaupapa Māori principles that we were particularly mindful of in our approach to this study were whanaungatanga, manaakitanga, and mataara.

Whanaungatanga: Whanaungatanga guided us to connect with whānau and rangatahi in our networks and to work with them in ways that made them feel their contributions were valued and valuable.

Manaakitanga: Showing manaakitanga meant that we ensured that participants felt comfortable, involved, and informed. The onus was on us, as kairangahau, to uphold the mana of participants, their whānau, and their iwi/hapū. This kaupapa guided us in each step of the research process, from contacting rangatahi and their whānau, to interviewing and gathering language data, and throughout the data analysis and writing processes.

Mataara: The principle of mataara (see also Hunia, 2016) guided us to be alert and watchful in our research, to bear in mind the possible risks to participants, particularly rangatahi, and to mitigate those risks. It involved watching closely in order to see, understand, and learn, and reminded us to be present and to act in a way that was “tika”.

Ethics

We took a kaupapa Māori principles-based ethical approach in this study. Our research kaupapa and values were the primary guide for how we acted in working with participants, gathering and analysing data, and disseminating and publishing results. The approach was informed both by kaupapa Māori theory, and by Massey University's (2017) principles-based Human Ethics Code

> *The code is characterised by a 'deep consideration—high trust' approach. What this means is that the University expects that researchers will take responsibility to thoughtfully apply the principles to their research (interpreting principles using 'deep consideration' rather than having a set of rules to follow).*

Potential issues

Early on in the study, we identified possible issues we thought could arise in the project and discussed these in full with NZCER's Ethics Committee.

One of the major challenges in this study was how to capture real-life natural language data in a variety of contexts, including unconfined spaces, while at the same time ensuring everyone who took part (including bystanders) was informed and gave their consent. With a solely rules-based approach, we would have needed to gain explicit consent from every person present. In unconfined spaces, such as a large event or other public space, such an approach would have been impractical.

Our kaupapa Māori principles-based approach included gaining informed consent whenever and wherever possible, but our main concern was that we treated all participants and data ethically. Sometimes, language or images were recorded incidentally from people who were not aware of the project (for example, a person who had a short conversation with one of the rangatahi participants in a public space, whom we were not able to contact subsequently for permission). In these cases, our approach guided us to uphold the mana of all participants by anonymising data as part of our data-management process for analysis purposes, and by excluding sensitive material.

Informed consent and use of images

Prior to the interviews, rangatahi and their whānau were given an information sheet about the purpose of the study and what we were asking them to do, along with a consent form (see Appendix A). Participation was voluntary and rangatahi were able to withdraw their information from the project without explanation up until 2 weeks after their interview was completed.

The kairangahau checked with participants (and one or both parents of younger rangatahi) about consent to use images of them or their artwork in the report. There were two points at which we asked for consent. The first point was before the initial interview. The second point was during the report writing phase, when we sent each rangatahi a copy of the profile story we compiled from our data. At the first point of consent, rangatahi were given the option to sign the consent form, or to give their consent orally. Oral consent was recorded on a consent form by a kairangahau. At the second point of consent, each rangatahi was given the option of signing a consent form specifically related to use of their name, story, and images.

Identifying rangatahi participants

In consultation with Te Mātāwai, we developed a set of criteria to determine areas of interest for the study. These criteria included participants' ages and levels of reo Māori proficiency; locations and potential reo Māori domains; and low- to high-density contexts. We drew on recent community-based research about te reo Māori, including Te Ahu o te Reo (Hutchings et al., 2017) to help shape these criteria.

For this project, we defined rangatahi as being in the age range of 13–23 years. The reason for choosing 23 years as the upper age limit was because these rangatahi, born in or after 1996, are defined as "gen-I" or "digital natives". That is, they were born into a world with digital devices. The lower limit of 13 years old we chose for three reasons: (a) anecdotally, the term "rangatahi" is sometimes equated with the teenage years; (b) 10 years (13 to 23 years old) was a broad but manageable age range; and (c) we were satisfied that rangatahi would be able to give informed consent (with the support and consent of whānau) from age 13 years.

We looked for rangatahi who were bilingual speakers of te reo Māori and English, with a moderate to high level of proficiency, able to understand and respond to conversational reo Māori at least "fairly well".[1] During our whanaungatanga session where we introduced ourselves and the project, we assessed their reo proficiency through informal conversation, and through asking rangatahi to self-report their level of proficiency using levels from Te Kupenga (Statistics New Zealand, 2014). This gave us some insight into their own views about their proficiency, and their comfort levels about communicating in Māori for the duration of the interview.

Through whanaungatanga, we invited rangatahi Māori to participate in the study. Nineteen rangatahi (10 males and 9 females), along with 12 of their friends and whānau members took part. From February through to June 2019, kairangahau visited each of the 19 rangatahi in one of a range of contexts.

Since the project called for us to focus on areas in communities and not on education settings, we did not actively seek to gather data from rangatahi in kura. However, because participants and their whānau were able to choose where we would meet, we did video record a kapa haka practice at a mainstream high school, in which two participants took part.

Some rangatahi were living in their own iwi regions, while others were living outside their iwi regions with whānau, or for education. The four iwi regions visited for this study were:

- Tainui
- Te Arawa
- Te Tai Hauāuru
- Te Waipounamu.

These four iwi regions align with the geographical areas covered by four iwi clusters of the same name that are defined in Te Ture mō Te Reo Māori.

Most interactions between rangatahi and kairangahau took place in te reo Māori. English was used when a participant preferred to use that language.

[1] Using the levels in Te Kupenga (Statistics New Zealand, 2014). See also Figure 1.

Mixed methods

Kaupapa Māori guided the overall approach to the research project, which included mixed methods. Kaupapa tuku iho guided us and kept us grounded in the values and epistemologies of our tūpuna as we drew on tools from Western research. While we privileged the tools and values of mātauranga Māori, we were also able to use mixed methods that were fit for purpose within our kaupapa Māori approach.

Using a mix of methods allowed us to develop a rich picture of how and when rangatahi were exposed to and used te reo Māori. Exposure includes hearing te reo ā-waha, reading te reo ā-tuhi, and interpreting te reo ā-tinana, while use includes speaking te reo ā-waha, writing te reo ā-tuhi, and using te reo ā-tinana.

Qualitative methods allowed us to capture rich data from the lives and language environments of rangatahi participants, and to develop pictures of naturally occurring language use in real-world contexts. The data added texture and depth to quantitative data—which focused on frequency—to bring greater clarity to what was happening with regard to exposure to and use of te reo Māori in the worlds in which our rangatahi move.

This research provides a series of snapshots of how a small number of rangatahi were being exposed to and using te reo Māori. It is not representative of the wider population.

The research questions

The **five research questions** focused both on rangatahi exposure to te reo Māori (hearing and reading), and their use of te reo Māori (speaking and writing).

1. **How are rangatahi using te reo Māori?**
2. **How are rangatahi being exposed to te reo Māori?**
3. **What is the frequency of rangatahi use of, and exposure to, te reo Māori in particular contexts?**
4. **What sort of reo Māori are rangatahi using, and what are they saying?**
5. **What motivates/affects rangatahi use of te reo Māori?**

Data-gathering methods

This research project has explored rangatahi use of and exposure to te reo Māori through a range of ethnographic data-collection methods, including:

- Method 1: Video (Group 1)
- Method 2: Still photos (Group 2)
- Method 3: Talking pictures (Group 3)
- Method 4: Self-report (Group 4)
- Method 5: Kanohi ki te kanohi profile interviews
- Method 6: An internet search.

We refined our methods after early trialling. The most significant change was moving from having two groups of rangatahi, who would each use two data-collection methods, to having four groups of rangatahi, who would each use only one data-collection method. We felt that asking each rangatahi to collect data using two methods (as originally planned) would be too onerous and would take up too much of their time. This meant that we only needed to visit rangatahi kanohi ki te kanohi once rather than the two visits originally envisaged.

For methods 1–4, data were captured over a period of between 20 minutes and 1 hour with each rangatahi. The reason for this was twofold: the upper limit was designed to limit the amount of data collected to a manageable level; the lower limit was determined by rangatahi becoming fatigued or bored with the research.

Table 1 Method 1: Video

Activity	**Purpose**
Rangatahi wore a Bluetooth microphone as they interacted normally with others at a specific event (e.g., Matatini; chatting with a friend; at kapa haka practice). The microphone was connected to a video recorder operated by the kairangahau at the same time. Kairangahau operated a video camera connected to a Bluetooth microphone (worn by rangatahi). During the 1-hour session, they also observed the rangatahi and took field notes.	To capture audio recordings of real-time natural language. Audio was transcribed for analysis, and sections of the transcript were used in reporting. The camera captured video of the broad context where language was used, and of participant interactions. Only the research team saw the video. They used it to describe the context around language use. No video images/stills were used in reporting, unless agreed to by participants.
Types of data captured	**Research questions addressed**
Reo ā-waha	RQ 1, 2, 3, 4, 5
Reo ā-tuhi	RQ 2,
Reo ā-tinana	RQ 4

Video recording is a method used widely in language research, as it allows the capture of both spoken language and the wider social context in which language is used (Iverson, 2010).

Method 2, Still photos, was informed by a photographic method called "Photovoice" which was developed on three theoretical bases—that with proper tools (such as a camera), people can: develop consciousness of their social reality and deal critically with it; give voice to ideas, images, that have little or no platform; and bring about social change (Wang & Yanique, 2001).

Table 2 Method 2: Still photos

Activity	**Purpose**
Photos were captured using three approaches. The first approach involved rangatahi wearing a lanyard attached to a mobile phone. An app on the phone, Timelapse, was programmed to take a photo every 10 seconds for 15 minutes. The second approach involved rangatahi using a camera to photograph "te reo Māori me ngā āhuatanga Māori" as per kairangahau directions. This approach was used at Te Matatini, and at public gardens in Tainui and Te Waipounamu. The third approach involved kairangahau taking photos either on a camera or on mobile phones. Kairangahau photographed the rangatahi participants and the environment at Te Matatini, and at public gardens in Tainui and Te Waipounamu.	To capture evidence of Māori text and images that rangatahi were exposed to.
Types of data captured	**Research questions addressed**
Reo ā-tuhi	RQ 2, 3, 5

The Timelapse still photo method was adapted from a method used in the Kids'Cam project (Smeaton et al., 2016). However, technical glitches meant that this approach was only partially successful.

Table 3 Method 3: Talking pictures

Activity	**Purpose**
Kairangahau asked rangatahi questions about their lives and a range of topics. At the same time, rangatahi were asked to create collages about themselves and things they thought were important, using art materials (e.g., coloured pens, pictures from magazines). When the collages were complete, rangatahi were asked to tell the kairangahau about them. Kairangahau audio recorded conversations and took photographs of the artwork and/or of the rangatahi, with consent.	To capture audio of rangatahi talking about themselves, their whānau, and anything else they wished to discuss.
Types of data captured	**Research questions addressed**
Reo ā-waha	RQ 1, 2, 3, 4, 5
Reo ā-tuhi	RQ 1

Our talking pictures method was informed by a qualitative arts-based method of data creation and collection called collage. Collage can be used as "a reflective process, as a form of elicitation, and as a way of conceptualizing ideas" (Butler-Kisber and Poldma, 2010, as cited in Gerstenblatt, 2013).

Table 4 Method 4: Self-report

Activity	Purpose
Rangatahi used an app to recall and self-report on their use of and exposure to te reo Māori during the time they were being video recorded (i.e., regarding the same event as above) or during an hour that they chose. Kairangahau helped set rangatahi up to do the self-report exercise.	To capture rangatahi perceptions of their te reo Māori exposure to triangulate with contextual information.
Types of data captured	**Research questions addressed**
Reo ā-tuhi	RQ 1, 2, 3, 5

Table 5 Method 5: Kanohi ki te kanohi profile interviews

Activity	Purpose
Kairangahau conducted semistructured interviews with rangatahi.	To gather information about rangatahi to develop case-study stories (primary purpose). Information included: proficiency, background, schooling, aspirations (see Appendix B). A secondary purpose was to analyse the language use of rangatahi.
Types of data captured	**Research questions addressed**
Reo ā-waha	RQ 1, 2, 3, 4, 5
Reo ā-tinana	RQ 4

Kanohi ki te kanohi interviews with participants began with whakawhanaungatanga and a brief description of the purpose of the study. All but one of the participants were interviewed kanohi ki te kanohi and audio recorded with their agreement. They spoke te reo Māori, or English, or both, as they chose; however, they were encouraged to kōrero Māori either by their parents or by the kairangahau. Whānau members were welcome to be present at interviews.

Interviews—including profile questions—took between 30 and 60 minutes. We asked participants open questions about their interests, and about their aspirations regarding te reo Māori (see Appendix B). We also asked them about demographic information and about reo Māori proficiency.

Proficiency self-rating

Participants self-rated their proficiency in speaking, listening, reading, and writing te reo Māori by indicating their preference on show cards (see example show card in Figure 1).

Pātai 1

He pēhea tō kaha ki te kōrero Māori i ngā kōrero o ia rā?

a. He pai rawa atu (Ka taea e au te kōrero ki te reo Māori mō te tino nuinga o ngā kaupapa)

e. He pai (Ka taea e au te kōrero mō ngā mea maha ki te reo Māori)

i. He āhua pai (Ka taea e au te kōrero mō ētahi mea ki te reo Māori)

o. Kāore i te tino pai (Ka taea e au te kōrero mō ngā mea māmā anake ki te reo Māori)

u. Kāore i tua atu i ētahi kupu noa iho ētahi kīanga rānei

Question 1

How well are you able to speak Māori in day-to-day conversation?

1. Very well (I can talk about almost anything in Māori)
2. Well (I can talk about many things in Māori)
3. Fairly well (I can talk about some things in Māori)
4. Not very well (I can only talk about simple/basic things in Māori)
5. No more than a few words or phrases

Figure 1 Show card with questions about reo Māori speaking proficiency (Statistics New Zealand, 2014).

Table 6 Method 6: Internet search

Activity	Purpose
Kairangahau searched the internet for publicly available content on various online platforms, such as Instagram, YouTube, and Facebook. Criteria for the searches included: 1. Content with a high density of te reo Māori being used; and 2. Participants were within age range (13–23 years old). Search terms included: *rangatahi and *te reo Māori, *rangatahi and *Māori, *rangatahi and *waiata, *rangatahi and *rangatiratanga, *mana wāhine, *wāhine toa, *rangatahi and *kia kaha te reo, *rangatahi and *gaming, *rangatahi and *haka.	To capture data on rangatahi use of te reo Māori online.
Types of data captured	**Research questions addressed**
Reo ā-waha	RQ 1, 2, 3, 5
Reo ā-tuhi	RQ 1, 2, 3, 5

We had originally planned to undertake a sweep of social media used by a group of participants. However, the project team agreed that this would be difficult, as it was likely we would view personal material by people who were not aware of the research. Instead, we chose to do a search of publicly available items on the internet. We gathered and analysed videos posted on social-media platforms Facebook and YouTube. Criteria for the searches to locate the videos included content with a high density of te reo Māori being used, and participants within the age range of approximately 13–23 years old.

The internet search was conducted by a rangatahi member of the research team. This provided the tuakana members of the team with the opportunity to mentor and support an emergent kairangahau.

Analytical approach

Our analytical approach aimed first to identify and describe themes and patterns from the language captured in our research. Themes and patterns were described in ways to enable the rangatahi participants to recognise themselves and their language worlds.

Secondly, its aim was to provide baseline data that other rangatahi Māori and their whānau could recognise or compare with their own use of te reo Māori.

Transcription

All video and audio recordings were transcribed. Due to the natural contexts in which speech was recorded, background noise meant that transcriptions reflected only what the transcribers were able to hear. This did not significantly detract from the quality of the data that was transcribed.

Profile interviews were conducted primarily for identification and contact purposes, and to gather information to develop a series of stories about the participants and their language environments and language use. However, as we realised that this material would enrich the reo ā-waha data, we added them to our corpus and transcribed and analysed them along with other audio data.

Qualitative analysis

Contexts

The eight contexts where fieldwork took place have come about for two main reasons. They had to be appropriate for the data-gathering method used, and convenient for participants and/or their whānau.

For Method 1: Video, and Method 2: Still photos, participants chose to be at public events, restaurants, and an office, where other people would be present, and where there was potential to be exposed to te reo Māori visually and orally. For Method 3: Talking pictures, participants needed to be in a relatively quiet space where they would not be interrupted, for example, in meeting rooms, in offices, or the family lounge room. Method 5: Kanohi ki te kanohi profile interviews suited a quiet space to talk.

In most cases, we asked rangatahi or their parents to nominate a place where they would be comfortable to talk and work with us. The exception to this was Te Matatini, where we approached rangatahi who were in attendance at least a day prior to data gathering to be sure they were happy to participate.

To begin analysis, we categorised the locations where kanohi ki te kanohi research sessions took place according to eight contexts. The ninth context comprised material collected online. These nine contexts were then divided into public and private contexts, as shown in Table 7. Grouping the data in these ways enabled us to analyse reo Māori exposure and use within a variety of private and public contexts.

Table 7 Public and private contexts

	Context	Public/Private
1	Matatini	Public
2	Family homes	Private
3	Student flat	Private
4	Meeting rooms in office spaces	Private
5	Restaurant	Public
6	Kapa haka practice	Private
7	Iwi office	Public
8	Public gardens	Public
9	Internet context	Public

One context that may be noted for its absence is sporting events. We were aware that some sporting codes use and promote te reo Māori. However, the difficulty of capturing natural language from rangatahi engaged in physical activity in environments with high levels of ambient noise was a barrier.

Stories about rangatahi

A set of stories were written about rangatahi experiences of te reo Māori within the eight contexts. The stories include descriptions of each context, a short explanation of the process of data gathering in each context, and information about the lives of the rangatahi participants. This set of stories introduces the rangatahi and the contexts, in preparation for the next layers of qualitative analysis.

Descriptions of five online kaupapa

Because the data we gathered online was publicly available, we categorised the internet context as public. Since we could not always tell the location of online content, we categorised this data according to five kaupapa. This contrasts with the stories about rangatahi and contexts, which focus on physical locations. The kaupapa are as follows.

- **Kaupapa 1** — Kaupapa Māori public event.
- **Kaupapa 2** — Entertainment.
- **Kaupapa 3** — Rangatahi concerns.
- **Kaupapa 4** — Waiata performance.
- **Kaupapa 5** — Online gaming.

We wrote a short description for each kaupapa, which includes who the online content has been created by, the intended audience, what the content is, and which languages are present.

Thematic analysis

Initial analysis of data through reflections, reading transcripts, viewing videos, and listening to audio informed the development of a thematic coding schedule. We uploaded all transcripts and notes for all of the rangatahi to NVivo software. These data were then coded using the coding schedule.

To answer the question "What motivates rangatahi into and out of using te reo Māori?" we thematically analysed the aspirations shared by 12 rangatahi in their profile notes or in transcriptions of audio- or video-recorded kōrero. Using NVivo we also thematically coded the linguistic nudges identified in the nine contexts to understand the reasons why rangatahi and those around them codeswitched within public and private contexts.

Linguistic nudge is the term we use to describe reasons or motivations for people to switch from one language into another. *Nudge* is used in health and economics in reference to influencing decisions and actions. (See, for example, Sunstein and Thaler, 2012.) For example, the act of starting a conversation in Māori could be considered a linguistic nudge that encourages the other person to reply in the same language.

We began by analysing rangatahi speech movement between languages as codeswitching. From this perspective, a bilingual speaker switches from one language (code) to another, and these switches can be examined "from various viewpoints such as the form, location, patterns, and functions of code switching" (Fachriyah, 2017, p. 149). The insights we gained through this analysis led us to the analytical concept of translanguaging.

The term *translanguaging* comes from a theoretical perspective that views the way people use their languages (and/or codes, dialects)—not as independent units, but as a single system that they draw from to express themselves in socially, culturally, and contextually appropriate ways (García & Li, 2014; Oliver & Nguyen, 2017). Two issues arise from this that are relevant to this study.

First, there is a long history in education of student language being rejected as inferior. This includes indigenous languages such as te reo Māori, and non-standard dialects of English (see, for example, Kelly, 2015; Oliver, & Nguyen, 2017). There is also anecdotal evidence that rangatahi use of a mixture of English and Māori is rejected and that rangatahi are sometimes admonished for it by well-meaning adults. Yet both codeswitching and translanguaging research indicates that this is normal language use for bilinguals (García & Li, 2014). From a translanguaging perspective, bilinguals are not so much drawing from two separate languages as from a single linguistic repertoire "from which they select features strategically to communicate effectively" (García, 2012, cited in García & Li, 2014, p. 22). This perspective is supported by evidence that when young people have more than one language or dialect, they will always translanguage, despite the efforts of adults to stop them (Canagarajah, 2011, cited in Oliver & Nguyen, 2017).

The second issue is the concept of translanguaging as "the enaction of language practices that use different features that had previously moved independently, constrained by different histories, but that now are experienced against each other as a new whole" (García & Li, 2014, p. 21, emphasis in original). We keep in mind that Māori and English are not being experienced against each other on a level playing field. The dominance of English means that its impact on te reo Māori can be detrimental if ways cannot be found to give space and status to te reo Māori.

In the study, we use the term "translanguaging" to describe how rangatahi in our study drew on and used their entire **linguistic repertoires** (García & Li, 2014) to interact and make meaning as rangatahi with others.

Linguistic Landscaping

We drew on a Linguistic Landscaping (LL) approach to analyse some reo Māori ā-tuhi that rangatahi were exposed to on, for example, signs, clothing, and books. This reo ā-tuhi was captured via methods 1 and 2. LL is a research method derived from the fields of sociolinguistics and semiotics (Landry & Bourhis,1997). LL provides a process to document and analyse written language within a given area.

Understanding how languages are used on signage gives us information about not just the use of written language in a given area, but also about its status in society (Backhaus, 2007). Signs are created to be read, understood, and interpreted. Therefore, the presence of written language carries within it expectations of how society reads, understands, and interprets signs. The languages that are present, their placement, distribution, and size (to name just a few) are all elements that carry assumptions about the geographical area in which they're placed.

LL has been discussed by distinguishing "official and nonofficial signs" (Backhaus, 2006). A large number of official signs (official road signs, for example) are distributed by institutions with power over language, such as government. Non-official signs include graffiti, or prices on products in a stall.

We analysed te reo ā-tuhi that was present in the landscape of eight contexts. Some analysis units we used in our analysis of images and text included:

- reo ā-tuhi type (e.g., labels, clothing, books, and temporary and permanent signs)
- languages present
- grammar
- place and context.

Quantitative analysis

To explore some aspects of language in the eight research contexts, and some aspects of language proficiency of rangatahi, our approach included:

- quantitative analysis of observations, video, and audio data to determine the density of reo Māori in each research context
- analysis of the reo ā-waha corpus to generate word-cloud visualisations of vocabulary frequency and range
- lexical/grammatical analysis of the reo ā-waha corpus to survey rangatahi grammatical use of a set of indicator words.

For lexical/grammatical analysis of collected spoken Māori data, we used WordSmith Tools 7.0 (Windows 10), tidytext, and other R software (Windows 10 MacOS and Linux), and, to a lesser extent, MAXQDA software. We used WordSmith Tools to generate word lists (frequency, alphabetical, and relevant statistics) and concordances (useful for providing details of use of a particular word, such as the grammatical particle ai) from transcriptions of rangatahi spoken language. Function and grammatical words were removed from the transcripts to allow exploration of content words (e.g., verbs, nouns, and adjectives). We generated word clouds with WordSmith.

Vocabulary analysis

Our primary interest was the range of vocabulary (especially content words) being used by rangatahi. A wide range of vocabulary, along with the use of low-frequency words, is an indication of proficiency (Laufer & Nation, 1995). The range of vocabulary can be displayed as lists; however, word clouds provided insightful visual illustrations of vocabulary use, and allowed us to compare speakers/dialogues. Useful lexical statistics included total number of words, range of words (types, i.e., same forms), tokens (the number of each word type), and type/token ratios.

Lexical/grammatical analysis

Along with a broad vocabulary, a wide range of accurate usage of grammatical particles (i.e., other than content words, morphology, and phrase/sentence constructions) is a strong indicator of proficiency (along with vocabulary usage). We therefore generated concordances to examine the use of:

- manner particles kē, tonu, rawa, kau, noa
- directional particles ake, iho
- experience verbs pīrangi, mōhio
- the irregular verb taea
- the nominalising suffix -Canga
- the passivising suffix -Cia.

The analysis of these items, and a discussion about their use by rangatahi, is presented in Chapter 5.
The following chapter presents background information about the contexts in the research, and the rangatahi we met within those contexts.

3. Rangatahi and contexts in the study

This chapter describes the contexts where we gathered data, and the rangatahi we gathered data from. There were 19 rangatahi in 13 locations across four iwi regions.

We have categorised the data by context to enable analysis by location or kaupapa. The following descriptions set the scene for each context, and give a short profile of each rangatahi participant. We have written the profiles in the present tense and give the ages of the rangatahi at the time of the study. Note that a few of the rangatahi are present in more than one context because, for example, we interviewed rangatahi at home, then transported them to a public space to take photos. We also provide a short explanation of the process of data gathering in each session. Table 8 identifies each context as public or private. These two categories are used in analyses in Chapters 4 to 6.

Note that some rangatahi agreed for their names and images to be used. Other rangatahi asked that we use pseudonyms, and we have not included images of those rangatahi.

Table 8 Public and private contexts

	Contexts	Context type
1	Te Matatini o te Ao at a sports stadium in a city in Te Taihauāuru	Public
2	Family homes in Te Arawa and Tainui	Private
3	A student flat in Te Waipounamu	Private
4	Meeting rooms in office spaces in Tainui	
	Private	
5	A restaurant in Te Arawa	Public
6	A kapa haka group practice in Te Waipounamu	Private
7	An iwi office in Te Waipounamu	Private
8	Public gardens in Tainui and Te Waipounamu	Public
9	Online digital platforms	Public

Context 1: Te Matatini

Te Matatini is a national kapa haka competition held every two years. In 2019 it was held in Te Taihauāuru. Many reo Māori speakers of all ages gathered at Te Matatini to support their whanaunga. Te reo Māori was part of the kaupapa of this event, and was promoted by event organisers, stall holders, competitors, and supporters.

There were two main areas at the venue—the performance area and the concourse area. There were many different types of stalls set up in the concourse. Some stalls sold food, merchandise, and other products such as clothing, pounamu, or jewellery. Others were for whare wānanga and universities, and government and non-government agencies. Some stallholders were showing or conducting research, signing up students for courses, and giving out information and resources. Others had competitions and games, including games that encouraged people to speak and sing te reo Māori.

Māori images and written words were highly visible on signs, in stalls, and on clothing and bags. The performances were being broadcast on small screens and sounds from the stage and audience were sometimes audible over the hum of conversation on the concourse.

Hundreds of people, including the rangatahi participants, were moving in and out of the performance area and visiting stalls around the concourse. People were greeting each other and appeared happy to reconnect. Kairangahau noted that there was a sense of community, and that several people commented to them about how nice it was to be in such a positive, high-energy, Māori atmosphere.

There were reo Māori writing and designs on temporary general signage and on signage in stalls. Lots of stalls were selling products with traditional and contemporary Māori design elements and te reo Māori text. There were hei pounamu, coloured kōwhaiwhai-inspired jewellery, Māori-speaking dolls, kete, and Te Matatini T-shirts. Tamariki wore temporary moko, ākonga wore school uniforms with Māori mottos and images, and many people wore clothing with Māori designs or words.

Whakawhanaungatanga was a huge part of Te Matatini. As they moved around the venue, rangatahi met up with lots of people. Every time they met up with someone they knew, they smiled, called out “Kia ora!” hugged, kissed, and shared hongi and kōrero.

Kairangahau chose the venue, and then recruited rangatahi who were going to Te Matatini or who were already at the venue.

Image 1 The concourse area at Te Matatini

Tama

Tama (20) is from Ngāti Tama and Te Ati Haunui-ā-Pāpārangi. He attends university and has a group of friends he speaks Māori with. He enjoys kapa haka, parties, and is passionate about the environment and climate change. Tama grew up in a semi-rural area and was educated in Māori-medium before moving to a city and an English-medium high school. He aspires to be able to speak Māori without having to think twice about what to say.

Image 2 Tama

Data gathering[2] with Tama

Tama wore a Bluetooth microphone for half an hour as he walked around the concourse area. Kairangahau followed with a camera, which captured body language and the ambient language around him.

During his interactions with people he met along the way, te reo Māori was used for greetings but otherwise conversation tended to be in English. He walked around the stalls and looked at clothing and food stalls, sometimes chatting with friends. Conversation was informal and included topics such as the weather, shopping, kai, and kapa haka performances.

[2] A full description of the six data-gathering methods is in Chapter 2.

Rereao and Te Rahera

Rereao and Te Rahera are close friends. They are both 20 years old and live in Te Taihauāuru. They attended kura kaupapa Māori and are now at the same university.

They are passionate about kapa haka and have committed to speaking te reo Māori with each other all the time.

Image 3 Te Rahera and Rereao

Data gathering with Rereao and Te Rahera

Rereao and Te Rahera also wore Bluetooth microphones as they walked around the concourse area using the Video method. They interacted with one another and with people they met along the way. For the most part they used te reo Māori consistently with each other and with other people. As they moved through the stalls, they talked about things they wanted to buy, such as earrings and clothes.

> *Rereao: Whā me te hawhe, whā me te haurua. Kei te hiahia au ki te hoko i tētahi o ērā—umm panekoti.*

They also talked about food, kapa haka, and personal tastes (for example, their favourite colours). It sometimes seemed that they left sentences unfinished, as if they knew each other so well they did not need to complete them. Their conversation was natural and easy. When they saw someone they knew, they would greet them with "Kia ora", "Kei te pēhea?"

Matariki Black

Matariki Black (14) attended a kura rumaki, and is currently at high school. He speaks te reo Māori with whānau at home, and in Wairoa where his whakapapa lies. Matariki B enjoys waka ama, and helping others learn to whakapakari tinana. His hope is for te reo Māori to thrive and grow within his whānau and in the world.

> *Kia tipu tonu i roto i tōku whānau, arā kia kaha tonu ki te ora ki roto i te ao me tōku whānau.*

Image 4 Matariki Black

Data gathering with Matariki

Matariki B took part in a trial of the Still photos method of research at Te Matatini. The kairangahau gave him a camera and asked him to take photos of te reo Māori and other Māori images.

Context 2: Family homes

Three whānau groups were interviewed in their homes—two in the Te Arawa region, and one in Tainui. These contexts were comfortable, intimate settings where rangatahi were in familiar surroundings. Home environments can give a strong sense of a whānau life and natural language environment, such as who uses te reo Māori with whom, and how much reo Māori is used. They can also show what systems at home look likely to support rangatahi to develop and use te reo Māori. All three whānau homes in Te Reo o te Rangatahi had lounge areas adjoining kitchen dining areas. The lounges were each furnished with couches, a coffee table, cabinets, and a television. In two of the homes, the television was on, and broadcasting Māori TV. A children's programme in te reo Māori was on at one house, and kapa haka was playing at the other house.

The three whānau areas had Māori artworks displayed on the wall, and on cabinets or tables. These included whakairo, paintings, ceramic art, and bone taonga.

One home was located on a papa kāinga, with extended whānau living in houses close by. The other two homes were in suburban areas.

Kahira and Makurata

Kahira is 13 years old and lives in the Te Arawa region. She took part in the interview with her whanaunga, Makurata (aged 10), at their papa kāinga. Kahira goes to a wharekura at a kura ā-iwi where she speaks te reo Māori with friends, kaiako, and whanaunga. Kahira and Makurata are also supported by some of the adults and children in their whānau who are proficient reo Māori speakers, and by other whānau members who are learning te reo Māori.

The two girls would like more people to speak Māori. While they supported the idea that Pākehā should learn, Kahira thought it was more important for Māori to be able to speak te reo Māori.

> *Kairangahau 1: Me ako hoki te Pākehā i tō tātou reo?*
>
> *Makurata: Āe. Ka pai rātou tarai ki te ako i ētehi kupu.*
>
> *Kahira: Mehemea e hiahia ana rātou ki te ako ka taea rātou engari te manako nui, ko mātou ngāi Māori ka kōrerotia reo.*

Data gathering with Kahira and Makurata

The kairangahau met Kahira, along with her mum, adult tuakana, and two nieces. After introductions and whakawhanaungatanga, the adults and a younger child departed, while Kahira and Makurata stayed with the kairangahau for the rangahau session. The venue was suggested by the kairangahau and agreed to by Kahira's mum.

There were two parts to the data-gathering session. First, the kairangahau interviewed the two girls for about 15 minutes about their lives and about their use of te reo Māori. Then the kairangahau explained the Talking pictures data method to the rangatahi, and gave them paper, magazines, and other resources to create a collage about themselves and the things they liked, while the kairangahau chatted with them and asked them questions. Since the girls were quiet, and seemed shy, the kairangahau left them alone with the recording equipment running, to give the girls a chance to relax and talk with each other. The collage session took about 20 minutes.

Manaaki

Manaaki (13) lives in the Tainui region with his parents and two sisters. Manaaki is at wharekura, and the girls are at kura kaupapa Māori. The whānau are bilingual and use Māori and English interchangeably. Te reo Māori is a natural part of whānau life and activities including at home, and in waka ama and other sports, where there are other Māori speakers involved.

Manaaki is supported to kōrero Māori by his whānau and by kura. Other whānau members also use te reo Māori with the tamariki. Manaaki and his two sisters speak Māori very quickly and switch between English and Māori often.

Manaaki says he likes to dream, and is aware that having a plan is also important.

> *Manaaki: Kāre au he moemoeā, engari i kī mai au tētahi saying, 'a plan without a wish is just a dream'. Ka mahi ahau i tēnei i ngā wā katoa nā te mea ka wareware au tōku plan.*

Data gathering with Manaaki

The rangahau took place in the whānau area at the home of Manaaki, where te reo Māori was present in artworks, books, and whakairo. His māmā and aunty chose the venue as it was convenient and familiar.

Manaaki and his two sisters joined in the rangahau, with the two kairangahau asking questions and generally chatting to the three rangatahi. One of the kairangahau is an aunty to the rangatahi. Having their aunty in the room meant that there was a person the rangatahi were used to speaking Māori and English, so the interview and Talking pictures session went smoothly and interactions were very natural. The young people spoke quickly and switched between English and Māori often. Everyone sat on the floor of the lounge and chatted as the three rangatahi made collages and talked about their artworks.

Image 5-7 Collages by Manaaki and sisters

Mai Io

Mai Io and her whānau speak to each other in Māori wherever they are and about anything and everything. Her reo Māori is supported in her home by her whānau, and out of home at kura and by a large community of reo Māori speakers in the city. The venue was suggested by the kairangahau and agreed to by the whānau.

See Context 5: Restaurant in Te Arawa for more information about Mai Io and her whānau.

Context 3: Student flat

This reo-Māori student flat was in a city in Te Waipounamu. The students who live there are part of a small, dedicated community of reo Māori speakers in the city, and are committed to speaking Māori with each other at all times. Te reo Māori is central to tikanga that the flatmates practise, which includes formal mihi whakatau for all visitors.

> *Te Ngaru:*
> *Nā reira, tēnei noa e whakarewa ana i te reo whakahei, te reo pōhiri, te reo whakatau ki a kōrua e ngā māreikura. Nau mau, haere mai, piki mai, kake mai ki tēnei whare o tātouināianei. Nō reira, tēnā tātou katoa*

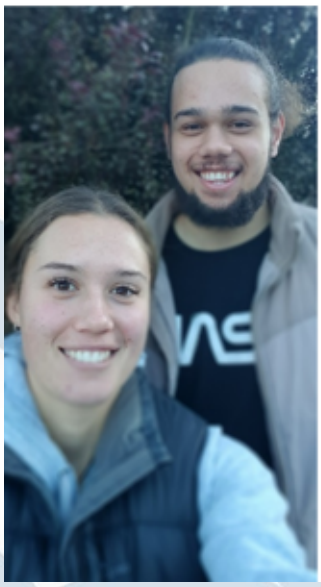

Image 8 Matariki and Te Ngaru

Image 9 Reo Pākēhā jar in the student flat

Te Ngaru and Matariki

Te Ngaru (19) and his sister Matariki (20) are originally from the Tainui region. They both attended kura kaupapa Māori before moving into mainstream high schools. Their whānau moved to Te Waipounamu, where they both attend university. Te Ngaru lives in the flat with other students, and Matariki lives in the same city at home with their parents.

Te Ngaru and Matariki use te reo Māori at home with whānau and flatmates and at university with friends and kaiako. Other places they speak Māori are at their sister's place with her baby, and at the gym with friends.

Te Ngaru and Matariki are passionate about te ao Māori and te reo Māori, and have a strong sense of their roles in Māori-language revitalisation. Te Ngaru and his flatmates are committed to a reo-Māori-only environment in their flat. Living and socialising with similar-aged students has helped grow their reo. One of their strategies to encourage each other to speak only Māori is a reo Pākehā jar. Anyone who speaks any English has to put money in the jar. Te Ngaru noted that the flatmates don't police the jar strictly, but it is an incentive for them to stick to te reo Māori.

Te Ngaru has a clear goal for reo Māori revitalisation. He would like to see 50 per cent of people in Aotearoa to be Māori speakers in his lifetime. Matariki would like everybody to be surrounded by Māori speakers everywhere they go.

Data gathering with Te Ngaru and Matariki at the student flat

Prior to the data-gathering session, the kairangahau made contact with Te Ngaru by phone and he mentioned that it was their tikanga at the flat to whakatau all manuhiri. At the time of data collection, Te Ngaru's flatmates had left for the holidays. His sister Matariki was at the flat to tautoko her brother. Te Ngaru chose the venue as somewhere familiar and a reo Māori place.

The session began with a formal whakatau from Te Ngaru, and then both Te Ngaru and Matariki sang a waiata. One of the kairangahau responded and laid a small koha. The rangatahi and kairangahau then came together with hongi and awhi, followed by lunch, after which the kairangahau interviewed the rangatahi, using less formal language. The whakatau and interview took about 40 minutes and were captured using audio-recording equipment.

After the interview, Te Ngaru and Matariki took photographs at a local garden using the Still photos method.

Context 4: Meeting rooms in office spaces

In the Tainui region, several rangatahi were interviewed in rooms in office spaces. These were familiar places, where rangatahi occasionally spent time. Usually, these offices are predominantly English-language places, since most people in the workplaces are English speakers, and most written text is in English. The offices were all situated in large buildings. One had an open-plan area with several desks and computers. It also had several banners and posters displayed that had some reo Māori text and images on them. All the offices had permanent signage that was in English.

Aniwa and Kohurangi

Aniwa (13 years) and Kohurangi (12 years) are cousins. Their whānau are very close with three households living very close to each other. Aniwa and Kohurangi went to kōhanga reo and Māori-medium kura, and their whānau are committed to te reo Māori.

Data gathering with Aniwa and Kohurangi

Aniwa and Kohurangi were interviewed in an inner-city office, in a large meeting room. It was a Sunday afternoon and the rest of the office was empty.

The rangatahi answered questions about their lives and te reo Māori. Kairangahau gave them paper, magazines, and other materials and asked them to make collages about things they liked while they talked, using the Talking pictures method. Their matua chose the venue as it was convenient.

One of the kairangahau was a whānau member, which made it easier to have a more natural kōrero, because shared understandings meant they could talk about specific people and information from their lives. The girls answered questions, and as the conversation unfolded, they began to tell combined stories from different viewpoints.

The girls are confident speakers of te reo Māori and they shared a lot of laughs. As cousins who know each other well, they are comfortable disagreeing with each other and expressing their differing opinions.

Kairangahau 2: He whakaaro ā kōrua mō te ako i te reo Māori i ngā kura katoa?

Aniwa: Kao. Kare rātou i te Māori and kia pai noa iho tātou ki tō tātou ake reo.

Kohurangi: Pai mēnā ka mahi i ngā tāngata katoa.

Kairangahau 2: Nē? Pai tēnā. Kei a koe ō whakaaro, kei a koe ō whakaaro. Ka pai.

Te Hāmama

Te Hāmama is 16 years old and goes to wharekura in the Tainui region. He is a confident speaker and is passionate about te reo Māori, kapa haka, and the arts. One of the pou reo in his world is his uncle, who talks to him about his Ngā Puhi history and speaks te reo o Ngā Puhi with him.

Tōku matua kēkē, he kaha nōna ki te kōrero i te mita o Ngā Puhi, waihoki, he nui ōna mōhiotanga, ki ngā tikanga, ki ngā kōrero, ki ngā hītori o Ngā Puhi … ka whakaako ia ki a au ētahi o ngā kōrero kei a ia mō Te Tai Tokerau.

Ko tāna, ka tango i te 'w', so ki te kī i ngā kupu pēnei i te whakaaro, ki hakaaro, whakamana—hakamana, āe. Ka kōrero ia mō ētahi o ngā kōrero i a ia i te wā ka hoki atu rātou ki Te Tai Tokerau ki te taha o ō rātou kuia, i ō rātou koroua ki Te Tai Tokerau.

Te reo Māori is an important part of Te Hāmama's life, along with whānau, music, and kapa haka. Even though he speaks Māori well, sometimes he finds it hard to keep using te reo Māori because it is easy to slip into using English with his friends. Things that help him use te reo Māori include friends and teachers speaking Māori around him, and especially when someone speaks Māori to him.

Kairangahau 1: Nō reira, he aha te take ka huri anō koe ki te reo Māori?

Te Hāmama:
Tērā pea, i ngā wā tākaro, kei waenganui koe i ō hoa, so, ko te reo Pākehā ka rere, engari i te wā ka kite koe i te kaiako, ko te reo Māori ka puta. E kore e pai ai tō tau e kore rawa rātou e kōwhete i a koe mō te kōrero Pākehā, engari i te wā ka haere ka hoki anō ki te reo Pākehā.

Te Hāmama enjoys kapa haka, "Mō te hemo tonu atu." He and his whānau travelled to Wellington to attend Te Matatini, and even heavy rain didn't stop him and his sisters from watching every group perform. Te Hāmama also enjoys watching kapa haka on Māori TV, and he performs with his kura.

Image 10 Te Hāmana

Image 11 Te Hāmana's collage

Data gathering with Te Hāmama

Te Hāmama took part in the rangahau in a private meeting room in a large building. His mum chose the venue for convenience and because it was quiet. They shared stories about their whānau, and about likes and dislikes. The kairangahau provided materials for Te Hāmama to make a collage about his life and the things he liked, and he talked about these things as he worked. Te Hāmama's mum also joined in the conversation, which was audio recorded. The session took about an hour.

Molly

Molly is 14 years old. She goes to an English-medium school, but speaks Māori at home with her dad, who teaches te reo Māori. Molly's reo is supported when she visits their marae, and when other people speak Māori to her. Her interests and hobbies include reading, listening to music, and playing computer games, and she likes telling jokes to make people laugh.

Kairangahau 1: He aha ngā mea tino pai ki a koe, ō kaingākau? Hei āwhina, ō hākinakina pea—

Molly: He pānui pukapuka. Mātakitaki i ngā kiriata. Whakarongo ki ngā waiata. (laughs) Kōrero ki taku pāpā.

Kairangahau 1: He aha?

Molly: Kōrero ki taku pāpā.

Kairangahau 1: Ka rawe. Te waimārie hoki tō pāpā.

Pāpā: Me te whakaputa kōrero kia kata, kāre he pai tēnā ki a koe?
Molly: Kao, tēnā tō mahi.

Data gathering with Molly

Molly was in her dad's office at a university. She was interviewed by two kairangahau on a laptop computer using the Zoom app. Molly took part in the Self-report method of research. Her father also joined in the conversation.

Context 5: Restaurant in Te Arawa

This context was a large, busy family restaurant in the Te Arawa region, in a city where there is a large reo Māori community. Lots of families, small groups of friends, and a few individuals were at the restaurant talking and ordering food. The restaurant was noisy, with many people talking. Apart from the participant whānau, everyone was speaking English, including those who were cooking and serving food. Menus and signage were all in English.

Mai Io

Mai Io (aged 13) goes to a local wharekura. She enjoys mau taiaha, netball, kapa haka, dancing, and reading reo Māori books. She has whakapapa links to Te Arawa.

Mai Io would like to be able to hear te reo Māori in most places she goes. She realises that the language is vulnerable and would like to see it grow stronger.

> *Mai Io:*
> *Kia kaha ake te reo, kia rangaona ake te reo i te nuinga o ngā wāhi. Kia kaha noa iho nō te mea kei te totohu noa i tēnei wā.*

At least one of her kaumātua is a pou reo who taught te reo Māori for many decades. Mai Io and her whānau continue the tradition by being committed to speaking Māori together everywhere they go. This, and attending kura reo Māori, supports Mai Io's reo Māori, and that of the whole whānau. Mai Io and her siblings also play sports, where the coaches and other players speak Māori while they are practising and playing. Being part of a large Māori-speaking whānau has normalised the use of te reo Māori when they are together.

Data gathering with Mai Io at the Te Arawa restaurant

The research began with the kairangahau meeting Mai Io, her parents, her older brother, and three teina at their home (see Context 2), and explaining the research and the Video method. The whānau travelled from home to the restaurant in the family car. The restaurant was chosen by the kairangahau and whānau as a place the whānau were familiar with, and where natural language could be captured for the research. In the car, and at the restaurant, Mai Io wore a Bluetooth microphone, and the whānau conversation was video-recorded. Mai Io and her whānau talked to each other in Māori about what they wanted to eat while waiting at the counter, then ordered their food in English because the restaurant staff did not speak Māori. The whānau found a table and sat down to eat and chat for about 20 minutes.

> *Teina 1: Me kōrero Māori? Kōrero Māori … Me kōrero Māori?*
>
> *Mai Io: Kao, i te mea kāre rātou i te mārama ki tō reo …*
>
> *[Family orders food]*
>
> *Teina 1: Ka kai koe i te aha?*
>
> *Mai Io: Ka kai au i ngā sundaes.*
>
> *Teina 1: Ka kai au te strawberry shake me ērā mea—*
>
> *Teina 2: Yeah, yeah he aha tō whai, te rōpere, te tiakareti rānei?*
>
> *Mai Io: He reka ki a koe?*
>
> *Teina 1: He reka tonu nē, engari he tino reka ko te tiakareti.*

Context 6: Kapa haka practices in Te Wai Pounamu

Kapa haka practices are contexts in which there is exposure to a lot of te reo Māori, as waiata, haka, and mōteatea are all in te reo Māori. A group of around 30 rangatahi attended the practice in a school hall, and most wore school uniform. The words to a Ngāi Tahu pātere were projected onto a large screen at the front of the hall on a stage. Two rangatahi participants were members of the kapa haka and their father was the tutor.

The tutor did most of the talking during the practice, while the rangatahi followed his instructions and sang a pātere. Since most of the group were not proficient speakers of Māori, the tutor used mostly English. However, he incorporated some Māori words and phrases into his kōrero. Some of these he explained in English (for example, "the rangi or the tune"). Other items, which he did not translate, seemed to be known by the group.

> *Follow along with the kupu as we're doing it. We're going to be doing it a few times, so, after a few times of following along, I want you to start actually saying the words as we're saying them, ka pai? And you'll hear the tone, you'll hear how the rangi or the tune flows up and down—ka pai?*

Most of the Māori the tutor used was instructional or encouragement such as "Kia rite" or "Ka pai". He also used some Māori humorously: "Get your wiri on!"

The group started off shyly singing the pātere. The tutor asked the group if they knew what it was about, and then gave them detailed explanations of historical and geographical elements of the content of the mōteatea.

He explained the history behind the words they had been singing, weaving in stories from Ngāti Māmoe and Ngāi Tahu. He also explained the importance of using their bodies, faces, and hands to express themselves and to show their connection to the pātere while performing. He modelled the resting stance for tama tāne, and encouraged tama wahine to pūkana. He explained to the group that body movements should link with the words of the pātere.

Image 12 Kapa haka practice

The group sang the pātere several more times, with different students leading it. The tutor gave the group feedback and encouragement and, as they repeated the pātere, they got louder and the rangatahi began to incorporate more body language and gesture into their performance.
The participant rangatahi did not speak much Māori in this setting. This may have been because English was the default language for many of the other rangatahi, and because it was practice time for the kapa, and not a time for casual chatting. However, the group sang the pātere repeatedly, which balanced out the use of English. Therefore, all rangatahi present heard and used a significant amount of classical reo Māori in this context.

Data gathering with rangatahi at the kapa haka practice

Kairangahau were invited to the high school kapa haka practice by the tutor. At the beginning of the practice, the tutor called the group together and they stood in a large circle. He led a karakia, and introduced the two kairangahau. He then asked all the rangatahi to line up: that is, to put themselves into kapa formation. The two rangatahi participants were positioned in line with other tama tāne.

Kairangahau used a video camera and a still camera to film and take photographs of the rangatahi as they practised.

Context 7: Iwi office, Te Waipounamu

The office in Te Waipounamu was a place where te reo Māori was predominant. Te reo ā-tuhi was present in posters and permanent signage. There were carvings and Māori artworks throughout the office, and te reo Māori was the normal language in this space.

Four rangatahi were interviewed at the office. All have whakapapa ties to iwi in Te Waipounamu. Family members of two of the rangatahi were also in the building at the time.

Kiringāua and Thomas

Kiringāua (15 years) and Thomas (21 years) are confident and highly competent speakers of te reo Māori.

Most of Thomas' education was in English medium, until he moved to wharekura. Kiringāua started his school life at English-medium schools, but then later was home schooled. At English-medium schools he felt he had to leave his Māoritanga at the door.

Thomas: Hei te mea i te kura Pākehā me waiho i tō Māoritanga ki te kūaha.

Image 13 Kiringāua and Thomas

The two rangatahi enjoy watching and discussing kapa haka performances. They would also like to set up a whānau kapa haka in the near future.

Māori is their preferred language of communication. They are committed to using te reo Māori as much as possible, and would love to be able to use it everywhere in their community in every situation. They had a high level of Māori language proficiency.

Data gathering with Kiringāua and Thomas at an iwi office

An interview and video recording with Kiringāua and Thomas took place in the kitchen area in the evening. The interview was video recorded, then the two rangatahi were left to talk together about whatever they wanted. Their conversation was also captured on video.

Tūmai and Hinepounamu

Tūmai (17) and Hinepounamu (20) are good friends. Tūmai does his schooling at home, while Hinepounamu went to a mainstream high school in the past and is now at university. They are both passionate about te reo Māori and are highly proficient speakers. They have clear ideas about their roles in supporting te reo Māori revitalisation in their communities now and in the future.

Image 14 Hinepounamu

> *Tūmai: Kia pakari ake anō taku reo, mā reira e māmā ake kia whakapakari ake au i te reo o aku whanaunga ki te kāinga, mā tērā ka tipu ake te puna kōrero o taku hapū, marae, ka ea tērā, kātahi pea ka titiro ā-waho ki Te Waipounamu, ki te motu rānei.*

> *Hinepounamu: Kia whānui ake te kete mātauranga ōku, kia tino tāea taku hāpai ake i te reo o taku whānau, hapū hoki. Kia tae au ki taku kuiatanga, he tino wawata nōku kua pakari ake te puna kōrero o taku marae ki Te Tai Poutini.*

They use te reo Māori all the time with each other, with their whānau, with friends who kōrero Māori, and at hui rangatahi. They also use it at events such as Matatini and manu kōrero, and when hui are held at their marae.

These rangatahi described elements of te reo Māori that go beyond words, including sending messages by using their eyes or whistling.

Data gathering with Tūmai and Hinepounamu at an iwi office

Tūmai and Hinepounamu were interviewed in the morning, in a small meeting room in the iwi office building. The interview session lasted about 50 minutes, and the rangatahi were asked to complete the online survey in the Self-report method in the following week.

Context 8: Public gardens

Two botanical gardens were included as public contexts in Te Reo o te Rangatahi. The first was in the Tainui region, and the second was in Te Waipounamu.

Public garden in Tainui

A gala to celebrate Matariki was underway in the garden in the Tainui region. Stalls for the gala were set up in two areas of the gardens. An outside area was for food vendors, and inside a large hall situated within the gardens an area was set up for live music, and for vendors selling other items such as taonga and whakairo. There were reo Māori and bilingual signs at the stalls, and people wearing clothing with Māori text and images. Several Māori-speaking whānau were attending the event.

Outside of the two gala areas, there were several themed gardens. A Māori garden featured pou whakairo and native plants, and showcased a pātaka kai and a māra kūmara. Plaques in te reo Māori and English displayed information about the garden.

Image 15 Pātaka in kūmara garden

Image 16 Te Ahuru

Image 17 Tuiaria

Te Ahuru and Tuiaria

Te Ahuru (16) and Tuiaria (13) are brother and sister. They live in Hamilton and attend Māori-medium wharekura. They are confident speakers of te reo Māori and their reo Māori is supported at home and at kura. They also regularly hear te reo Māori on Māori Television and at events such as whakataetae kapa haka ā-motu.

Both Te Ahuru and Tuiaria would like to hear more te reo Māori, and for more people to be able to speak and understand Māori. Tuiaria would like for people to switch into English less often, and to see and hear more te reo Māori in movies and on the internet.

> *Kia kaua e whakawhitiwhiti te reo Māori ki te reo Pākehā. Kia mahi i ngā kiriata reo Māori, ā ka kite te reo Māori ki te ipurangi.*

Data gathering with Te Ahuru and Tuiaria in a public garden

Te Ahuru and Tuiaria were at the Matariki gala day at the Tainui garden, and participated in the research. Kairangahau met the rangatahi and their mother, who chose the venue as a place where the rangatahi would be comfortable, and where te reo Māori was likely to be heard and seen.

The research session started with introductions and whakawhanaungatanga. Kairangahau interviewed the rangatahi in a small information building in the garden. The interview was audio recorded. After the interview, kairangahau asked the rangatahi to walk around the gardens and take photos of te reo Māori and other things they thought were Māori (Still photos method). Te Ahuru wore a lanyard with a mobile phone attached. A timelapse app on the phone took photographs approximately every 10 seconds. Tuiaria used a still camera to take photos. After about 20 mins, the two rangatahi swapped equipment, and carried on walking around the garden taking photos. The session ended after about an hour.

Public garden in Te Waipounamu

This garden is in a city with a small, dedicated reo Māori community. The main entrances open into a large area with flower gardens and lawns, a stream, a pond, and an information booth that sells art and craft products. Plaques and signs in this area were mostly in English, with botanical names in Latin. A café sign was written partly in French.

The garden has several themed areas spread over a large, hilly area, including a native garden. However, the rangatahi chose to stay in the main garden area.

There were a few small groups and pairs of people walking around this main garden. As far as we noticed, all were speaking in English other than our group.

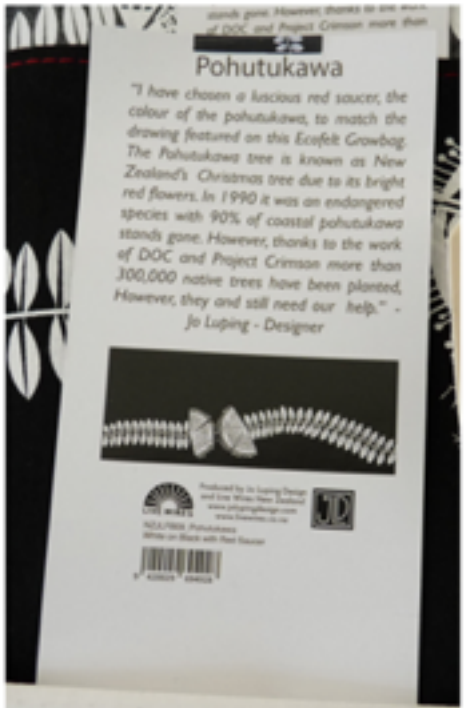

Image 18 Māori word on a product for sale

Image 19 Te Ngaru and Matariki

Data gathering with Te Ngaru and Matariki in a public garden

Two rangatahi, Te Ngaru and Matariki, were in the garden with two kairangahau as part of the research. The rangatahi chose the venue as a suitable place to take photos and where they might see some reo Māori writing.

The photography session at the park lasted about 30 minutes and followed the whakatau and interview at Te Ngaru's house nearby. Kairangahau asked the rangatahi to walk around the gardens and take photos of things they thought were "Māori", including te reo Māori writing and images.

Te Ngaru wore the lanyard and mobile phone, while Matariki took photos using the camera. After about 15 minutes, the two rangatahi swapped equipment, and continued photographing things that caught their eye in the garden. This included plants and flowers. Unfortunately, the Timelapse app switched off unexpectedly and did not capture any photos at the gardens.

Because Te Ngaru and Matariki were at the garden together, they were able to use te reo Māori with each other. However, a lack of reo Māori speakers and text at the garden is a barrier to exposure to the language for them.

More information about Te Ngaru and Matariki is in Context 3.

Context 9: The internet

Given that rangatahi are digital natives, the internet serves as a ninth context specifically for data-gathering method 6: Internet search. For the purpose of this research, only content freely available through public search engines was collected.

The kairangahau rangatahi in our team looked for material that she thought was targeted at a rangatahi audience. This resulted in a dataset comprising 21 short videos[3] and three memes. The dataset incudes videos created by rangatahi for rangatahi.

The videos selected are a small sample of the kinds of reo content rangatahi are being exposed to and creating in the public internet context. It is not a comprehensive list of the content available online.

Through the analysis of this data, we were able to group the foci of the videos into five different kaupapa. These kaupapa provide examples of the kinds of reo rangatahi are being exposed to, and using, online. These groupings are listed below.

[3] Full references to these videos are available in Appendix C.

Kaupapa Māori public event

Ihumātao

Eleven of the videos collected were live recordings of an event at Ihumātao. While the event has had national interest and exposure, rangatahi attendance at, and documentation of, the event suggests that it is a kaupapa that rangatahi care about. Some of these videos were taken and shared by rangatahi. All the videos were published in a public online forum (Facebook) to update people about what was happening at Ihumātao.

Of these videos, seven were filmed at the main meeting place at Ihumātao, where hundreds of people were gathered to advocate for the return of this piece of land to tangata whenua. Two short videos were filmed by a rangatahi to document what was happening in real time and shared live to Instagram. One video included karakia and whaikōrero being recited simultaneously as the haukāinga planted trees on the land. One video took an interview format.

Four of the 11 videos were all in te reo Māori, and the rest were in a mixture of Māori and English.

Ngāo Tauira tautohetohe

This video was shared publicly on Facebook to document a rangatahi performing a speech in te reo Māori. This was a live recording of an event and was produced by the rangatahi or her whānau for fellow university students. Her speech was all in te reo Māori.

Entertainment

These videos were created to entertain others and/or gain subscriptions online. The videos included one vlog filmed by a rangatahi, which followed her through a day in her life and was all in te reo Māori. The second video was a skit created by university students, who spoke in Māori and English. The third video was of a make-up tutorial entirely in te reo Māori, with English subtitles.

Rangatahi concerns

One of the videos featured a television story where three rangatahi were interviewed in Māori about having their names mispronounced. This was then shared on the internet. The rangatahi only spoke Māori in the video, although there were clips of other people speaking English.

Performance—Waiata

Three of these videos featuring waiata performances were written and/or performed by rangatahi. The videos had been produced for a television programme and were shared online. One was a professionally produced music video created by people outside of the rangatahi age range but aimed at engaging a rangatahi audience.

Online gaming

One of the videos featured online gaming, which is an activity many rangatahi enjoy, and some use te reo Māori for. This video captured rangatahi and others gaming in te reo Māori and talking about how te reo Māori and gaming interact with one another. Their conversation, and the recordings of them gaming, were all in te reo Māori.

4. How rangatahi are using, and being exposed to, te reo Māori

The six data-collection methods produced video and audio data, images, observation and reflection notes, and online survey responses. This range of data types allowed us to explore rangatahi exposure to, and use of, te reo Māori using different approaches and lenses. The two research questions addressed in this chapter are:

RQ 1. How are rangatahi using te reo Māori?

RQ 2. How are rangatahi being exposed to te reo Māori?

We developed a series of sub-questions to address these research questions. To answer the sub-questions, we analyse three modes of te reo Māori: te reo ā-waha; te reo ā-tuhi; and te reo ā-tinana. Table 9 shows the sub-questions and the modes of te reo Māori we analysed to address each one.

Table 9 Questions and sub-questions, and modes of te reo Māori

	How are rangatahi being exposed to te reo Māori?	How are rangatahi using te reo Māori?
Te reo ā-waha	Who was speaking te reo Māori with and around rangatahi? What sort of reo ā-waha is available online for a rangatahi audience?	What communicative functions were rangatahi speaking Māori for? How are rangatahi using te reo ā-waha online?
Te reo ā-tuhi	What written/visual reo Māori were rangatahi seeing? What sort of reo ā-tuhi is available online for a rangatahi audience?	
Te reo ā-tinana		What non-verbal modes were rangatahi using?

Te reo ā-waha: Who was using te reo Māori with and around rangatahi?

To explore how rangatahi were exposed to te reo ā-waha, we analysed video and audio data from interviews with 18 of the 19[4] rangatahi , online survey data from three rangatahi, videos posted on social-media platforms, and kairangahau reflections. We wanted to find out who was using spoken reo Māori with rangatahi in the research contexts and elsewhere. Because in most cases, the rangatahi were using and being exposed to te reo Māori simultaneously, this section is about both exposure and use.

The 18 participants we interviewed talked about particular people in their lives who spoke te reo Māori with them. For seven rangatahi who were attending Māori-medium kura, and one who was at a mainstream high school, this included friends and kaiako at their kura, and whānau members. For eight rangatahi who were not at kura or school, it was a few whānau members and friends who spoke te reo Māori with them. Four rangatahi said they heard te reo Māori at rumaki reo Māori courses held over a week or weekend a few times each year.

The three rangatahi who participated in the Self-report method said that they heard te reo Māori from their parents, aunties and uncles, siblings, and kaiako, while one said they used it with friends. All but one of the rangatahi heard te reo Māori in the research contexts from kairangahau during interviews.

Rangatahi exposure to te reo ā-waha in public contexts in the research

The four public contexts in our data were Te Matatini in Te Taihauāuru, a Matariki gala at a public garden in Tainui, a restaurant in Te Arawa, and a public garden in Te Waipounamu. The findings presented below come from a systematic analysis of audio and video data, and of kairangahau reflections.

Te Matatini

Thousands of people attended Te Matatini, which meant that there was potential for rangatahi to hear te reo Māori from many more people than in the other three public contexts combined. Haka, waiata, and announcements from the stage could be heard in some places coming from the performance area, or broadcast on screens. Apart from this, however, the **ambient language** in the concourse was mostly English (see Density section, Chapter 5). Designated pou reo were employed at Te Matatini to kōrero Māori with people, and some stalls were run by Māori speakers. The pou reo may have spoken to the rangatahi in our study, or to other rangatahi at the venue. However, no instances of this were in our data.

Of the four rangatahi participants at Te Matatini, we collected video footage from three. One of the three spoke mostly in English, using only a few Māori words, including greetings. This was also true of the people he spoke with.

The other two rangatahi spoke te reo Māori with each other, using only a few English words. They told us that they were committed to speaking Māori to each other all the time, whenever they were together. As well as a few Māori-speaking stall holders, and a few people they were newly introduced to, this pair of rangatahi also heard and spoke te reo Māori with a few friends, whānau members, and teachers. The following is a short conversation with a friend they met on the concourse.

[4] We were not able to interview one of the 19 rangatahi.

540 I hoatu koe i ngā mea ki a whaea T____ mā? I reira koe?

11002 I reira ahau mō te wā paku nō te mea kei reira hoki te wāhi o P___, o Ng____. Nei ka peka atu ahau ka whakawhiti ki te whānau—

540 Whakawhiti atu, whakawhiti mai—

11002 Āe, whakawhiti atu, whakawhiti mai, hāereere, haere, rapu kai.
540 Ka rawe.

A few friends and whānau members spoke predominantly English to the pair. However, these interactions also included a few Māori words and phrases, including relationship terms such as "whaea"; greetings such as "kia ora"; proper nouns (including the names of kapa haka, brands, people, and places); and the feedback filler "nē". (See Chapter 6 for more information on how rangatahi switched between languages.)

In other public contexts
At the public garden in Tainui, where a Matariki gala was being held, the ambient language was predominantly English. However, there were a few whānau reo Māori who were speaking Māori. The two rangatahi participants heard te reo Māori from each other, from their mother, and two kairangahau. During the research session, another whānau reo Māori whom they knew approached them, and greeted and chatted with them using te reo Māori.

At the busy restaurant in Te Arawa, the ambient language was English from the many other people there. Only whānau members and the kairangahau spoke Māori to the rangatahi in this context.

Two rangatahi in the public garden in Te Waipounamu heard te reo Māori from each other, and from the kairangahau. The ambient language there was English.

Rangatahi exposure to te reo ā-waha in homes and private spaces

Data from interviews, from audio and video data, and from our reflections, revealed information about rangatahi exposure to, and use of, te reo Māori in home and private spaces during and outside of the research. During research sessions, in homes and private spaces, all the rangatahi heard te reo Māori from kairangahau.

In family homes during the research sessions, one rangatahi heard te reo Māori from four siblings, and her parents, while another heard te reo Māori from his two siblings and his parents. One rangatahi heard it from her younger whanaunga, and mainly English from her mother and sister.

At the student flat, two rangatahi heard te reo Māori from each other.

In workplaces, one rangatahi heard te reo Māori from her father, and one heard a few words of Māori from his mother, who spoke mostly English. One rangatahi heard te reo Māori from her cousin, who participated in the activity. There was some ambient English language, when kairangahau spoke to a parent. However, rangatahi were involved in most conversations, which were in te reo Māori.

At the iwi office, four rangatahi spoke only te reo Māori with each other, with two tēina, and with four adults who were present.

About 40 people were present at the kapa haka practice: a kaiako, a few parents, two kairangahau, and about 35 rangatahi members of the kapa haka, including two who participated in the research. The rangatahi heard a few words of te reo Māori from the kaiako, who spoke mostly English.

Kaiako: nothing to be nervous about, ka pai? Right. Kia rite. Kia wiri.

In this context, rangatahi sang the pātere repeatedly, and were therefore using mostly Māori, but *speaking* very little of any language. Any ambient language came from other students talking to each other in English.

Rangatahi exposure to te reo ā-waha out of the research contexts

Data from interviews and the online survey indicated that, outside of the research contexts, rangatahi use of te reo Māori varied. Twelve rangatahi told us that te reo Māori was the main language they heard at home with whānau members or others they lived with. Four rangatahi heard both English and Māori at home, and two rangatahi heard mostly English at home.

Eight rangatahi said they went to kura where they heard te reo Māori from friends and kaiako. Five said they heard te reo Māori from some people at the universities they attended. Rangatahi also heard te reo Māori from friends, team mates, and coaches when they played sport or did other physical activities, such as going to the gym. Four rangatahi talked about hearing te reo Māori at marae, or at hui rangatahi.

Several rangatahi mentioned hearing te reo Māori from whānau members other than those they lived with. These included their irāmutu, uncles, aunties, siblings, young children, and kaumātua.

Ōku koroua, ōku aunties me ōku iti o ngā uncles. Engari ko te nuinga o tō mātou whānau he kōtiro, so, ka kōrero Māori ngā kōtiro i te whānau. (Rangatahi, Te Arawa)

Kāre tō mātou whānau e tino mōhio pēhea ki te kōrero Māori. Kei te ngana rātou ki te ako i te reo. (Rangatahi, Te Arawa)

Six rangatahi told us that they also used and heard te reo Māori at events such as school sports, manu kōrero, and kapa haka competitions.

In all the contexts in the study, one or more people—including some of the rangatahi themselves—had made a commitment to kōrero Māori with the rangatahi. These pou reo were particularly important as they set the tikanga and expectation for use of te reo Māori. Rangatahi who had taken on the role of pou reo included a group of friends and flatmates in Te Waipounamu, and three sets of two friends—one in Te Taihauāuru and two in Te Waipounamu. Other people who acted as pou reo included parents, kaumātua, aunties and uncles, and kaiako.

Rangatahi told us that they listened (were exposed) to kapa haka and reo Māori pop music on television and online (for example, on YouTube and on Spotify).

Discussion about rangatahi use of, and exposure to, te reo ā-waha

Rangatahi were using and hearing te reo ā-waha in public and private contexts in and outside of the research contexts. Mostly, they heard te reo Māori from a few people with whom they had reo Māori relationships, including kaiako, whanaunga, and friends. The most common places they used te reo Māori were at home and at kura. In public places, rangatahi were exposed to a lower amount of reo ā-waha in Māori than in English.

When rangatahi had someone to kōrero Māori with, they could use te reo Māori anywhere they were, especially if the tikanga to kōrero Māori was set and the rangatahi were committed to using te reo Māori. Pou reo were very important as setters of tikanga kōrero Māori, and some of the rangatahi themselves were taking on the role of pou reo. For others, switching to English was the easy thing to do if that was the language being spoken by others.

Te reo ā-tuhi: What written/visual te reo Māori were rangatahi seeing?

Rangatahi were exposed to te reo ā-tuhi in public places

We analysed images from the Still photos data-gathering method in three contexts (Te Matatini in Te Taihauāuru, a Matariki gala in Tainui, and a public garden in Te Waipounamu) to explore how rangatahi were exposed to te reo ā-tuhi in particular contexts. Two public contexts were kaupapa Māori events held over a short period of time at particular venues and the reo ā-tuhi captured there was temporary and higher in density than was usually to be found at the venues. Data captured at all other public and private contexts reflected the usual density of reo ā-tuhi to be found in these spaces.

In Te Taihauāuru, photos were taken at Te Matatini; specifically, photos were taken around the concourse area of the large sports stadium, where stalls were set up. The Tainui images were taken at a public garden in the city, where a gala day to celebrate Matariki was underway. Rangatahi took photos in the temporary gala areas as well as in permanent areas of the gardens. Both Matariki and Te Matatini were kaupapa that celebrated Māori identity, te reo, and tikanga Māori. Temporary signage in te reo Māori was displayed at both these events. Te Waipounamu images were captured in a public garden on a day without any special events taking place. Thus, only permanent signage or images were present within the gardens at the time images were taken.

Te Matatini in Te Taihauāuru

Some of the text at Te Matatini was bilingual. Image 1 shows bilingual equivalents of items for sale (for example, “Tarau poto—Shorts”). We note that by placing te reo Māori before English, the sign maker gave some status to te reo Māori. Images 20 to 22 show advertising signs at vending stalls. Image 21, “kī chain”, is a biliterate play on words, but is essentially an English phrase. Image 22, “ngā whakakai harakeke kete”, has English word order, and is therefore grammatically **unacceptable** for te reo Māori. Image 29 shows the words “kai” and “food” on the same sign. As with Image 17, this official Matatini sign gives status to te reo Māori by placing the Māori word before (and above) the English word. Image 27 features text that was mostly te reo Māori. Some, but not all, was translated into English.

By contrast, Images 23–26 have no reo Māori. These are official, permanent signs at the venue. Symbols on these signs are intended to be recognisable across languages, or are in English.

Many people attending the event wore or carried items with Māori images or writing (for example, “Kaimahi”). Children wore temporary moko, and there was a stall with a wide variety of merchandise with Māori imagery (for example, kōwhaiwhai designs), text (for example, “Kai”), and audio (for example, music CDs).

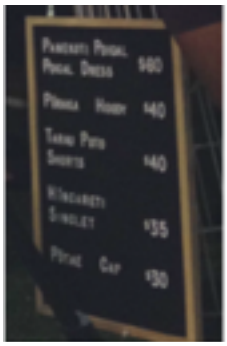

Image 20

Image 21

Image 22

Image 23

Image 24

Image 25

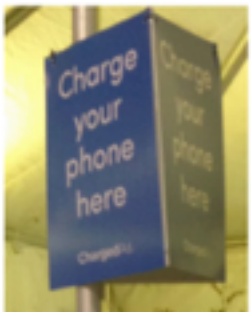

Image 26

Image 27

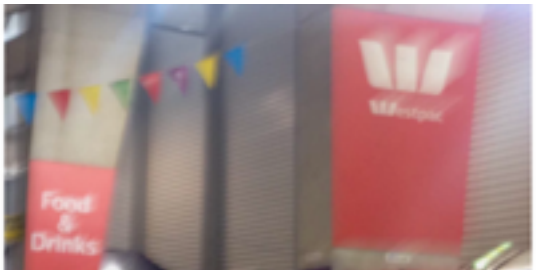

Image 28

Image 29

Image 30

Image 31

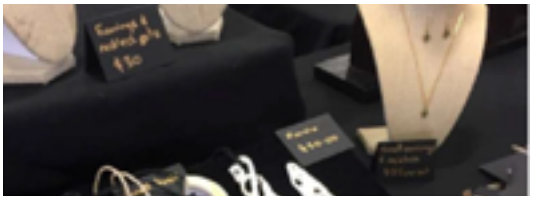

Image 32

Image 33

Image 34

Image 35

Image 36

Image 37

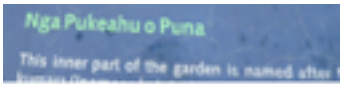

Image 38

Public gardens in Tainui

Most of the permanent signage captured in the Tainui images had very little reo Māori other than the names of plants (for example, kūmara), people, and places.

Temporary signage in te reo Māori specifically connected with the Matariki event was visible. Images 33 to 35 show advertising signs, some bilingual (for example, hamupeka "hamburger"). Image 40 is a temporary sign for the event at which these photos were taken. It features the Māori title of the event "Matariki ki Waikato", but most of the text on the sign is English.

Image 39

Image 40

Te reo ā-tuhi was also visible on clothing (which we did not capture in photographs in Tainui), and rangatahi also took photos of non-text items that they perceived as Māori, including whakairo, which were permanent fixtures in the gardens (Image 39).

Public garden in Te Waipounamu

Three languages that the rangatahi and kairangahau noticed in the gardens were English, Latin, and French (Image 41 to 44). There was a notable lack of reo Māori text, with rangatahi noticing and photographing just two instances of reo Māori text during the half-hour session in the garden. Those examples were the words “Waikato” on a plaque (Image 41), and “pohutukawa” [sic] on a product for sale in the information centre (Image 46).

While driving back to the student flat from the gardens, the kairangahau noticed, and the rangatahi photographed, a reo-Māori sign at a local school (Image 45).

Image 41

Image 42

Image 43

Image 44

Image 45

Image 46

Rangatahi were exposed to reo ā-tuhi in homes and private spaces

Whānau homes and a student flat

In whānau homes and at the student flat, rangatahi were exposed to te reo Māori books, artworks, and images. At the flat, there were non-fiction books including history books, dictionaries, grammar books, and tikanga books. Several had reo Māori titles and Māori images on the cover, but the content was written predominantly in English. Rangatahi took photos of the books, and of taonga and artworks in various media, including harakeke, paint, wood, and bone.

School kapa haka

At the kapa haka practice, the main piece of text that rangatahi were exposed to was a lyric sheet of a pātere, which was projected onto the wall. In addition, there were photographs and artworks displayed on three walls of the hall, and several of these included Māori images and a small amount of reo Māori text.

Meeting room in office space
One rangatahi was exposed to a small amount of Māori text on signs and posters in one meeting room in an office. In another meeting room, there were textbooks about te reo Māori on the bookshelf, although it was not clear if the rangatahi was aware of them. In all three meeting rooms, rangatahi wrote some Māori words on the collages they created for the Talking pictures method. Images from these three contexts were of the rangatahi and their artworks only, and were taken by the kairangahau.

Iwi office
At the iwi office, permanent signs and posters were in te reo Māori. The rangatahi in this context were exposed to te reo Māori as the normalised language within the context. No images were taken in this context.

Internet context
In public spaces on the internet, te reo ā-tuhi targeted at rangatahi included reo Māori memes, subtitles, and captions.

Discussion about how rangatahi were seeing reo Māori ā-tuhi

Rangatahi were exposed to Māori text on signs, clothing, books, banners, posters, and lyric sheets in public spaces, and in homes and private spaces during the study. Rangatahi were also exposed to labels and signs with Māori-only text, English-only text, and bilingual text on products. Rangatahi were also exposed to some non-text Māori images including art, whakairo, taonga, a pātaka, and māra kūmara.

Rangatahi noticed and photographed only a very few instances of these, indicating that they were not always aware of text around them. This does not mean that the text was not impacting on them. Research suggests that signage plays an important role in how people perceive language status, and in people's attitudes towards languages (Backhaus, 2007).

Photos taken by rangatahi at the Matatini and Matariki events indicate that signage displayed specifically for the event meant that rangatahi were exposed to relatively more Māori text and images in these two contexts than in others. Signage at the two events enabled comparison between permanent and temporary signage. Even the small amount of data we captured gave a clear indication that the venues themselves normally display low density reo Māori. Therefore, in these two contexts, rangatahi were exposed to te reo Māori because of the events, and because of those who were actively promoting te reo Māori, rather than because of policies or practices at the venues. The temporary event signage illustrates what a more multilingual approach to written language could look like in other public spaces.
Rangatahi exposure to reo Māori ā-tuhi was much lower than their exposure to English text. In public spaces, no permanent signs that were photographed were in te reo Māori, and most of the temporary signs with te reo Māori text also had English text. Some text in te reo Māori was grammatically unacceptable.

Te reo ā-waha: What were rangatahi using te reo Māori for?

Rangatahi were using te reo Māori for a range of communicative functions

We analysed the spoken data to explore what rangatahi were communicating when using te reo Māori. To do this we adapted a set of five communicative function categories. Our categories were drawn from an original set by Finocchiaro (Finocchiaro & Brumfit, 1983, cited in Tedick, 2002). We used NVivo to analyse the data thematically according to our five categories, which were modified to align better to the ao Māori and tikanga Māori patterns in our data. The resulting five categories are:

Whanaungatanga: Ka kōrero Māori ki te whakanui, ki te mihi, ki te manaaki tangata hoki. Ka kōrero Māori ki te whakawhitiwhiti whakaaro, ki te whakaae, whakahē, ki te tautohetohe rānei. Te reo Māori is used for relationship building. It is used between people to greet, to uplift, to thank, and to manaaki people. It is used to discuss ideas and to agree, disagree, or debate.

Whakaputa whakaaro, kare ā-roto: Ka kōrero Māori ki te whakaputa i ō rātou whakaaro, ō rātou hiahia ā-tinana, ā-hinengaro; ki te whakamārama hoki i ō rātou whakaaro. Te reo Māori is used to talk about thoughts, wants, and needs; and to express and explain ideas.

Arahi: Ka kōrero Māori ki te arahi, tohutohu, patipati, tono, ki te whakatūpato rānei. Te reo Māori is used to lead, encourage, direct, invite, and to caution.

Wānanga take: Ka kōrero Māori ki te whakatakoto kaupapa; ki te whakamārama take, mea, tāngata, taiao rānei; ki te pātai mō tētahi kaupapa; ki te māherehere; ki te aromatawai, ki te arotake rānei. Te reo Māori is used to formulate and support opinions; to describe events, items, people, or the environment; to ask about things; to plan and evaluate.

Auahatanga: Ka kōrero Māori ki te whakakatakata, ki te whakangahau rānei i te tangata; ki te whakamāori; ka kōrero paki; ka wawata, ka para huarahi, ka whai rautaki rānei. Te reo Māori is used creatively for humour and entertainment; to create stories and translate; to find new pathways forward and develop strategies.

This is not an exhaustive list, and each category overlaps with others. In addition, any **utterance** can have more than one communicative function.

There was ample evidence that rangatahi were using te reo Māori for these complex functions in our data. However, illustrating this using succinct examples proved difficult, because the examples are highly contextual, and require background understanding.

Table 10 illustrates the multifunctional nature of utterances, and shows which communicative functions were being met by the examples we chose from rangatahi spoken language.

Table 10 Communicative functions being met through rangatahi use of te reo Māori in public and private spaces

Examples		Communicative functions				
	Context	Whanaungatanga	Whakaputa whakaaro, kare ā-roto	Arahi	Wānanga take	Auahatanga
1	Matatini	✓	✓			✓
2	Family homes				✓	✓
3	Student flat	✓	✓		✓	
4	Office spaces		✓			
5	Restaurant	✓	✓	✓	✓	
6	Kapa haka practice					
7	Iwi office	✓	✓		✓	✓
8	Public gardens		✓		✓	✓

Table 11 presents examples from public spaces of utterances used by rangatahi across the five communicative functions, and Table 12 has examples from private spaces.

Table 11 Communicative functions: Examples of what rangatahi were using te reo Māori for in public spaces

Examples			Communicative functions			
		Whanaungatanga	Whakaputa whakaaro, kare ā-roto	Arahi	Wānanga take	Auahatanga
4.1	11001: Kia ora. Kei te pēhea koe?	Mihi				
4.2	11003: Hiahia [au i] ērā mea kōwhai.	Whakawhiti whakaaro	Whakaputa hiahia			
4.3	13006: Ka mahi ahau i te wāhi kawhe, i te mea he mahi ngawari.	Whakawhiti whakaaro	Whakaputa hiahia			
4.4	13006: Me noho i konei.			Arahi/ Tohutohu		
4.5	13006: I tākaro mātou i te Monopoly mō te wā roa i tēnei rā.				Whakamā-rama mahi	
4.6	22003: Mō e hia te roa?				Pātai mō tētahi kaupapa	
4.7	22002: [kei te hiahia au...] Kia maha ake ngā tūwheratanga mō ngā tāngata Māori ki roto i ngā mahi o te ao whānui.		Whakamārama whakaaro		Whakautu pātai	Wawata
4.8	11002: Pai ērā [hei taringa]. Ka noho pai ki tō, ki ō kākahu.	Whakanui	Whakaputa whakaaro			
4.9	11003: (Sings) I te haere, ine ... he rā rā rā rā ...					Whaka-ngahau
4.10	11003: He tino hoa māua. Ka korero [Māori] māua ki a māua i ngā wā katoa.	Whanaungatanga			Whakautu pātai	Whai rautaki (reo Māori)

Table 12 Communicative functions: Examples of what rangatahi were using te reo Māori for in private spaces

Examples			Communicative functions			
		Whanaungatanga	Whakaputa whakaaro, kare ā-roto	Arahi	Wānanga take	Auahatanga
4.11	13006: Kī atu ki Aunty Mea kia noho ki tō tātou whare.	Manaaki		Tohutohu	Māherehere	
4.12	14004: He pēhea ki a koe te panonitanga mai i te kaikōrero ki te kaiwhakawā?	Whakawhiti whakaaro			Pātai mō tētahi kaupapa	
4.13	14005: Ko te wāhi hei whakapakaritanga mā te iwi, ko te taha ki te kounga o ngā kōrero. Ki a au nei, me kounga rawa, engari mō te taha ki te kaiwhakawā—ā, ko tētahi mea pai, e taea ana e au ētahi kupu akiaki te āta tuku.	Manaaki	Whakaputa whakaaro		Whakautu pātai Whakatakoto whakaaro	
4.14	24004: He tino pai te mahi reti ki ahau.		Whakamā-rama whakaaro		Whakautu pātai	
4.15	24005: Kāore anō au kia kai i tēnei rā.		Whakaputa hiahia ā-tinana			
4.16	24005: Ko te reo Māori te pou o tōku ao, koia te pou o ōku mahi katoa.		Whakamā-rama whakaaro Whakaputa kare ā-roto		Whakautu pātai	
4.17	24005: Tēnei noa e whakarewa ana i te reo whakahei, te reo pōhiri, te reo whakatau ki a kōrua … Nau mau, haere mai, piki mai, kake mai ki tēnei whare ō tātou.	Manaaki Whakatau Mihi				

Examples			Communicative functions			
		Whanaungatanga	Whakaputa whakaaro, kare ā-roto	Arahi	Wānanga take	Auahatanga
4.19	33004: Āe, i te mea ko tā mātou kaiwhakahaere mō te poitūkohu, me kī, ko te coach, ko ia tētahi kaiako ki te kura.				Whakautu pātai Whaka-mārama mō tētahi kaupapa	
4.20	501: Tō kapa. 14005: Tō kapa.	Whakatoi				Whakakata
4.21	14004: Kei kōrā tonu te pito mata e tipu ana.	Manaaki	Whakaputa whakaaro			
4.22	14005: Āe, āe, ki a au nei, me whakarite i tētahi ... 14004: Whakarite i tētahi kapa hou ... 14005: ... ki a au nei, ka taea e tātou. Kei reira te āheinga. Ko te hī, ko te mea nui kia āta whakarite i tērā i a tātou anō, i tērā kāhui.	Whakaae Tautoko Whakawhiti-whiti whakaaro	Whaka-mārama whakaaro			Māherehere
4.23	32001: Kāre au e tino mōhio me pēhea te tangi i ngā taonga puoro.		Whaka-mārama whakaaro			

Discussion about what rangatahi were using te reo Māori for

Our data illustrated that rangatahi in the study were using te reo Māori for a broad range of communicative functions to meet complex social needs.

Tables 11 and 12 show just a small number of examples from the data we collected, but there were strong themes. In both public and private contexts, whanaungatanga was a significant theme. Rangatahi were using te reo Māori to constantly build and maintain whanaungatanga through greetings between friends and whānau, such as in Example 4.1 (or shortened versions such as "Pēhea?" or "Pēhea koe?"), and through more complex, formal mihi such as through whakatau (Example 4.16). Example 4.9 illustrates that, for two rangatahi at Matatini, their mutual commitment to te reo Māori was an integral part of their relationship. Other ways that rangatahi used te reo Māori for whanaungatanga in te reo Māori included expressing likes and dislikes (Example 4.2) and whakanui (Example 4.8).

Rangatahi were using simple, informal reo Māori structures for simple functions such as expressing their wants and needs (Example 4.2). They also used more complex structures such as negative sentences to achieve these simple functions (Example 4.15). Similarly, they used both short, simple structures (Example 4.2), and longer, more complex structures (Example 4.23, below) for complex functions such as humour[5].

> *14005: Kāore he wāhi mō te [reo] Māori. Me whai hua rānei koe i te ao o te whutupōro. Me noho rānei ki te taha. Anā, ko au tērā i noho ki te taha, ahakoa te mōhio tonu ki ngā pūkenga tākaro whutupōro.*

This analysis provides a brief overview of the sorts of communicative functions that rangatahi are meeting when they kōrero Māori. It indicates that their use of te reo Māori meets simple and complex daily language needs. Further research could explore this area in greater depth, and may identify areas of weakness and strength where rangatahi may be supported to develop and use te reo Māori more proficiently or effectively.

[5] It is difficult to exemplify examples of humour out of context.

Te reo ā-tinana: What non-verbal modes were rangatahi using?

Te reo ā-tinana or non-verbal modes are ways that people communicate other than with words. They include body language such as gestures and facial expressions; gaze (looking at or away from a person); eye talk (for example, pūkana); orientation and space (the way people position themselves in relation to others, and the distance between them); body sounds such as clapping, clicking, or whistling; and sounds made with the body and other things (for example, takahi, pakipaki, drumming, playing music).

All cultures and groups have their own distinctive patterns of non-verbal communication. Non-verbal communication modes have consistent structure, in the same way that verbal language has consistent structure. For example, in language, the three sounds /k/ /a/ /h/ can be meaningfully structured together in te reo Māori to form the word "kaha". They cannot be randomly structured and keep the same meaning. Therefore while "haka" is made up of the same sounds as "kaha", the order of the sounds gives them a different meaning. Further, the sounds can be structured in ways that have no meaning in te reo Māori, but may have meaning in another language. So if someone was to say "hahk" or "ahka", the sounds would make no sense within a reo Māori conversation. Non-verbal communication works the same way.

In te ao Māori, some widely known examples of non-verbal communication are hongi, pūkana, and mahi ā-ringa (to accompany waiata). Professor Wharehuia Milroy hinted at other modes in exemplifying "te wairua o te kupu" at the Kōhanga Reo Waitangi Tribunal hearing (Waitangi Tribunal, 2012), regarding intergenerational transmission of language and culture. He related a story about when, as a young child, he fell out of a cherry tree. Crying on the ground, he was approached by his koro, who had seen him fall. Professor Milroy related how he looked up at his koro, hoping for sympathy. The koroua used orientation space and gaze as he expressed himself using a metaphor. He leaned over the boy, looking down as he lay on the ground, and drawling slowly, said "Ō, kua tae koe ki Pārengarenga rā anō". This demonstration indicated that the koroua relied not only on the words he spoke and the tone he spoke them in to transmit his message but also on his stance, movement, and facial expressions. These non-verbal communication modes are an integral part of te reo Māori.

Three modes of te reo ā-tinana that occurred in our data are exemplified below. We refer to these as te reo ā-karu (communicating with eyes), reo ā-tinana (body language), and reo ā-whio (communicating with whistling).

Example 4.23 Te reo ā-karu: Glancing down then up

When the kairangahau asked 44002 and 44003 a question, the two rangatahi turned to each other and met each other's gaze. The older participant flicked her eyes and eyebrows downward, her head nodding slightly down, then up. The younger rangatahi (44002) responded using the same motions. This was clearly a message. The kairangahau asked about what they had done, and what it meant. They clarified that, when the kairangahau had asked a question they had paused, unsure of how to answer the question, before communicating together with their eyes in a way that 44003 intended as "Aua, kei a koe", followed by 44003's response, "Kei a koe, cuz".

> *44002: Te hūiki pause, awkward moment, kātahi ka hono ā-karu nei, mā te hono ā-karu ka hiki ngā pewa, mā tērā rerenga kōrero ā-hinengaro nei.*

When the kairangahau asked "Ki ō kōrua whakaaro, he reo Māori tēnā?" the two rangatahi in the study agreed emphatically that the method of communication using their eyes and facial expression was Māori.

> *44002: Āe.*

> *44003: Ka kore au e kōrero pērā ki aku hoa Pākehā (laughter).*

Significantly, one rangatahi characterised what they had done with their eyes as "kōrero", indicating her perception of their actions as communication in a Māori way.

In Example 4.24, 14005 uses words, tone, and gaze to express his opinion of a group in a way that protects the mana of the kapa haka he is referring to by saying, "pai rātou" and "ka kite atu i te pito mata". His tone of voice and gaze shifting (glancing side to side) indicate that his actual opinion may differ from what he says, but that he is being diplomatic. His friend, 14004, notices and shows his understanding of the context, by laughing.

Example 4.24 Te reo ā-karu and te reo ā-waha

14005: [kapa haka name] pai rātou, glances back and forth to each side.

14004: Laughs.

14005: Nods: Āe, smiles.

14005: Ka kite atu i te pito mata. [Both laugh, 14004 looking directly at 14005.]

14005: Te pito mata. [Smiles broadly, avoids gaze of 14005, possibly looking at 501 out of camera shot.]

14004: Kei te tipu tonu. [Looking directly at 14005.]

14005: [Glances left, smiles] Āe, a [kapa haka name].

Te reo ā-tinana

We observed rangatahi using their bodies to communicate in a consistent way in both public spaces, such as Te Matatini, and in homes and other private spaces to express whanaungatanga.

For the rangatahi in our study, a meaningful way of expressing whanaungatanga was to greet using a particular sequence of body movements and touches. An example was when the kairangahau were welcomed to the student flat in Context 3 with hariru and hongi as part of a mihi whakatau and waiata. We also saw many examples of whanaungatanga when rangatahi greeted people they knew, or were introduced to new people at Te Matatini. In examples 4.25 to 4.28. (See also Image 46), rangatahi also use orientation and space (how they position their body in relation to others) and gaze (where they look) in familiar ways.

Example 4.25 Te reo ā-tinana: Female–female hug 11003

11003 approaches two people sitting on the ground. Each in turn puts an arm up to touch 11003's left upper arm as she bends down and kisses her friend on the left cheek.

Example 4.26 Te reo ā-tinana: Female–male hug 11001

11001 and his female friend lean in, meeting each other's gaze, and hug. Each has their right arm over the other's left shoulder, and left arm under the other's right shoulder. Their right cheeks touch as they greet each other verbally.

Examples 4.25 to 4.27 and the figures in Image 46, indicate a pattern that we saw, experienced, and captured in both private and public contexts in the study, and repeatedly at Te Matatini. That is, when at least one of two people greeting each other was a female rangatahi, the pattern was to make eye contact, and kiss on the left cheek, sometimes followed by a hug, with right arms over left shoulders. If both were male, then different patterns applied, and included elements such as handshake, hongi, and chest bump, as illustrated in Example 6.

Example 4.27 Te reo ā-tinana: Male–male greeting

Two young men meet each other's gaze at about 2 metres apart. Man 1 raises his arm and opens his hand ready for fingers-up handshake. Man 2 approaches, they grasp hands, lean in and hongi once. They move their faces apart, turn slightly to left and lean in to bump chests (right sides of chest touch lightly).

Image 47 Expressing whanaungatanga with te reo ā-tinana

The examples of reo ā-tinana above indicate a distinct way of communicating that rangatahi and others in our study were familiar with, and were using repeatedly.

Had someone in the study done something unexpected, such as kiss on both cheeks, then rangatahi were likely to have noticed and reacted to that difference. For example, outside of the study, but at the time it was taking place, one of the kairangahau happened to meet several Pākehā teachers and two Māori teachers for the first time. The Māori teachers and the kairangahau greeted each other familiarly using the pattern of hariru and a kiss on the cheek. However, the Pākehā teachers seemed unfamiliar with the pattern, resulting in a series of awkward movements between each of them and the kairangahau. This example, while not part of the rangatahi study, serves as anecdotal evidence that body language has a structure not unsimilar to the grammar or syntax of verbal language.

Example 4.28 Te reo ā-tinana: Mōteatea

In the kapa haka practice context, the kaiako talked about and modelled stance, posture, facial expressions, wiri, foot and hand actions and positions, and group formations that are accepted practice for performing mōteatea. Two rangatahi participants practised this reo ā-tinana and modelled it to their peers in the group. The kaiako also talked about when and how to use this reo ā-tinana.

> *Think about what you do with your face … It's an opportunity for girls to pūkana, to bring that [tupuna] to the fore. Or to do an action that might be talking about a rangatira because you're doing particular actions. So, don't be shy. So, this time through, I want everyone to do … At least three actions through the waiata. I'm not too worried if you don't get the action quite right and you go down when you should be going up, or up when you should be going down. I'm not worried about that just yet. All I want to see is some movement from you. Ka pai? Kia rite.*

Our analysis contributes to a description of one aspect of reo ā-tinana that lends richness to the overall concept of "te wairua o te kupu". There is room for further research to capture aspects of te reo Māori ā-tinana.

Example 4.29 Te reo ā-whio

One rangatahi identified that his whānau used particular whistles as ways of calling out to each other to get their attention. We call this "reo Māori ā-whio". He told us that this was something that his koro (from Ngā Puhi) has passed down in their whānau.

> *44002: I ahau e tamariki ana ko tērā mea [whistle, type 1] me te [whistle, type 2]. He take, he tikanga tō tēnā, he tikanga tō tēnā tō tēnā. I te wā e tipu ana tōku pāpā he whio tāna [tā taku koroua nō Ngā Puhi] mō ngā mahi rerekē. Tētahi whio, ko te tikanga o tērā whio he mahi i ngā rihi, ko tētahi anō—horoia ō kākahu, ērā mea.*
>
> *Kairangahau 1: Nē? Ka tāea e koe ērā?*
>
> *44002: Oh no, kāore i ahau te tikanga o ērā whio, engari ko ērā ngā kōrero a taku pāpā. I a ia e tipu ana he whio rerekē tā ia mahi i roto i te whare.*
>
> *Kairangahau 1: Ka pai. Ka mahi koe i ngā momo rau ki te mahi whio?*
>
> *44002: Te pātiti [laughter]. I te pānui au i tētahi pukapuka, Te Pīpī Kāretu, he momo pātiti Māori … ka whio rātou, kia attract i ngā weka.*

In example 4.29, 44002 talks about other whistles that his koro used for other functions, such as directive whistles meaning "Do the dishes", or "Wash your clothes". This example supports anecdotal evidence of whistles as a mode of Māori communication outside of the study, and this is an area for further research.

Discussion about te reo ā-tinana

Rangatahi were using recurrent patterns of reo ā-tinana, which included elements such as touch (hugs, kisses, hongi, shaking hands), hand gestures, facial expressions, whistling, pūkana, and gaze to communicate. Some rangatahi were cognisant of some elements of reo ā-tinana, referring to them as "kōrero", and considering them to be reo Māori.

While hongi can be characterised as a distinctly Māori form of reo ā-tinana, other elements we saw have arguably been—or are being—adapted and included into newer patterns such as those rangatahi were using. Further research could explore:

- other aspects of te reo ā-tinana that work together with te reo ā-waha to fully characterise te reo Māori
- changes in te reo ā-tinana over time.

Awareness of a wide range of modes of te reo Māori may contribute to reo Māori revitalisation, as these modes contribute to the richness of te reo Māori and thus to "te wairua o te kupu".

Online data—exposure to, and use of, te reo Māori

To better understand how rangatahi are being exposed to te reo Māori online, and how they are using te reo Māori online, the rangatahi member of the research team (kairangahau rangatahi) used the Internet search method for reo Māori content online. Primarily, the search revealed the heavy dominance of English internet content on social-media platforms accessible in Aotearoa. However, there was a small amount of reo Māori material available.

The kairangahau searched for material she identified (as a rangatahi herself) as being created by, or targeted at, rangatahi. She selected 21 videos and three memes, and categorised these according to two groups: content she felt targeted rangatahi (creators' ages unknown), and content created by rangatahi for rangatahi. The latter is categorised according to her opinion that the creators appeared to be within the target age range.

We have analysed these two sets of data separately. The first set (content targeted at rangatahi; creators' ages unknown) has been analysed to answer two sub-questions:

- What sort of reo ā-waha is available online for a rangatahi audience?
- What sort of reo ā-tuhi is available online for a rangatahi audience?

The second set of data (content created by rangatahi for rangatahi) is analysed to address the sub-question: How are rangatahi using te reo ā-waha online?

We looked at and analysed the first 5 minutes of content in each of the videos.

We categorised each video and meme according to five kaupapa contexts (see also, Chapter 3):

- kaupapa Māori events (11 videos gathered from Ihumātao; and one video of a public debate at a university);
- rangatahi concerns (one video about name pronunciation);
- performance of waiata (four music videos);
- online gaming (one video);
- entertainment (one make-up tutorial; one skit by university students; and one vlog).

What sort of reo ā-waha is available online for a rangatahi audience?

We analysed 11 videos to see what sort of reo ā-waha was being used online. We also looked at how much te reo Māori was used in these videos.

Kaupapa Māori event

Videos about Ihumātao

Content targeted at rangatahi included a set of nine videos about Ihumātao. Rangatahi attendance at, and documentation of, the events at Ihumātao suggest that rangatahi were part of the target audience and are therefore likely to be exposed to the online content.

The videos about Ihumātao had varying amounts of reo Māori content. They ranged from being mostly in English with a few words such as “hau kāinga”, “whenua”, and “tapu” inserted, to being almost entirely in te reo Māori. Of these nine, six were amateur videos and three were professionally recorded by national media outlets.

In the six amateur videos, te reo Māori was used in whaikōrero and announcements, greetings, interviews, waiata, and commentary. An example of each of these content types is given below.

Example 4.30. Whaikōrero

Mauheretia e rua ngā whanaunga. I rukahu katoa ngā pirihimana ki a mātou i te ata nei... Āe, tērā tērā. Ka huri au ki te reo manako whenua... (Hudson, 2019).

Example 4.31. Informal greeting (whakawhanaungatanga)

Tangata 1: Kia ora rā.

Tangata 2: Kia ora my bro

Tangata 1: Mihi atu, oi oi oi! [both men hongi]

Tangata 2: Kia ora my bro, mean kōrero bro (Protect Ihumātao, 2019).

Example 4.32. Formal greeting

> *Kia ora e te iwi. Anei rā mātou, Te Whānau o Tupuranga, Te Kura o Kia Aroha, Ōtara, i haere mai i Ōtara i tēnei rangi, Ōtara tangata, Ōtara wairere. Te mihi atu ki a koutou. Kua heke mai tātou, mātou i te whenua Ihu o Mātao tēnei rā hei tautoko i tēnei kaupapa tino whakanui, tino whakahirahira. Ko koutou, ngā kaitiaki, ngā… [unclear] o tēnei whenua, ko tātou i tēnei rā. Nā reira, huri noa, huri noa, tēnā koutou, tēnā koutou, tēnā tātou katoa. (Te Ao, n.d.)*

One amateur video, recorded at Ihumātao and shared publicly on Facebook, captured a young man (late 20s) who took on a role of interviewer, informally asking different people—including rangatahi—about their reasons for being at Ihumātao, and about the events of the day. He greeted everyone in Māori. Some rangatahi responded to him in te reo Māori, as in example 4.33.

Example 4.33. Interview

> *Interviewer: Kia ora. How are we? Now we have gone live, in the field. Tell us where we are*
>
> *Rangatahi 1: We are at Ihumātao*
>
> *Interviewer: Āe. Koina?*
>
> *Rangatahi 2: Āe [laughter]*
>
> *Interviewer: And why? He aha ai?*
>
> *Rangatahi 2: i te mea… i ngaro ana i te whenua.*
>
> *Interviewer: Āe, āe. Hei aha tō whakaaro?*
>
> *Rangatahi 1: Um. Āe i ngaro te whenua*
>
> *Interviewer: Āe (Protect Ihumātao, 2019).*

Example 4.34. Commentary

Kia ora tātou, kei konei mātou kei Ihumātao, kei te pito o Ihumātao Quarry Road. Tōna... toru rau tāngata kei konei, Māori mai, Pākehā mai, Hainamana mai, kei konei e tohe ana. Āe, ehara i te tohe whakatumatuma nei engari he tohe i runga i te aroha, i runga i te maungārongo. He waiata te mahi. Kei konei ētahi o ngā punua kaiporotēhi. (Unknown commentator, Ihumātao)

Example 4.34 is an excerpt from an amateur video. It was recorded and narrated live by an unknown commentator who was describing the events in real time.

Example 4.35. Waiata 1

Toia mai te waka nei, kumea mai te waka nei... (Large group, Ihumātao)

Waiata in te reo Māori at Ihumātao were captured on video and shared online. These waiata included some that were performed live by popular artists such as Maisey Rika, as well as by informal groups (some large and multigenerational) who were supporting speakers, or singing protest songs.

A search of YouTube using the key phrase "waiata Māori" produces hundreds of results. Many are professionally filmed and edited music videos by artists who have written and/or performed songs in te reo Māori. The one song in this category included in our analysis was "Nō hea" by artists Rei and Tyna (Rei, 2019).

Example 3.46 Waiata 2

Kotahi noa iho te ara, e anga ana ki mua, Kore a muri e hokia.

Entertainment

An amateur YouTube video of a make-up tutorial in te reo Māori has been categorised as 'entertainment'. Although this video does not appear to have been created by rangatahi, it does present a type of content that rangatahi might be exposed to, or targeted with. The creator of the video speaks te reo Māori the whole time, except when using the names of certain products, and English pause fillers. The video is subtitled in English.

Example 3.47. Make-up tutorial video

... koina te mea tino mīharo o tēnei mea te whakarara kanohi, kei a koe te tikanga (Flavell, 2017).

What sort of reo ā-tuhi is available online for a rangatahi audience?

Te reo ā-tuhi includes a range of things including: labels, clothing, books, signs, and images. An analysis across the 21 videos showed the following types of reo ā-tuhi:

Flags

- Tino Rangatiratanga flag and other flags.

Signage

- permanent bilingual signage near elevator with name of office
- signs with Māori proper nouns written on them, for example, the names of people, iwi, and organisations.

Text on screen

- title of vlog, television programme
- vlog - instructions “Mātaki mai”, “Rekoata” on screen all the time
- subtitles in English that include Māori proper nouns

Texts and imagery worn or carried by people

- moko kauae
- poi
- kete
- taonga, for example, pounamu
- korowai
- patu
- taiaha
- T-shirts with Māori designs and text
- piupiu

Buildings or waka

- waka
- marae
- kōwhaiwhai panels
- whakairo

Another kind of reo ā-tuhi that targets rangatahi online is reo Māori memes (Images 48 to 50). Memes (cultural units) consist of an image or set of images juxtaposed with text, and are widely shared. They are often humorous and have the function of “in jokes” within a particular group or culture.

Of a large number (over 50) of reo Māori memes that we found online, we selected three for inclusion here that were clearly transmitting Māori knowledge or perspectives, and presented widely used meme images overlaid with reo Māori text for humorous effect. Two of the three were based on whakataukī, and all three had clear connections with tikanga Māori. This meant that the humour was only accessible to people with a deep understanding of the cultural concepts they touched on. Essentially, they were jokes for Māori-speaking audiences, who would get the joke, find the meme funny, and share it with others.

Images 48-50

Rangatahi may be using te reo ā-tuhi in private online spaces, such as their personal Facebook pages, in messages, or on other private accounts such as Instagram or Snapchat. However, we did not gather data from private accounts for ethical reasons (see Chapter 2).

How are rangatahi using te reo ā-waha online?

This section analyses 10 online videos that featured rangatahi using te reo Māori, and that targeted a rangatahi audience.

Kaupapa Māori event

Ihumātao

Two short amateur videos about Ihumātao were recorded by rangatahi and live-streamed on Instagram. The two videos were taken in real time as action was happening, as a way of rangatahi documenting the event and getting the word out to their Instagram followers. As a result of live videos such as these being shared online, hundreds of people then arrived at Ihumātao to support the kaupapa.

In one of the videos, most of the commentary by a rangatahi was in English. However, she used Māori words such as whānau, karanga, pirihimana and tautoko throughout the short videos.

We have broken through whānau, we have broken through. Look at our people. Our people came on our karanga to help our frontline who was isolated... There were too many people that the pirihimana couldn't stop them (tepuawaioteatua, 2019, Jan 19. No title [ephemeral Video file]).

Here, she was using te reo Māori to call others to action, and to keep online followers informed.

Ngāi Tauira tautohetohe

This amateur video shows one rangatahi speaking in a public debate in a university auditorium. It was recorded and shared publicly on Facebook. Following a debating format, the speaker lays out her argument.

Example 3.48

I tēnei wā tonu kāore kau he tohu e whakamana ana i te ao Māori ki runga i te haki, engari mēnā ka whakaae koutou ki te tīni i te haki e āhei ana koutou ki te whakauru i ngā tohu Māori, pērā i te koru, ngā kōwhaiwhai, a Matariki, me ngā tae o te haki Tino Rangatiratanga. Otirā, ka kite te ao whānui i te mana motuhake o te ao Māori i Aotearoa nei (Te Ao, 2019 July A).

Rangatahi concerns

One video was created by rangatahi who were concerned about people mispronouncing students' Māori names. It was shared online, and later broadcast on television news. A clip from the news broadcast is now available publicly on Facebook. Three rangatahi in the video use te reo Māori (no English is used) to explain their opinions about an issue that was important to them.

Example 3.49

Ka tino whakamā au i te wā ka whakahua hē mai ngā kaiako i taku ingoa...ko te ingoa he mea whakamana i te tangata. Nō reira, ki a au nei he momo tāmi tēnā i te mana o tētahi. (Marae, (2019, March).

Performance—Waiata

The three professionally produced videos we analysed were of rangatahi performing waiata on the Māori Television programme Pūkana, and later shared on YouTube. The waiata were all in te reo Māori.

Online gaming

One video was a professionally produced clip that captured rangatahi talking about the game Fortnite in te reo Māori, and using te reo Māori while playing the game.

Example 3.50

Ōku whakaaro ake e pā ana ki tēnei kēmu, he kēmu rawe ka whakaatu i ngā āhua katoa o te wairua pakanga, ko te ihiihi, ko te whakatoi, ko te whakahīhī. Ka wikitoria mātou i tēnei rā? Ko te manako ia āe, heoi anō he manako te koura i kore a Aniwa, kia kaha boy. (Wānanga TV, 2018)..

Te reo Māori use in gaming in this video provides evidence that at least one small community of rangatahi who are online gamers, and who are using te reo Māori as their mode of communication in this forum. Research into the extent of rangatahi use of te reo Māori online is an area for further exploration.

Internet searches also revealed other online games that have been translated into te reo Māori.

Entertainment

We analysed two amateur videos that showed rangatahi using te reo Māori online to entertain others, or to gain subscribers. The first was recorded by a rangatahi who made a vlog of her day and published it on YouTube. She spoke te reo Māori throughout the video.

Example 3.51

Kia ora, ināianei kei te wehe atu au ki te wānanga, āe, nō reira whai mai i a au. Kei te ua ki waho, kāore i te tino pai te rā kia haere ki te wānanga. Ko te wawata ka tae mai ngā tauira. (Te Māwhai, 2014)

A second video showed a group of university students performing a skit in te reo Māori to entertain other university-aged students, some of whom fall into the rangatahi age range.

Discussion of how rangatahi are exposed to, and are using, te reo ā-waha and te reo ā-tuhi online

Videos available online indicate that rangatahi are the target audience for—and therefore are likely to be exposed to—te reo ā-waha in some public online spaces. We cannot be sure whether rangatahi are viewing the content we gathered. However, since the rangatahi participants in our study all told us that they were users of online platforms, it is likely that they would come across this, or similar content.

Searches revealed a range of amateur and professionally produced videos using varying levels of reo Māori content. Amateur videos covered kaupapa Māori events and protests, opinion pieces on reo Māori pronunciation, a day-to-day vlog, make-up tutorials, and music. Professionally produced videos included news current affairs items covering kaupapa Māori events, gaming, and music.

The amount of te reo Māori on the videos we analysed ranged from a few words by people speaking mostly English, to all te reo Māori. Some purposes for using te reo included to entertain and tutor, to call rangatahi to action, to protest and inform about kaupapa that are important, to showcase kaupapa Māori, and to entertain.

Evidence of te reo ā-tuhi targeted at rangatahi was hard to find on publicly available sites. It is possible that rangatahi are exposed to and using te reo ā-tuhi in private online spaces, such as in Messenger, on personal Facebook and Instagram accounts or closed groups, and in Snapchat videos, which are private and ephemeral. We decided against trying to collect this private online material because of the complexities of capturing it ethically, and without being invasive. However, further research may develop protocols that address these issues.

Summary and key themes

Te reo ā-waha

Rangatahi were exposed to and using te reo ā-waha in public and private contexts in and outside of the research contexts. Mostly, they heard te reo Māori from a few people with whom they had reo Māori relationships, including kaiako, whanaunga, and friends. The most common places they used te reo Māori were at home and at kura. In public places, rangatahi were exposed to a lower amount of reo ā-waha than English.

When rangatahi had someone to kōrero Māori with, they could use te reo Māori anywhere they were, especially if the tikanga to kōrero Māori was set and the rangatahi were committed to using te reo Māori. Pou reo were very important as setters of tikanga kōrero Māori, and some of the rangatahi themselves were taking on the role of pou reo. For others, switching to English was the easy thing to do if that was the language being spoken by others.

Our data illustrated that the rangatahi were using te reo Māori to meet their daily needs within the particular contexts of the study. They were using te reo Māori naturally, in socially complex ways, to talk about a wide range of topics and for a broad range of communicative functions including whakawhanaunga, whakaputa whakaaro, arahi, wānanga take, and auahatanga.

Online material for which rangatahi were a likely audience included a range of amateur and professionally produced videos using some or mostly te reo Māori. Amateur videos that covered kaupapa Māori events and protests, opinion pieces on reo Māori pronunciation, a day-to-day vlog, make-up tutorials, and music. Professionally produced videos included news current affairs items covering kaupapa Māori events, gaming, and music videos. Some purposes for using te reo in this online material included to entertain and tutor, to call rangatahi to action, to protest and inform about kaupapa that are important, to showcase kaupapa Māori, and to entertain.

Te reo ā-tuhi

Rangatahi were exposed to Māori text on signs, clothing, books, banners, posters, products, and lyric sheets in public spaces, and in homes and private spaces, during the study. Rangatahi were exposed to labels and signs with Māori-only text, English-only text, and bilingual text. Rangatahi were also exposed to some non-text Māori images including art, whakairo, taonga a pātaka, and māra kūmara.

Rangatahi were exposed to more Māori text and images in the Matatini and Matariki contexts than in other public contexts. This was because of the events, and because of those who were actively promoting te reo Māori at the events, rather than because of policies or practices at the venues. Signage at the two events was temporary, and illustrates what a more multilingual approach to written language could look like in other public spaces.

Rangatahi exposure to reo Māori ā-tuhi was much lower than their exposure to English text. In public spaces, no permanent signs that were photographed were in te reo Māori, and most of the temporary signs with te reo Māori text also had English text.

Online, evidence of te reo ā-tuhi targeted at rangatahi was hard to find on publicly available sites.

Te reo ā-tinana

Rangatahi were using recurrent patterns of reo ā-tinana, which included elements such as hugging, kissing, hongi, shaking hands, and hand gestures, as well as whistling, pūkana, and other eye movements to communicate. Some rangatahi were cognisant of some elements of reo ā-tinana, referring to them as “kōrero”, and considering them to be reo Māori.

5. What sort of reo Māori are rangatahi using?

Te Reo o te Rangatahi has provided a rare opportunity to gather a set, or corpus, of natural language spoken by rangatahi, which allows insights into features of their use of te reo Māori. This chapter addresses two research questions:

RQ3. What is the frequency of rangatahi use of, and exposure to, te reo Māori in particular domains?

RQ4. What sort of reo Māori (topics, vocabulary, grammar) are rangatahi using, and what are rangatahi saying?

The chapter begins with an analysis of the density of te reo Māori in each of the eight contexts, and identifies the topics of conversation that rangatahi spoke about. It describes some aspects of the phonology of the spoken-language data, then reports on the formal linguistic analyses of the corpus. RQ4 is addressed in part in Chapter 4. In this chapter, we further address the question by calculating and describing the density of te reo Māori in each research context (see Table 13).

Although the corpus is too small to allow accurate comparisons between individual speakers, or to make generalisations across a population, it is important because there is very little comparable spoken data from rangatahi reo Māori. The only other data we know of is the MAONZE corpus (Watson et al., 2016), which contains hour-long interviews with rangatahi speaking Māori. To date, analyses of the MAONZE data have focused on phonetics rather than lexical or grammatical aspects.

Analyses of the *Reo o te Rangatahi* corpus identified a list of the topics that rangatahi spoke about in te reo Māori. They also examined phonological features, qualities of vocabulary use and grammatical structure, and the impact of rangatahi use on language change. The results give indications of the language proficiency of rangatahi in our study.

Frequency

Density

Table 13 presents the results of quantitative density analysis of audio and video data for rangatahi within each of the eight research contexts. For analysis, we counted the number of potential connections, the number of actual communicative connections (number of people who rangatahi spoke with) in te reo Māori and English, and the incidences of audible ambient language in each context. This analysis indicated that 11 rangatahi were in high-density contexts; six were in mid- to moderate-density contexts; and just one was in a low-density context. Qualitative description below the table gives greater clarity to the picture of language density in each context.

Qualitative analysis confirms that the highest density contexts in the study were in private spaces occupied by a few committed people. Specifically, they were a student flat, some whānau homes, and an iwi office. In these contexts, everyone spoke Māori to each other during the research sessions, any ambient language (for example, between the kairangahau and parents) was in te reo Māori, and both these things were the norm outside of the research. Some other private contexts, including office spaces, and one whānau home, were high density for the research session, but were usually low- to mid-density. This is because some people who usually occupy the spaces outside of the research sessions speak te reo Māori only sometimes, or not at all.

One private context—the kapa haka practice—was a mid- to high-density context during the research session because of the pātere that the kapa sang and read repeatedly, but the school hall was usually a low-density venue.

The highest density public contexts were Te Matatini and the Matariki gala in the public gardens. Poor sound quality at both these events meant that it was not possible to analyse all the ambient language. However, of 16 instances of audible ambient language that we captured on our recordings, 12 were English and only four were te reo Māori. In addition, all four incidences of ambient reo Māori were from the Matatini stage. Two were when an MC was talking, and two were when kapa haka were performing. This means that no incidences of people talking to each other in te reo Māori were captured on the concourse.

Table 13 Ambient language, language connections, and language density in research contexts

	Contexts	Participant IDs	Potential connections	Ambient Māori	Ambient English	All actual connections	Reo-Māori connections	Reo Māori Density %	Density
1a	Te Matatini	11001	1000+	Y	Y	14	2	14	Low
1b	Te Matatini	11002 & 11003	1000+	Y	Y	34	25	74-85	Moderate -high
2a	Family homes	33004	4	Y	Y	4	3	75-100	Moderate -high
2b	Family homes	32002	4	N	N	4	4	100	High
2c	Family homes	13006	7	Y		7	7	100	High
3	A student flat	24004 & 24005	3	N	N	3	3	100	High
4a	Office space in Tainui	32003	3	N	Y	3	3	100	High
4b	Office space in Tainui	32001	3	N	Y	3	2	67-100	Moderate -high
4c	Office space in Tainui	42001	3	N	N	3	3	100	High
5	Restaurant in Te Arawa	13006	8	N	Y	8	7	88	High
6	Kapa haka practice Te Waipounamu	K and T	30+ rangatahi, tutor/father, 3 parents, 2 R	N	Y	1	n/a	50-100	Mid-High
7a	Iwi office in Te Waipounamu	14004 14005 44002	8	Y	N	8	8	100	High
7b	Iwi office in Te Waipounamu	44003	4	Y	N	4	4	100	High
8a	Public garden in Tainui	22002 & 22003	100+	Y	Y	11	9		High
8b	Public garden in Te Waipounamu	24004 & 24005	30+	Y	Y	3	3	100	High

All the public contexts appear high density according to quantitative analyses, because the communicative connections made were all, or mostly, in te reo Māori. However, other people present—and in some cases there were many—were not Māori speakers, and the ambient language was therefore English in these contexts. Thus, the reo Māori density at Te Matatini was much lower for one rangatahi than for others.

The density analysis results underline five things. First, rangatahi were exposed to much more English than Māori in public contexts. Second, the highest density contexts were in homes and private spaces where rangatahi and others they were with made a commitment to te reo Māori all the time. The third important finding is that both in public and private contexts, density is directly related to the people who are there and their motivation to kōrero Māori. The results also highlight that reo Māori music and kapa haka make space for te reo Māori.

We heard from some rangatahi that they find it easy to switch to English when others are speaking English. Thus, the prevalence of English in public contexts may be a barrier to using te reo Māori for some rangatahi. This highlights that rangatahi who commit to speaking Māori even when there are few Māori speakers around them are making a significant commitment.

Topics

Rangatahi used te reo Māori to talk about a wide range of topics, as shown in Table 14.

Table 14 Topics that rangatahi talked about in te reo Māori

The research project (discussed in all interviews).
Whanaungatanga: (for example, pepeha, iwi, and hapū connections).
Te reo Māori, including: its value and connection to identity; how teacher knowledge of te reo Māori impacts te reo in classrooms; how students use te reo Māori and English at kura; places where te reo Māori is heard or seen; and rangatahi aspirations for te reo Māori.
Previous and current schooling, hobbies, and interests. University classes, and work were raised by older rangatahi.
Te ao Māori, including: kapa haka; tāmoko, tikanga; whakatau manuhiri (see also Sports and Arts, below); centrality of te ao Māori in their lives; Matatini (performance standards); Ngā Manu Kōrero (acting as a judge, and competitors' abilities); what it means to be Māori and succeed at high school; mau rākau, kura reo, and developing a new kapa haka.
Sports, including: kī-ō-rahi, rugby, netball, basketball, waka ama, swimming, volleyball, going to the gym, table tennis, skateboarding, skiing, and boxing.
Arts: visual (painting), dancing, music (singing, playing guitar, making beats) and drama were named interests. Some rangatahi specifically mentioned waiata Māori).
Reading and books.
Watching reo Māori media, including on Netflix, YouTube, and MTV. Kapa haka and anime were mentioned as specific genres.
Iwi history, and future plans for their iwi.
Everyday whānau topics including food, Māmā's birthday, feeding pets, future jobs.

The topics covered were unsurprising ones that rangatahi might be expected to talk about. This does not mean that rangatahi are not able to discuss more complex issues. Rather, the data we captured reflected that rangatahi were talking about everyday rangatahi things.

Phonology

We did not undertake any formal, quantitative phonological analysis of our data. However, our observations indicate that rangatahi in the study are speaking Māori in a way that is phonologically comparable to modern adult usage. This suggests that the rangatahi in our study were learning and maintaining the phonology of the adults who were using te reo Māori around them.

We found a few examples of some of some well-known regional allophones, (for example, /h/ and /f/; /ŋ/[6] and /k/). Example 5.1 illustrates the use of the /h/ allophone of /f/ common in Tai Tokerau mita (dialect or regional variation). It was produced by a rangatahi who was describing the mita his koroua used.

> *Ka tango i te 'w', so ki te kī i ngā kupu pēnei i te 'whakaaro', ki 'hakaaro', 'whakamana', 'hakamana'. (32002, Tainui)*

Example 5.2 shows the use of the Te Waipounamu allophone /k/ for /ŋ/, and was produced as a proper name by a rangatahi talking about where they heard te reo Māori being used. Neither speaker in examples 5.1 or 5.2 used these allophones elsewhere in their reo ā-waha.

Example 5.1 Tai Tokerau mita in Tainui region

***h**akamate i a rātou*

Example 5.1 Tai Tokerau mita in Tainui region

ngā Kura Ra**k**atahi

There was also one instance of *wērā,* a dialectal variant of *ērā,* from a rangatahi in Te Arawa. There may have been other instances or examples of similar variants that were not transcribed due to the poor sound quality of some recordings.

The examples provide some evidence that rangatahi use, or are at least aware of, some elements of mita.

[6] /ŋ/ is the International Phonetic Alphabet (IPA) symbol for a velar nasal (that is, the sound represented by the diagraph "ng" in written reo Māori.

Te reo ā-waha data

The dataset analysed in the following sections was reo ā-waha from 17 rangatahi transcribed from 13 of the 14 audio and/or video recordings we captured via four data-gathering methods—Interviews, Video, Talking pictures, and the Internet search. Because we were focusing on te reo Māori structures, we excluded one video recording because it was almost all in English. In addition, some of the recordings also captured the language of other people (for example, whānau members); however, only the language spoken by the rangatahi is analysed here.

Hereafter we refer to this data as the reo ā-waha dataset. Table 15 provides a summary of data in the reo ā-waha dataset.

Table 15 Rangatahi spoken data: Lexical summary

Participant identification numbers	Group	Time (minutes)	Words (total)	Words per minute	Types	TTR (%)
11002 & 1103	Video	32	1,709	53.4	380	22.18
13006	Video	17	787	46.3	247	31.39
14004 & 14005	Video	48	2,346	48.9	438	18.65
22002 & 22003	Interview	15	310	20.7	134	43.23
24004 & 24005	Interview	40	2,346	58.7	537	22.89
32001	Talking pictures / interview	30	1,836	61.2	376	20.48
32002	Talking pictures / interview	24	1,177	49.0	293	24.89
32003	Talking pictures / interview	39	1,763	45.2	364	20.65
33004	Talking pictures / interview	22	1,657	75.4	359	21.67
42001	Interview	22	246	11.2	119	48.36
44002	Interview	5	275	55.0	115	41.82
50001	Internet	3	335	112.3	159	47.46
50002	Internet	3	578	193.0	163	28.20
Totals		**221**	**13,605**		**1,453**	**10.68**

Table 15 illustrates that the length of data-collection sessions varied considerably—the shortest being under 5 minutes, and the longest being nearly 50 minutes. In some cases, the number of words captured from rangatahi reflect the length of a recording, but other factors apply, such as other people present, and the comfort level of the rangatahi. A focus for us is the number of **word types** per session. More types generally indicates a wide range of vocabulary and more complex language. For example, two of the recordings we analysed (with rangatahi 14004 and 24004) were likely to contain a wider range of vocabulary than the others, on the basis of the larger number of types. This can clearly be seen in the word clouds in the following section in this chapter.

The ratio of types to **tokens** (number of times a word type occurs) is called the type–token ratio (TTR). The lower the TTR ratio, generally the more lexically complex the language sample. Table 15 also shows that the number of words per minute was highly variable, possibly due to the six methods of data collection. For example, in interviews, some of the rangatahi may have taken a while to warm up as they began to feel comfortable with the kairangahau and their questions, whereas natural data occurring between friends flowed more quickly and may have resulted in a higher overall word-per-minute rate. Our observations suggest that, once rangatahi participants felt comfortable in the research context, they responded quickly between each other. This is an indication of high **fluency.**

Rangatahi in our study had similar TTR ratios and word-type counts to those of four rangatahi whose spoken language was collected for the MAONZE project (see Appendix D). That there are now two sets of similar results from this age group may indicate that our results could be "normal" for this age group in the early 21st century. However, further research, including the gathering and analysis of more and large corpora, is required to confirm this hypothesis.

Vocabulary

This section presents word clouds[7] that show the results of an analysis of the vocabulary in the reo ā-waha dataset.

Our primary interest for vocabulary analysis was the range of vocabulary (especially content words) being used by rangatahi. A wide range of vocabulary, including use of low-frequency words, can indicate high proficiency (see, for example, Laufer & Nation, 1995). The range of vocabulary can be displayed as lists. However, word clouds provide insightful visual illustrations of vocabulary use. The word clouds display the most frequently used words towards the centre and in a larger font. Less frequent words are in smaller text and further from the centre. This allows readers to quickly see which are the most frequently used words in a text or transcription.

The word clouds include content words (verbs, nouns, adjectives) but not function words (for example, kua, he, nā), pause fillers (for example, nē), or proper nouns (for example, names of places or people). Exclusion of function words, pause fillers, and proper nouns is widely accepted in this type of analysis because they are very high frequency and may distract from the main focus, which is the range of vocabulary. In addition, only words that occur at least three times appear in the word clouds. Frequency lists of all words in the data—including those that appear fewer than three times—are attached as Appendix E.

[7] For further explanation of analysis methods, see Chapter 3.

Word-cloud analysis of te reo ā-waha collected from all rangatahi

The word cloud in Figure 2 is a visualisation of vocabulary frequency in the reo ā-waha dataset. Only spoken language from the rangatahi themselves was analysed. Since we were focusing on te reo Māori, we did not include data collected from one rangatahi who spoke mostly English.

Figure 2. Word cloud of spoken data from all contexts (total content words = 5,169)

The most frequent term in the data was mea (256 occurrences). The vast majority of occurrences featured *mea* as a noun (for example, *ērā mea, ngā mea, ērā momo mea*). There were some examples of the grammatical construction he mea; other examples included *nō te mea, nā te mea, i te mea* "because" and the phrase *ehara i te mea*. However, there were no examples of *mea* being used as a verb (for example, *ka mea atu*). Further research could focus on whether rangatahi are using words, including mea, as nouns, verbs, and other parts of speech, or whether they are using them in more restricted ways, such as nouns only.

The items in the word cloud are high-frequency nouns, verbs, and adjectives that reflect the world that rangatahi move in, and things they commonly talked about, such as whānau, kapa haka, kura, wā and hākinakina (see also Table 13). The prevalence of words such as kōrero, Māori, may have reflected discussion around the research.

The reo ā-waha data from public contexts (Figure 3) came from five rangatahi who were at Te Matatini, in a public garden, or at a restaurant, and from two videos sourced using the Internet search method (see Chapter 2).

Figure 3. Word cloud of spoken data from public contexts (n = 984 content words)

The presence of nouns such as kapa, whanaunga, and Matatini, and of verbs such as hiahia, kite, haere, and wero, reflect the topics discussed by rangatahi and the things they like and do.

The word cloud in Figure 4 comes from analysis of the spoken language of 12 rangatahi in private contexts (homes, a student flat, iwi offices, and office spaces). With a word count of 3187, the dataset was over three times the size of the public context set. We note that, because the total number of content words in each of the public and private context datasets are dissimilar, they should not be directly compared.

As with the whole-corpus word cloud, Figure 4 reflects topics from the worlds of these rangatahi, who talked about things like hākinakina, kura, and kāinga. The words “kōrero” and “Māori” were among the highest frequency in the dataset, and “Pākehā” also featured—the prominence of these words likely reflects that te reo Māori was the focus of the research and rangatahi talked about the study.

Figure 4 Word cloud of spoken data from private contexts (n = 3187 content words)

Discussion about frequency, topics, phonology and vocabulary

Frequency

The density analysis results underline four things. First, rangatahi were exposed to much more English than Māori in public contexts. Second, the highest density contexts were in homes and private spaces where rangatahi and others they were with made a commitment to te reo Māori. The third important finding is that both in public and private contexts, density is directly related to the people who are there and their motivation to kōrero Māori. The results also highlight that reo Māori music and kapa haka make space for te reo Māori.

Topics

Rangatahi used te reo Māori to talk about a wide range of topics, including: whanaungatanga, te reo and te ao Māori, identity, schooling, interests, sports, kapa haka, arts and music, reading and books, online platforms, and everyday things such as food, pets, and holidays.

Phonology

Observations indicate that rangatahi in the study are speaking Māori in a way that is phonologically comparable to modern adult usage. Some rangatahi are aware of, and using, aspects of mita.

Vocabulary

The main finding from the vocabulary analysis is that the rangatahi in the study were mostly using high-frequency words that are readily used or well known by reasonably proficient adult speakers of modern Māori. This is not necessarily an indication of low proficiency. Rather, it may reflect contexts where a broad vocabulary that includes low-frequency words was not required for rangatahi to meet their day-to-day language needs.

Further case-study research could explore the language use of a smaller number of rangatahi over a period of time, and across different contexts, to explore the range of vocabulary that rangatahi are exposed to and using.

Grammar and language change

Two analyses of the reo ā-waha data are presented in the section. The first is a **lexical/grammatical** analysis from rangatahi participants. It excludes the reo ā-waha from the videos obtained from the Internet search method. The second presents and discusses examples from the dataset that may indicate language change.

Lexical/grammatical analysis

This section details rangatahi Māori usage of grammatical particles including ai, the manner particles *ai, kē, kau, tonu, rawa, also ake, and iho;* the very frequent experience (or middle) verbs pīrangi and *mōhio;* the irregular verb *taea*; and passive suffix (-*Cia*) and the nominalising suffix (-*Canga*), where C is a consonant. Analysis of these particles gives important insights into the lexical knowledge and grammatical competencies of Māori-speaking rangatahi. Since the particles are used in complex grammatical structures, mastery of them is an indication of a high level of proficiency.

Grammatical particles

The grammatical ai (see Harlow, 2007, 2015 for details on grammatical particles) has a large number of functions. Its usage is a clear indication of Māori language competency. Table 16 presents all identifiable examples of rangatahi use of ai in the data.

Table 16 Rangatahi ai *usage*

Data	Phrase examples of "ai"
11002	*he aha* ***ai***
11002	*kia mahi* ***ai*** *raro i a ia*
13006	*he aha* ***ai***
14004	*e puta* ***ai***
14004	*kia pai* ***ai*** *te tuku*
24004	*rangona* ***ai*** *te*
24004	*i kōrerotia* ***ai*** *e mātou*
24004	*kia kore* ***ai*** *e mate ki te*
24004	*mā te whakaheke werawera e tūtaki* ***ai*** *ngā mahi*
24004	*mā te aha e ora* ***ai*** *te reo?*
24004	*i haere* ***ai*** *māua*
24004	*Kia ū atu* ***ai*** *ki uta*
24004	*Kia whakapūpū atu* ***ai***
32001	*kōrero pai* ***ai*** *tō rātou*
32001	*E kore e pai* ***ai*** *tō tau*
32001	*i pērā* ***ai***
32001	*e pai* ***ai***

The data include accurate usage of the particle ai with passive constructions and in the future negative *kore*. It is clear that this particle was being used accurately by rangatahi in the study.

Table 17 presents identifiable examples of rangatahi use of *kē* in our data. This modifier often indicates difference or otherness. It is an important marker of Māori grammatical competence. As with the results for *ai*, rangatahi use of *kē* is accurate in our study.

Table 17 Rangatahi kē usage

Data	Phrase examples of "kē"
11002	*he wāhi **kē** atu*
22001	*ki hea **kē** atu*
24004	*kei te Māori **kē***
32001	*nō Kawhia **kē***
32002	*I te shadow **kē***
33004	*kua haere **kē** ki runga*
50000	*kua piro **kē** koutou*

Table 18 presents rangatahi *kau* usage identifiable in the data. In the analysis of data from 32002, *kau* is clearly a noun (cow) and not the particle. In the 33004 data, it is mostly likely functioning as a manner particle. In the rangatahi MAONZE data, *kau* as a manner particle is rare (P. Keegan, personal communication, December 2019). Its absence in our data may be evidence of language change: it is possible that, except in **lexicalised** phrases such as "e mihi kau ana", *kau* is rarely being used productively by younger speakers of Māori.

Table 18 Rangatahi kau usage

Data	Phrase examples of "kau"
32002	*He **kau**, he rāpeti*
33004	*i waiata **kau***

Table 19 presents rangatahi *tonu* usage that was identifiable in our data. This particle has a wide range of functions indicating "still, continues, unceasing, progressive" and can also be used for emphasis.

Table 19 Rangatahi tonu usage

Data	Phrase examples of "tonu"
11002	*ka haere* ***tonu***
13006	*he pai* ***tonu***
14004	*kei konei* ***tonu***
14004	*kei te mau* ***tonu***
14004	*ko tā tātou ao Māori* ***tonu***
14004	*i noho* ***tonu*** *ki te taha*
14004	*mōhio* ***tonu*** *ki ngā pūkenga*
14004	*kura auraki* ***tonu*** *au*
14004	*i reira* ***tonu*** *a*
14004	*he Pākehā* ***tonu***
14004	*Me te mōhio* ***tonu*** *ka kaha ia ki te mahi*
14004	*ka ka whāia* ***tonu*** *te ara reo*
14004	*i eke* ***tonu*** *ngā kōrero*
14004	*pai* ***tonu*** *te taha whakawā*
14004	*I manawa tītī manawaroa* ***tonu***
14004	*ko taku whakahīhī* ***tonu*** *pea*
14004	*kei kōrā* ***tonu*** *te*
14004	*kei te ora* ***tonu***
14004	*Me ngā mātua* ***tonu***
14004	*tokomaha* ***tonu***
14004	*kei te tipu* ***tonu***
24004	*he reo Māori* ***tonu***
24004	*Me ngana* ***tonu*** *ki te whakamahi i tētahi kupu*
24004	*Me haere* ***tonu***
24004	*Engari mihi* ***tonu*** *ana*
32001	*Ko te hemo* ***tonu*** *atu*
32001	*kia ora* ***tonu***
32002	*ka whakamau* ***tonu***
42001	*Kia kōrero* ***tonu*** *mātou*
50001	*nā reira mātakitaki* ***tonu*** *mai*
50001	*kei te mau* ***tonu*** *mai koutou ki aku mahi*
50001	*kei te tatari* ***tonu*** *au*

The particle *tonu* is clearly well known and used both productively and accurately by the rangatahi Māori in this study. The functions represented here cover all those stated above—"still, continues, unceasing, progressive"—and rangatahi are also using it for emphasis. Its presence and the accurate use of it in the data are indications of proficiency. If it was absent, this would indicate a lack of sophistication.

Table 20 presents rangatahi *rawa* usage that was identifiable in our data. This particle also has wide meanings including "indeed, really, exactly, very, finality".

*Table 20 Rangatahi **rawa** usage*

Data	Phrase examples of "rawa"
11002	*pai **rawa** ēnei mea*
14004	*kātahi **rawa** koe ka tū*
14004	*me kounga **rawa***
14004	*ka heke **rawa** te kounga*
24004	*he uaua **rawa** tērā*
32001	*e kore **rawa** rātou e*
32001	*e kore **rawa** koe e*
32001	*nā te tawhiti **rawa** ki te*
32001	*pai **rawa** atu*
32002	*ngā kupu tere **rawa***
32002	*kupu roa **rawa***
32002	*he pai **rawa** atu*
33004	*He pai **rawa** tēnā*
42001	*he pai **rawa***
44002	*he tohunga **rawa** koe*

These data suggest that the particle *rawa* is also being used productively by rangatahi Māori for all the functions stated above.

Table 21 presents rangatahi *ake* usage, identified in the data, and Table 22 presents rangatahi iho usage. These important Māori particles often function as directionals, but have other meanings, including comparisons. The particle *ake* can be used for emphasis or to indicate immediately, recently, distance, and comparison. The particle iho can also be used for emphasis and to indicate less, worse, shorter, lower, below, and under.

Table 21 Rangatahi ake usage

Data	Phrase examples of "ake"
14004	*Pākehā **ake** nei*
14004	*mō tōna reo **ake***
14004	*kia pai **ake** pea te*
14004	*ō rātou **ake** reo*
14004	*he poto **ake***
14004	*he māmā **ake***
22001	*he kaha **ake** te reo i te mea*
24004	*i tipu **ake** ki*
24004	*he māmā **ake** te kōrero*
32001	*āhua uaua **ake***
32001	*he māmā **ake** te kōrero*
32001	*he nui **ake** tōku mōhio*
33004	*maha **ake***
33004	*ōku whakaaro **ake***
50000	*he pai **ake** i ahau*
50000	*Pākehā **ake** nei*

Table 22 Rangatahi iho usage

Data	Phrase examples of "ake"
13006	*he whakaaro noa **iho***
13006	*he pai noa **iho***
22001	*ko hākinakina noa **iho***
24004	*kei te pai noa **iho***
24004	*ko te kōrero noa **iho***
32001	*Koirā noa **iho***
32002	*Ko tērā noa **iho***
32002	*he taonga tuku **iho***

These examples show both *ake* and *iho* being used productively by rangatahi Māori. However, some uses of *ake* and *iho* were not present in our data. This does not necessarily mean that rangatahi are not using them, but may reflect limitations resulting from the small amount of usable spoken data gathered in this project. We note that all the examples of iho can be considered lexicalised, as they occur in the phrase "noa iho" and "tuku iho". This contrasts with uses of *ake* that are clearly productive in phrases such as "he pākehā ake", "ōku whakaaro ake", and "he āhua uaua ake".

It is possible that rangatahi are using *ake* as a general intensifier, including in places where *iho* may have been used in former times; for example, in the phrase "he māmā ake".

Experience verbs

Table 23 displays rangatahi usage of the verb *pīrangi* and Table 24 displays usage of the verb *mōhio* identified in our data. These two verbs are high-frequency words and belong to a special set of verbs termed "middle" or "experience" verbs. When used transitively (requiring an object), they traditionally mark the object with *ki*, rather than i.

Since *i* is a far more common transitivity marker than ki, this analysis gives an indication of whether rangatahi are using the traditional forms, or are moving towards i as a general transitivity marker. If the latter, this may indicate language change.

*Table 23 Rangatahi **pīrangi** usage*

Data	Phrase example of "pīrangi"
13006	*pai tō **pīrangi***
13006	*me **pīrangi** au i taku mea*
14004	*kei te **pīrangi** parāoa*
14004	*e **pīrangi** ana*
14004	*Me **pīrangi***
14004	*kei te **pīrangi***
14004	*Tokomaha e **pīrangi** ana*
14004	*kāre i te **pīrangi** ki tērā āhuatanga*
32002	*ka **pīrangi** ahau ki te tiki*
33004	*kei te **pīrangi** au*
33004	***pīrangi** coffee ia?*
33004	***pīrangi** au tērā atu wine*
33004	*Kei te **pīrangi** ahau kimi i tētahi*
33004	*Kei te tino **pīrangi** ahau kia ora te reo*
4002	*ka **pīrangi** kōrero atu ki a rāua*

Table 24 Rangatahi ***mōhio*** *usage*

Data	Phrase example of "mōhio"
11002	*ka* ***mōhio*** *kei te rīpene*
11002	*kei te* ***mōhio*** *au pēhea te*
11002	*kei te* ***mōhio*** *au i a ia*
11002	***mōhio*** *koe he aha*
13006	*i te* ***mōhio*** *kua*
13006	*kei te* ***mōhio*** *au*
14004	*ka* ***mōhio*** *koe ki a*
14004	*kei te* ***mōhio*** *au ki a*
14004	*ka* ***mōhio*** *koe ki ētahi*
14004	*kāre au i te tino* ***mōhio***
14004	*ahakoa te* ***mōhio*** *tonu ki ngā*
14004	*Me* ***mōhio*** *ki te kaupapa*
14004	*Me te* ***mōhio*** *tonu ka kaha ia ki te*
22001	*kāore i te tino* ***mōhio*** *ki ōku*
22001	*ka* ***mōhio*** *te kanohi nei*
24004	*i te mea* ***mōhio*** *kōrua ki te*
24004	*Kāre i te* ***mōhio*** *mehemea he katakata*
24004	*kāore au i te tino* ***mōhio*** *i ētahi o*
24004	*Kāore mātou i te* ***mōhio*** *ki te kupu*
24004	*kāore au i te tino* ***mōhio***
24004	*me* ***mōhio*** *ki ēnei kupu*
24004	*Kāre i te* ***mōhio*** *i te tautoko te*
24004	*kāore au i te* ***mōhio*** *ki taua wāhi*
32001	*kāre rātou i te* ***mōhio*** *pēhea ki te kōrero Māori*
32001	*matua keke noa e* ***mōhio*** *ana*
32001	*kāre i te tino* ***mōhio*** *mārama i te reo*
32001	*he nui ake tōku* ***mōhio***
32001	*kāore ia i te tino* ***mōhio***
32001	*Kāre i te* ***mōhio***
32001	*Kāre au e tino* ***mōhio*** *me pēhea*
32002	***mōhio*** *ki te*
32002	*kāre koe e* ***mōhio*** *i te kupu*
32002	*Kāore au e* ***mōhio*** *i te ingoa*
32002	*ka* ***mōhio*** *ahau kei tērā*
32002	*kāre au e* ***mōhio*** *i ngā kupu katoa*
33004	*au i te* ***mōhio*** *he pēhea te whakaahua*
33004	*kei te āhua* ***mōhio*** *i te reo*
33004	*kei te tino* ***mōhio*** *pēhea ki te kōrero Māori*
42001	*Kāore e* ***mōhio*** *ki*
42001	*kāore rātou* ***mōhio*** *ki te kōrero*
44002	*kāore au e tino* ***mōhio*** *he aha ngā*
44002	*kāore au i te tino* ***mōhio*** *ki ngā momo*
50001	*e* ***mōhio*** *ana rātou kei konei*

Both tables show examples of the object being correctly marked with *ki*. Sometimes nouns are directly incorporated into the verb (for example, *pīrangi* coffee). This is a well known feature of spoken Māori, and can therefore be considered **acceptable.** There is one example of *pīrangi* being used as a noun "ka pai tō pīrangi", which can also be considered acceptable. However, there are also examples of the object being incorrectly marked with *i* or occasionally *he*, or not being marked at all. This, too, may be an indication of language change that arises from rangatahi growing up hearing a significant amount of input from second-language speakers of te reo Māori. More research is required in this area.

Irregular verb "taea"

Table 25 displays rangatahi usage of the irregular high-frequency verb taea identified in our data. Traditionally, this verb acts as a passive construction, whereby the agent is marked always with *e* and the second phrase is not marked.

Table 25 Rangatahi **taea** *usage*

Data	Phrase example of "taea"
11002	*ka* ***taea*** *koe*
11002	*ka* ***taea*** *te mahi i tō waea*
11002	*ka* ***taea*** *te haere ki te mahi*
11002	*kāre au e* ***taea*** *te pātuhi*
11002	*ka* ***taea*** *ia*
13006	*ka* ***taea*** *te mahi te spa*
14004	*e* ***taea*** *ana e au ētahi kupu*
14004	*ka* ***taea*** *e tātou*
32002	*Ka* ***taea*** *ahau te pene*
32002	*Ka* ***taea*** *te kimi i ētahi atu*
32002	*ka* ***taea*** *koe ki te*
32002	*e* ***taea*** *ki te hiki*
32002	*kāore e* ***taea*** *koe te mahi*
32002	*e* ***taea*** *ana ki te kōrero Māori*
33004	*Ka* ***taea*** *koe*
33004	*Ka* ***taea*** *ana ahau ki te …*
33004	*Ka* ***taea*** *e au tērā*
33004	*ka* ***taea*** *rātou*
33004	*ka* ***taea*** *hoki rātou*
33004	*ka* ***taea*** *te whakamārama te maha ake …*
42001	*ka* ***taea*** *te kite*

In the table above, sometimes *taea* is used correctly (see shaded examples) and sometimes it is not. This variable usage of *taea* is probably evidence of language change, and this is discussed further in the following section: Language change and innovation.

Nominalising and passivising suffixes

Table 26 displays all identifiable instances in the data of rangatahi usage of the nominalising suffix *-C(a) nga* (for example, -anga, -tanga, -hanga) and Table 27 displays usage of the passive suffix *-Cia* (for example, -tia, -hia, -ngia).

Table 26 Rangatahi -Canga usage

Data	Phrase examples of "-(ta)nga"
13006	*āna **putanga** he tipi kei roto*
14004	*ko te **āhuatanga** nui*
14004	*hei **whakapakaritanga** mā te iwi*
14004	*I te **putanga** i te kura*
14004	*te **panonitanga** mai i te kaikōrero*
14004	*kua kitea tērā **āhuatanga***
14004	*hei **whakapakaritanga** mā rātou*
14004	*ko te **āhuatanga** āhua*
14004	***ahungaruatanga pēperekōutanga***
14004	*ki tērā **āhuatanga***
22001	*ngā **tūwheratanga** mō ngā tāngata*
24004	*Ko tērā te **tīmatanga** o te reo*
24004	*e te **kāwanatanga***
24004	*te **kāwanatanga** ki te reo Māori*
24004	*Koirā te **tīmatanga***
24004	*ngā **āhuatanga** o te wā*
24004	*he **putanga***
32001	*he nui ōna **mōhiotanga***
32002	***Whakamaumaharatanga***
42001	*engari i te **tīmatanga***

It is possible that some of the words above, *including āhuatanga, kāwanatanga, putanga,* and *tīmatanga,* are lexicalised, because they are commonly heard. Other examples, such as "whakapakitanga", are low frequency, so it is likely that the rangatahi has deliberately used the -Canga suffix. Our data therefore indicate that at least some rangatahi are using nominalising suffixes productively.

Table 27 Rangatahi -Cia usage

Data	Phrase examples of "-Cia"
11002	*kua **whakaaengia** koe*
11002	*kei te **rīpenengia** au*
11002	***haria***
11002	*ka **whāia** koe ināianei*
11002	*ka **whakakahangia** ki*
11002	***Whakanuia** i tēnei Māori*
13006	***Tōia** te waka*
13006	***Whakaaturia** te rori*
14004	***Tāmokohia** te kanohi*
14004	*ka **whāia** tonu te ara reo*
14004	*ka **karangahia** e tō māmā*
14004	*ka **katia** ngā tatau*
14004	*kua **whakatūria** kētia a*
22001	*e **hiahiatia** ana*
24004	*ka **kōrerotia** tētahi tangata*
24004	*kupu kua **hangaia** e*
24004	*I **whakamahia** e au*
24004	*ngā kōrero **māramatia** e au*
24004	***hangaia** rānei tētahi kupu*
24004	*tētahi kaupapa i **kōrerotia** ai e mātou*
24004	*ka **tāpiritia** e au i ngā kupu*
24004	*Kia **kōrerotia** e tēnā, e tēnā, ā tōna wā*
24004	*Ko Tāne ka **irihia***
32001	*ka **mahia***
32001	*me **whāia** te ākonga i te reo*
32001	*kapahaka ka **mātakingia***
32002	*Ka pānui ahau i ngā mea i **kōrerohia***
33004	*ka **kōrerotia** reo*
44002	***horoia** ō kākahu*

Table 28 indicates mostly accurate and acceptable use of the passive suffix, and some use that can be called unacceptable. Examples of acceptable use include:

- common passive phrases (for example, ka kōrerotia e tēnā, e tēna)
- commands that use a passive form (for example, "Tāmokohia te kanohi")
- passive agreement (for example, kua whakatūria kētia e au "It was established instead by me").

Our data provide evidence that some rangatahi are using the important processes of **nominalisation** and **passivisation** in productive ways.

Discussion about results of lexical/grammatical analysis

This section has presented the results of lexical/grammatical analysis of seven manner particles, two experience verbs, an irregular verb, and passive and nominalising suffixes in rangatahi spoken data. Acceptable usage can indicate high proficiency, while unacceptable usage may indicate low proficiency, language change, or innovation.

Rangatahi were mostly using five of the particles—ai, kē, tonu, rawa, and ake—correctly and productively. The other two particles—kau, iho—were used correctly, but iho only appeared in lexicalised phrases, and kau appeared in the data only once. Similarly, rangatahi were using the nominalising and passivising suffixes correctly and productively.

Rangatahi use of mōhio, pīrangi, and taea was more variable. Sometimes rangatahi used these verbs correctly, and there were also instances of unacceptable use in the data. There are a number of possible reasons for the latter, including transference from English, hearing unacceptable usage from second-language learners, and language innovation.

Examples of unacceptable use by rangatahi may reflect the normal process of language acquisition and socialisation, whereby tamariki and rangatahi experiment with grammatical rules as they approach adult proficiency. However, exposure to a large amount of acceptable usage by proficient speakers is required if rangatahi are to develop adult usage through this process.

Overall, the results of the lexical/grammatical analysis give an indication of high proficiency of the rangatahi in the study.

Language change and innovation

As they reach their teenage years and begin to develop and test their identities and make connections with new people and groups, rangatahi also develop and test new language boundaries. Thus, young people across the world are a "driving force behind language change" (Tagliamonte, 2016, p. 43). Language change is inevitable: indeed, some change is desirable, as it is a sign of vitality. However, too much change caused by impact from a dominant language like English can undermine te reo Māori.

The findings presented so far in this chapter indicate several ways that te reo o te rangatahi in our corpus may be reflecting language change. Three ways that may reflect or lead to language change are: rangatahi using grammatical rules in restricted ways; rangatahi learning unacceptable structures; and rangatahi modifying old rules or developing new ones through language innovation and experimentation.

New language or structures that appear can become acceptable if they catch on in a group (for example, a group of rangatahi) and spread to the wider population.

For the rangatahi in this study, restricted or unacceptable use could come from:

- making learner mistakes as young first-language speakers learning from highly proficient adults
- learning unacceptable or restricted structures as young first-language speakers growing up hearing a significant amount of reo from low-proficiency second-language speakers
- transferring structures into te reo Māori from another language (for example, English) as bilingual first-language learners.

Any of these categories could contribute to the unacceptable and restricted use in our data, and we have no way of telling which apply. In addition, it is normal for people to make mistakes or slips of the tongue in the normal course of conversation. Again, we have no way of telling whether this was the reason for some of the unacceptable language forms in our data. Below are some types of restricted, unacceptable, and innovative forms from our data. We note that in these examples it is possible that we did not capture the full range of rangatahi usage.

Using some forms in restricted ways

Traditionally, words in Māori can act as nouns, verbs, or adjectives. For example, *mea* has been commonly used as a noun or a verb. However there were no examples of *mea* being used as a verb in our data (for example, "ka mea atu"). This could be because rangatahi were only using it as a noun, and may indicate that some words are being used in a narrowing range of parts of speech.

Our data also suggest that some forms are being used only in lexicalised phrases, rather than being used productively. For example, *ake* and *iho* are a pair of particles that traditionally were used in complementary ways, with *ake* having the meaning "upwards from the speaker" or "greater than", and iho meaning "downwards from the speaker" or "less than". Rangatahi were using *ake* productively in our study, but they were only using *iho* in lexicalised phrases "noa iho" and "tuku iho".

Generalising and modifying rules

In our data, rangatahi were using both i and ki as transitivity markers with experience verbs such as *pīrangi* and *mōhio.* This may indicate that rangatahi are moving towards using i as a general transitivity marker.

The unacceptable use of *taea* such as those (unshaded examples) in Table 25 has been a "source of comment and frustration for older, or more traditional Māori speakers" (Kelly, 2015, p. 44). However, our data may indicate that rangatahi in our study are testing out rules from the speech they have been exposed to. While rangatahi were using taea in acceptable structures sometimes (shaded examples, Table 25), other examples suggest they were trying out its use in other ways, for example as an experience verb, for example: "ka **taea** koe ki te..." (cf. "ka **mōhio** koe ki te...").'

While it is a normal for young people to try out structures and experiment with language forms, it is desirable that they are exposed to a large amount of acceptable usage by proficient speakers from a young age. If this occurs, their proficiency becomes adult-like by the time they reach their teenage years.

Language innovation

A way that young people drive change in language is through innovation. This includes when they deliberately use words, phrases, or other language items to communicate with peers differently to how adults use these language items (Tagliamonte, 2016).

Two rangatahi in our study told us about their innovative use of pū muri (suffixes) that were a feature of their reo with their flatmates and reo-Māori peers (see example 5.3: He pū muri: Suffixes). Each suffix has essentially the same function: that is, to change the meaning of the word or name in a teasing or slightly uncomplimentary way. Four of the suffixes are derived from three reo Māori words with associations that are slightly taboo (for example, farting), noisy (for example, snoring), or dirty (for example, pūehuehu "dusty"). The fifth suffix has two forms *-ux* and *-rux*—and is likely to be derived from "skux" (cool, awesome[8]), a phonologically English adjective commonly used, and likely developed by rangatahi Māori.

The suffixes are added according to the final vowel of a base word ("a" *-rux*[9] or *-x*[10] ; "e" add *-huehu'*; "i" add *itoi'* etc.—see example 5.3). The four suffixes derived from Māori words have Māori phonology; the fifth suffix shares phonology with both te reo Māori and English.

This set of suffixes is an important example of innovation at a grammatical level. As an indication of language vitality, the presence of language innovation at a grammatical level is an important finding in our study.

[8] Rotana, Personal communication, January 2020.

[9] /raːks/

[10] /aːks/ or /ʌks/

Example 3.51

24005: He nui ngā momo umm kupu kua hangaia e mātou i te whare nei. He momo reo o te whare nei.

Kairangahau 1: Āe, āe, āe, kōrero mai.

Kairangahau 2: Mmm.

24005: Umm, ehara i te mea he slang, engari he mea whakakatakata noa i a mātou. Ki a mātou he katakata.

24005: Kāre i te mōhio mehemea he katakata ki a kōrua, engari ko ngā kupu pēnei te 'pāterāx', rawa atu. Ka rongo—rangona ai te 'rāx' i tēnei whare. Mehemea ka kōrerotia tētahi tangata kāre e pai ki a mātou. Ka kī atu, ka tāpiri atu te 'rāx' i tō rātou ingoa. [Group laughs] Aua mea.

Kairangahau 2: He aha te 'pāterāx'?

24005: Ka pātero, engari kua—

Kairangahau 2: Ohh. (Group laughs)

24005: — engari 'pāterāx'. Pāterāx a lot.

...

Kairangahau 1: Engari he mea—he huri i te tikanga o te kupu kia āhua kino?

24004: Āe.

24005: ... He mea rangatahi noa pea. He mea hei whakakata noa i a mātou. Nō reira, mehemea ko te pū whakamutunga he 'a' ko te 'rāx', mehemea he 'e', ko te 'ehuehu', i te mea—Mōhio kōrua ki te pūehuehu, dusty tēnā, dusty? Nā reira, mehemea ko te pū whakamutunga ko te 'e', ka tāpiri atu ko te 'ehuehu'...

Kairangahau 1: Umm, he mea anō?

24005: Umm, oh. E pērā ngā pū katoa mō te—ngā oro katoa, a, e, i, o, u. Ko te 'i' ko te ītoi, ko te 'o' ko te 'ongoro', ko te 'u' ko te 'ūehuehu'. (Group laughs)

24005: Ko tētahi hoa nōku, ko O_____ tōna ingoa, tangata kaha ki te ngongoro... Ko tōna ingoa tapa ināianei ko O____ongoro. (Laughs).

These rangatahi identified that their innovation was a distinctly young people's thing to do with the statement "He mea rangatahi noa pea", and noted that it was something they did to make each other laugh, "He mea whakakatakata noa i a mātou."

This example of word play is interesting and important because it exemplifies humour and innovation. These are features of the language of young people around the world. The example also illustrates the metalinguistic awareness of these two rangatahi, who were able to articulate their innovation and use of the suffixes in a clear way.

Discussion about language change and innovation

In our data, there were examples of restricted, unacceptable, and innovative use of te reo Māori by rangatahi. While we cannot be sure that any of these examples are evidence of language change, we can say that the example of innovative use provides heartening evidence of language vitality.

Summary and key themes

In both public and private contexts, density is directly related to the people who are there and their motivation to kōrero Māori. The highest density contexts in the study were homes and private spaces where rangatahi and others they were with made a commitment to te reo Māori. Rangatahi were exposed to much more English than Māori in public contexts. Broadcast music and kapa haka make space for te reo Māori.

The corpus collected for *Te Reo o te Rangatahi* showed that rangatahi in our study were mostly using high-frequency words that are readily used or well known by reasonably proficient adult speakers of modern Māori, to talk about a range of everyday topics. The phonology of rangatahi in the study appears comparable to that of adult speakers of modern reo Māori.

Our lexical/grammatical analysis of an indicator set of lexical items shows that rangatahi use of these items, and of grammatical structures and processes, is mostly accurate, and suggests that they have a sophisticated use of te reo Māori.

Variable use of some indicator verbs suggests that rangatahi use of te reo Māori may reflect language change. This may be because rangatahi are transferring the structures themselves, or because they are hearing unacceptable usage from second-language learners. Rangatahi are also contributing to te reo Māori being a vibrant and living language by using it innovatively.

Sophisticated and innovative use by rangatahi is a heartening sign for revitalisation of te reo Māori.

6. Motivating factors that affect rangatahi use of te reo Māori

A key aim for this research has been to understand what motivates rangatahi into and out of using te reo Māori. In trying to understand what motivates rangatahi to use te reo Māori, we keep in mind that te reo Māori, tikanga Māori, mātauranga Māori, and te ao Māori perspectives are intrinsically intertwined.

Most of the rangatahi in this study have grown up in a culture (social and educational) where te reo Māori use is encouraged, through involvement in Māori-medium education, and with whānau members, flatmates, friends, etc. who have committed to revitalising te reo Māori.

We have identified factors that inspire or motivate rangatahi to use te reo Māori as expressed through their moemoeā or aspirations for te reo Māori.

All data from the study have been analysed thematically to identify what motivated rangatahi to use te reo Māori or what moved them out of it. Quotes from rangatahi have been included to illustrate how some of the main triggers caused them to move from one language into another.

A set of videos targeted at rangatahi (with some created by rangatahi) and posted on popular social-media platforms have been included in the thematic analysis. The online space is an important one for rangatahi, and the videos provide further examples of code switching in a variety of "natural language use" situations in which rangatahi are interested.

The analysis has also highlighted the enablers of rangatahi reo use in public and private contexts as well as some of the barriers.

Ngā moemoeā mō te reo Māori

Critical awareness about reo Māori revitalisation was evident in the aspirations for the future that rangatahi shared. As young people who, for the most part, have been socialised through the medium of Māori, these rangatahi are a part of the reo Māori revitalisation movement. In Māori-medium immersion education, rangatahi may have been exposed to ideas about language revitalisation and critical awareness. Their whānau have committed to helping their tamariki to learn te reo Māori me ngā tikanga Māori which contributes to the wider kaupapa of language revitalisation.

Twelve rangatahi shared their moemoeā or aspirations for te reo Māori during interviews. All viewed te reo Māori as important and integral to their identity, culture, and futures. They used te reo Māori in places such as home, kura, or whare wānanga, and most had Māori-speaking friends.

The moemoeā for te reo Māori shared by rangatahi have been distilled into four broad themes below. These themes illustrate how rangatahi envision te reo Māori could be in an ideal world.

Kia ora ai te reo Māori. Te reo Māori is a living language, a language that you and those around you choose to speak.

Kia ora tonu, koirā te tino—o ngā mea katoa, kia ora tonu. He hiahia nōku, kia tū ko te reo Māori hei kōwhiringa ki ngā tāngata katoa o te motu. Kei tēnā kōwhiringa e pai ai ērā e hiahia ana te ako, ki te ako. (Rangatahi, 32001, aged 13)

Kia taea te pēnei nō te Māori o te rere o te reo, kia kaua e ohorere a wai ake kāre i te mārama i te wā ka rongo rātou i te reo. He mea Māori noa, ka rangona i ngā wāhi katoa. (Rangatahi, 14004, aged 15)

Ko te reo Māori ka rangona, ko te reo Māori ka mahia. Tēnei tōku hiahia. (Rangatahi, 32001, aged 16)

Kia rere ai te reo Māori. Te reo Māori is used proficiently and confidently and people find it easy to communicate in te reo Māori.

Kia kaua ngā taiohi e whakamā. (Rangatahi, 11002, aged 20)

Āe, kia kōrero Māori i roto i ngā kāinga. Kia noho mai ko te reo Māori hei waka kawe i ngā whakaaro o tēnā, o tēnā. (Rangatahi, 24005, aged 19)

Kia kōrero ai ngā reanga katoa i te reo Māori. Te reo Māori is widely spoken by whānau, hapū, and iwi, and by future mokopuna.

Ko te reo Māori te pou o tōku ao, koia te pou o ōku mahi katoa. Ko tāku kia kōrero Māori mai aku tamariki, aku mokopuna ki a au, i ngā wā katoa. Rua tekau mā rua ōrau pea te iwi Māori e kōrero Māori ana. Hei taua takiwā. Nō reira ko taku hiahia kia rima tekau ōrau neke atu i mua i tōku matenga. (Rangatahi, 24005, aged 19)

Kia kōrero mātou katoa i roto i te reo Māori, engari he pai īna ka kōrero Pākehā, well, īna kāre koe e mōhio i te kupu. (Rangatahi, 32003, aged 13)

Kia pakari ai ngā hapori reo Māori. Te reo Māori communities are strong. Linguistic leaders support their whānau, hapū, and iwi language communities.

> *Mōku ake kia pakari anō te reo i roto i ahau. Ā tōna wā ka whai rautaki, ka whakarite rautaki pai ai te tuku i te reo ki taku whānau … engari ko te hiahia kia tuku i te reo ki ngā wāhi katoa. Ki aku hoa. (Rangatahi, 14005, aged 21)*

From these themes, it seems that rangatahi aspire to or are motivated to use te reo Māori because they:

- see te reo Māori as an important and integral part of their world
- want themselves and others to become capable and proficient reo speakers
- feel a responsibility to pass te reo Māori on to future generations
- have a desire to actively support strong reo communities.

Factors that motivate rangatahi to use te reo Māori include:

Mana—prestige

They see te reo Māori as an important and integral part of their world.

Pūkenga—personal growth

They want themselves and others to become capable and proficient reo speakers.

Whakapapa—responsibility to future generations

Whakapapa, and the responsibility they feel to pass te reo Māori on to future generations.

Rangatiratanga—leadership

A desire to actively support strong reo communities.

For these rangatahi, te reo Māori has prestige or positive value, which is a factor that impacts positively on people's inclination to use a language (Manley, 2008, p. 337). Positive attitudes towards a language that are connected to identity provide motivation to use a language (Bright, Hunia, & Huria, 2019; Vassberg, as cited in Manley, 2008). When the language is perceived to have high value and prestige, people are more inclined to learn and use it; conversely, when it is perceived to have low value and prestige, people may be less inclined to learn and use it.

Linguistic nudges

Linguistic nudge is the term we use to describe reasons or motivations for people to switch from one language into another. This switching between languages has been characterised as **codeswitching** and is a feature of **translanguaging.** The change into another language might be as brief as a single phoneme or a word, or it might be a few sentences. To better understand the linguistic nudges that prompt rangatahi to move between speaking Māori and English, we analysed the kōrero from all but one rangatahi in all eight contexts. We used NVivo software to organise the transcripts and notes for all of the rangatahi, then coded the linguistic nudges into and out of te reo Māori.

Moving from Māori into English

The following table shows the linguistic nudges out of te reo Māori that occurred within the eight contexts included in the study.

Table 28 Linguistic nudges out of te reo Māori

Codes for linguistic nudges out of te reo Māori	Contexts (see Chapter 3)							
	1	2	3	4	5	6	7	8
When English pause fillers unconsciously "popped out"	✓	✓	✓	✓	✓	✓	✓	✓
When they did not know how to say a word in Māori/no equivalent term in Māori	✓	✓	✓	✓	✓		✓	
When using or creating English or bilingual words or phrases popular with their age group	✓	✓	✓	✓	✓		✓	
When using proper nouns	✓	✓		✓	✓		✓	✓
In response to a person who has spoken to them in English	✓	✓		✓	✓		✓	
For fast communication	✓	✓	✓	✓	✓			
To explain something		✓	✓					
People they are speaking to do not speak Māori					✓	✓		
For an unknown reason		✓	✓	✓	✓		✓	

One of the features of the reo we captured was the intermittent use of English words while speaking Māori. We found that the most common reasons rangatahi codeswitched in the eight contexts were when:

- English pause fillers unconsciously "popped out"
- they did not know how to say a word in Māori/no equivalent term in Māori
- using or creating English or bilingual words or phrases popular with their age group
- using proper nouns.

When English pause fillers unconsciously "popped out"

The most common types of linguistic nudges were English pause fillers. In every one of the eight contexts, participants (rangatahi and others) codeswitched from Māori to English when English pause fillers unconsciously "popped out".

The rangatahi often used English pause fillers such as "ay", "hey", "oi", "oh", "ooh", "nah", "um", and "yeah", to signal their turn in a conversation. Other pause fillers included "I think", "Mm", "like", and "so". By comparison, there were very few Māori pause fillers in the data.

Data from the MAONZE project (P. Keegan, personal communication, December 2019) and from a PhD project on child language acquisition (Hunia, 2016) indicate that adult second-language learners use English fillers frequently. It is possible that rangatahi were doing so because they have grown up hearing adults using English pause fillers while speaking Māori. Our data provided further evidence that te reo Māori has been (and continues to be) affected by English in many ways, including the use of pause fillers.

Context 1. Te Matatini

While walking around the inside area of the stadium during Te Matatini, one rangatahi turned back to her companion to ask:

Kei hea a Whaea? Oh yeah. Kei te pai.

Context 5. Restaurant

While deciding what to order in a restaurant, one of the rangatahi said:

Oh hiahia au te sundae.

When they did not know how to say a word in Māori/no equivalent term in Māori

In six of the eight contexts, participants switched from Māori to English because they did not know how to say a word in Māori/or there was no equivalent term in Māori. The words "squishy", "messy", and "seasick" are examples of some of the English words used in these cases.

Context 2. Family home

One of the rangatahi described her hobbies, switching into English to describe one of them:

33004: Te nuinga o te wā kei te kura. E kōrero Māori ana mātou. Ah, i ngā wiki kei te kura ahau, rānei kei te mau taiaha rānei kei te fencing ahau. Oh, i ngā pō, ngā Paraire kei te fencing ahau.

Context 6. Kapa haka practice

When describing the purpose of different types of whistles, the rangatahi switched to English:

> *44002: Oh no, kāore i ahau te tikanga o ērā whio engari ko ērā ngā kōrero a taku Pāpā. I a ia e tipu ana he whio rerekē tā ia mahi i roto i te whare.*
>
> *44002: I te pānui au i tētahi pukapuka, Te Pīpī Karetu, he momo pātiti Māori, engari ko tērā te...ka whio rātou, kia attract i ngā weka.*

When using or creating English or bilingual words or phrases popular with their age group

In six of the eight contexts, participants switched from Māori to English because they were using or creating English words or phrases popular with their age group, or creating bilingual words.

Context 7. Iwi office

"I was like" is a common English phrase used by some of the rangatahi.

> *14005: Āe, pai te mau rākau engari i te whakangungu tuatahi mō te pou tahi o te whare tū taua, oh yeah, i pai tonu engari mō te taha ki te pou rua, oh, kite au i te taha whawhai. Pai tonu, engari ... kāre e tino pai ki au te āta whawhai i te tangata kia puta ai taku ihu, I was like 'oh!', nā reira, kua waiho i tērā taha i tēnei wā engari he wā tōna ka hiki, tērā pea te mau rākau.*

Context 7. Iwi office

You know" was another popular English phrase used by the rangatahi in Context 7.

> *44003: Yea, well because, i a māua e mahi pērā ana kāore au i tino whakaaro kei te kōrero, you know, so kāore au i te tino mōhio ki ngā momo mea, ngā momo reo anō.*

When using proper nouns

In six of the eight contexts, participants switched out of Māori to use English proper nouns. The use of English proper nouns was noticeable throughout the conversations with rangatahi. They regularly used English place names, names of people, names of kapa haka, names of schools, and brand names such as Xperia, Monopoly, or the Luge. Interestingly, some rangatahi chose to use the English title of "Māori Television" or "Māori TV" rather than the reo Māori "Pouaka Whakaata Māori".

Rangatahi also used English relationship terms such as "Aunty" and "Nanny" when talking to or about these relatives.

Context 8. Public garden

When asked (in Māori) about what social-media apps (tauwhana whakawhitiwhiti) he liked, the rangatahi replied:

Kāore au i te tino rata ki te social media.

Context 4 Meeting room

While describing where they went on a recent holiday, the rangatahi gave the English place names for the islands they visited.

Rangatahi: Āe. E whakaaro tonu ana mātou mēnā ka tae i runga i tētahi pōti anō i tēnei tau.

Kairangahau: Nē? Tēnei tau?

Rangatahi: Ka haere i te Kirihimete

Kairangahau: Ohh. Haere ki hea?

Rangatahi: Ki Mystery Island, ki Pine ...

In response to a person who has spoken to them in English

Context 1. Te Matatini

After speaking with the kairangahau in Māori the rangatahi switched to English when a relative approached and spoke in English.

11003

Tērā pea ka kite au he tangata, ka kōrero ki a rātou.

11003

Kia ora aunties.

527: Kia ora my darling—what is this? What is that?

11003: I'm getting recorded.

For fast communication

Sometimes, rangatahi seemed to use English words because they were able to access that word quickly from memory, rather than because of a lack of vocabulary. They might know the word in Māori but have used the English word first.

In Context 4, a rangatahi used the word "'cause" instead of "nā te mea" when she could have used the Māori phrase.

> *32003: ... Engari te whare o tō Koro, 'cause —*

To explain something

In context 7, a rangatahi participant switched to English to explain a concept.

> *44002: Te 'hūiki pause', awkward moment kātahi ka hono ā-karu nei, mā te hono ā-karu ka hiki ngā pewa, mā tērā rerenga kōrero ā-hinengaro nei.*

People they are speaking to do not speak Māori

While waiting to order food, a rangatahi in Context 5 responded to a sibling's question about whether they should kōrero Māori while ordering, saying that no they shouldn't speak Māori, because the servers did not speak Māori.

> *514 to 511: Me kōrero Māori? Kōrero Māori ... Me kōrero Māori?*
>
> *13006: Kao, i te mea kāre rātou i te mārama ki tō reo.*

For an unknown reason

In many instances, the reasons that rangatahi switched from Māori to English were not clear. We think "translanguaging" (Garcia & Wei, 2014) is a useful way of describing what rangatahi are actually doing when they move from one language to another. All the rangatahi and other participants in the study were, in a natural and unstressed way, drawing on their entire linguistic repertoires (including both te reo Māori and English) to make meaning with their whānau, friends, and other social groups. Research in other languages suggests that switching between languages is a feature of bi- and multilingualism. It is now an accepted best practice in second-language education to encourage translanguaging (see, for example, Oliver & Nguyen, 2017).

At first, we wondered if translanguaging was a feature of te reo rangatahi. However, we came to see it was a feature of the reo of all the Māori speakers in the study, including ourselves as kairangahau. This is an important finding. Translanguaging practices enable "bilinguals to select features from their entire semiotic repertoire ... [and it] is the discursive norm in bilingual families and communities" (Garcia & Wei, 2014, p. 23). We think it is important for rangatahi to know that they are not breaking any language rules by translanguaging. However, we also think it is important that rangatahi know how to support the revitalisation of te reo Māori by learning and using it to a level of high proficiency.

Raising critical awareness about important aspects of language, language revitalisation and bilingualism can be a useful way to engage and encourage people to use te reo Māori.

Moving from English into Māori

The following table shows the linguistic nudges into te reo Māori that occurred within the eight contexts included in the study.

Table 29 Linguistic nudges across contexts

Codes for linguistic nudges into te reo Māori	Contexts 1–8							
	1	2	3	4	5	6	7	8
Being in contexts where others expect te reo Māori to be used	✓	✓	✓	✓	✓	✓	✓	✓
Having someone to kōrero Māori with	✓	✓	✓	✓	✓	✓	✓	✓
Personal commitment to kōrero Māori	✓		✓		✓		✓	✓
When someone takes responsibility for nudging others into speaking Māori	✓	✓	✓					
To speak privately around non-Māori speakers					✓	✓		
When using proper nouns	✓							
When Māori pause fillers unconsciously popped out	✓							
For fast communication	✓							

The three most common linguistic nudges that motivated rangatahi to kōrero Māori in all or most of the contexts were: being in contexts where others expect te reo Māori to be used; having someone to kōrero Māori with; and personal commitment to kōrero Māori.

Being in contexts where others expect te reo Māori to be used

In all contexts, there was an expectation that the kōrero would be in Māori because of the expectation that the kairangahau set when they invited rangatahi and their whānau to participate in the study. Setting this tikanga meant that all were prepared to kōrero Māori before meeting.

During their profile interview, one rangatahi noted that if everyone spoke Māori, they would no doubt do so as well, but the same applied if everyone were to speak English.

> *Ki te kōrero Māori ki te ū te katoa, kāre e kore ka ū ahau, i te mea ka rangona i te reo Pākehā i ngā wā tākaro, i ngā wā kai, ko ahau tērā e hoe ana i te waka o te reo Pākehā anō hoki … ki te kōrero te tangata i te reo Māori ki a au, ko te reo Māori tōku e whakahoki ki a ia, engari, īna ko te reo Pākehā, ko te reo Pākehā tōku ka whakahoki ki a ia. (Rangatahi, 32001, aged 13).*

Three of the rangatahi who participated in Method 4: Self-report for this study filled in a short bilingual survey about their use of te reo Māori (see Appendix B). For these three rangatahi, triggers that motivated them to use te reo Māori included others' expectations that te reo Māori would be used and that te reo Māori was the normal language of communication.

Having someone to kōrero Māori with

With the kairangahau present, the rangatahi had at least one or two reo speakers to kōrero with and, in most contexts, there were also other reo speakers to talk with. Having someone to kōrero with was important, and meant that the rangatahi could create reo spaces wherever they went. The two friends in Context 1 exemplified this approach.

> *Ka kōrero māua ki a māua i ngā wā katoa. (Rangatahi, 11002, aged 20)*

Tamariki interviewed in the Te Ahu o te Reo study (Hutchings et al., 2017) also identified having people to kōrero with as one of the main things that would help them use Māori more often at home, with friends, at school, and in other places they spend time. Not having someone to speak Māori with was perceived as a barrier (Hutchings et al., 2017 p. 42).

Personal commitment to kōrero Māori

In five of the eight contexts, rangatahi, who also happened to be older (between 15 and 21 years old), had personally committed to kōrero Māori. Commitment to speaking Māori, including leading the way for others, was a powerful motivator for rangatahi to use te reo Māori.

In Context 3, rangatahi showed this commitment through greeting the kairangahau with a formal whakatau. They explained that they always whakatau manuhiri in this way. They took the lead in setting the tikanga that we would all be communicating in te reo Māori.

Rangatahi in Context 7 clearly saw a role for themselves to lead and support Māori language revitalisation. They were committed to making positive changes for their whānau reo and larger language communities.

> *Kia kaha ake te reo, kia rangona ake te reo i te nuinga o ngā wāhi.*
>
> *Ko te moemoeā mō te reo, kia ora tonu, kia tangata whenua anō ai ngā kōrero ā ngā tūpuna. I konā, ka ora ai ngā tino kōrero, ngā taonga a kuia mā, a koro mā, hei raurangi haere ake.*

When someone takes responsibility for "nudging" others "back into speaking Māori"

In three (Contexts 1, 2, and 3) of the eight contexts, participants nudged others into speaking Māori by setting or upholding a tikanga to kōrero Māori.

Context 1. Te Matatini

In three (Contexts 1, 2, and 3) of the eight contexts, participants nudged others into speaking Māori by setting or upholding a tikanga to kōrero Māori.

Context 2. Family home

In Context 2, one sibling nudged the other from English back into Māori by reminding him to kōrero Māori.

32504: There's cupcakes in there.

32002: He pai kia pā ahau i ētahi kapukeke.

R02: He aha?

32002: There's that pikitia kapukeke.

R02: Oh, titiro.

32504: There's one, two, three, four, five—

32002: Kōrero Māori 32504.

R02: Āe, kōrero Māori.

Context 3. Student flat

All the flatmates in Context 3 had committed to speaking Māori in their flat to create an immersion environment. To discourage codeswitching into English, they had an "ipu reo Pākehā" in the flat, where anyone who spoke English was fined a coin. This served as a nudge to go back to speaking Māori whenever they slipped.

R02: Ka kōrero Māori te katoa o ngā tāngata e noho ana i konei?

24005: Āe, āe, oh tōku hoa o te whare nei kua hoki atu ki Te Ika a Māui i te mea koinei kua hau mai ngā hararei. Engari mehemea tētahi ka kōrero Pākehā, raua atu te kopa ki roto i te ipu rā. Ā—

The rangatahi in Context 4 in Tainui mentioned a cousin who was trying to nudge them to kōrero Māori through incentives, apparently promising them a phone if they spoke Māori for the whole year.

32501: Ō māua kaihana, umm, i kī ia ki a kōrua, mēnā ka kōrero Māori māua mō tēnei tau katoa, ka hoatu koe tētahi waea—

Using te reo Māori to speak privately around non-Māori speakers

A rangatahi in Context 2 talked about their decision to speak Māori while in America so that others would not understand what they were saying.

> *32001: I te wā i haere mātou ki tāwāhi, ki Āmerika, koirā kua kite i te wā i te tino kōrero Māori mātou ko ōku tuāhine, i te mea kei Āmerika mātou ko te reo Pākehā te reo ka rangona i reira. Nō reira ki te hiahia mātou te kōrero pai ai, tō rātou kore mārama ki tō mātou kōrero, ka huri ki te reo Māori. I te mea kāre rātou i te mōhio pēhea ki te kōrero Māori.*

When using proper nouns

Context 1. Te Matatini

In Context 1 the rangatahi participant and others were nudged into speaking te reo Māori for the same kind of reasons that rangatahi moved from Māori into English, for example when using proper nouns.

The participant used Māori proper nouns such as people's names, relationship titles, for example, 'whaea', and shortened versions of the names of kapa haka "Rūātoki, Manu Huia, Rangiwewehi, and Apanui".

When Māori pause fillers unconsciously popped out

Context 1. Te Matatini

Historically, other than "nē" and "ā", few reo Māori pause fillers have been recorded. Our understanding is that previous generations of reo Māori speakers did not fill pauses between conversation turns in the same way that speakers of New Zealand English did, and do.

One that rangatahi used in Context 1 was "āe" as a feedback filler and at turn changes, in a similar way that they used "yeah".

> *11001: Kia ora. Kei te pēhea koe?*
>
> *518: Pai pea.*
>
> *11001: Āe*

For fast communication

Context 1. Te Matatini

In Context 1, participants used the word "reo" rather than "Māori language", and "kōrero", rather than "talking" which we think are examples of rangatahi quickly accessing particular words in Māori, rather than in English.

> *Rangatahi 1: They're monitoring the amount of reo I'm exposed to when I speak.*
>
> *Friend: How's your mic going? Are they listening to all our kōrero?*

Online

As part of the profile interviews we asked rangatahi participants about their use of social media and apps. Instagram was the most popular social-media platform (nine rangatahi), followed by Facebook (five rangatahi), and video websites such as YouTube or Netflix (five rangatahi). Snapchat and gaming sites were each mentioned by four rangatahi. A few mentioned īmera (three rangatahi), cooking apps (two rangatahi), Google docs (two rangatahi), and Spotify (one rangatahi).

This told us that the internet is a context where rangatahi choose to spend time and is therefore an important context to consider for reo Māori exposure and use. To better understand how rangatahi are being exposed to te reo Māori online, and how they are using te reo Māori online, we gathered and analysed videos posted on social-media platforms Facebook and YouTube.

The 21 videos located included content targeted at rangatahi that may or may not have been created by rangatahi, and content made by rangatahi for rangatahi. All included rangatahi in their target audience.

The videos provide more examples of natural language use outside of what we were able to capture through fieldwork. For example, some videos captured people's interactions at events, some are humorous skits, and some are real-time amateur reporting. Analysis of the videos gave us the opportunity to see linguistic nudges in action in these situations.

For the purposes of analysis, we have categorised the videos by the type of kaupapa they fit within rather than location as the location of each is not known. The first 5 minutes of content in each video was analysed to identify nudges into or out of te reo Māori.

- **Kaupapa 1** — kaupapa Māori public event.
- **Kaupapa 2** — entertainment.
- **Kaupapa 3** — rangatahi concerns.
- **Kaupapa 4** — waiata performance.
- **Kaupapa 5** — online gaming.

Moving from Māori into English

The following table shows the linguistic nudges out of te reo Māori that occurred within the five online kaupapa in the study.

Codes for linguistic nudges into te reo Māori	Kaupapa				
	1	2	3	4	5
To speak to a bilingual audience with varied levels of reo proficiency	✓	✓	✓		
When using proper nouns (includes words on screen)	✓	✓			✓
People they are speaking to do not speak Māori (includes English subtitles)	✓				
To explain something	✓				

Examples of some of linguistic nudges we identified in the five online kaupapa have been given here. Text has been included as it is part of online communication.

To speak to a bilingual audience with varied levels of reo proficiency

Kaupapa 1, Kaupapa 2, and Kaupapa 3 all used a bilingual style of communication to connect with their audiences. Drawing on both languages to explain, and express themselves.

When using proper nouns and on-screen labels

In Kaupapa 5, an online-gaming video was mostly in te reo Māori. A few English words appeared onscreen such as “Letsplaylive”, “rotate”, and “material”.

People they are speaking to do not speak Māori (includes English subtitles)

Kaupapa 2 videos included a make-up tutorial in Māori with English subtitles, to make the video accessible to viewers with little or no reo Māori proficiency.

To explain something

In Kaupapa 1, some speakers switched from a quite formal mihi and introduction in Māori into English in order to give detailed explanations to the crowd.

Note that Kaupapa 4 videos were in Māori with no switches to English.

Codes for linguistic nudges into te reo Māori	Kaupapa				
	1	2	3	4	5
When using proper nouns (includes words on screen)	✓	✓	✓		
To speak to a bilingual audience with varied levels of reo proficiency	✓	✓			
Being in contexts where others expect te reo Māori to be used	✓	✓			
When they did not know how to say a word in English / no equivalent term in English	✓	✓			

Note that Kaupapa 4 and 5 were in Māori, and there were no switches from English to Māori.

Common nouns

Common nouns used in Kaupapa 1 — (kaupapa Māori public event) included: “whānau”, “iwi”, “tino rangatiratanga”, “whenua”, “tangata whenua”, “awhi”, “kaumātua”, “kuia”, and “tamariki”.

To speak to a bilingual audience with varied levels of reo proficiency

Some of the differences we noted between data from reo Māori interactions kanohi ki te kanohi and those online were that some of the online content providers or narrators purposefully provided bilingual content to their audience, whether by codeswitching regularly between Māori and English, or by providing subtitles in one of the languages. Without direct contact with their audience, they made assumptions about how to best connect.

Being where others expect te reo Māori to be used

Te reo Māori was used in all kaupapa, so there was some expectation that it was appropriate to use te reo Māori, either because of the type of kaupapa being shared, or because a content creator has decided to privilege te reo Māori.

When they did not know how to say a word in Māori / no equivalent term in Māori

In Kaupapa 1 a woman said “ka mau te wehi” when starting a chant in Māori to get people excited and interacting.

We also noticed far more nudges into and out of te reo Māori among rangatahi participants during fieldwork. This may have been due to the much smaller amount of online content analysed with less opportunity to view nudges. It may also be related to the fact that some of the online content was scripted.

While we were able to analyse the content we viewed, we do not know what kind of impact the content might have on rangatahi motivation to use te reo Māori. Considering the importance of the internet context to rangatahi, this is an area that could benefit from further research.

Supporting rangatahi to use te reo Māori in public and private contexts

To motivate rangatahi to use te reo Māori, it is important to understand what enables reo use in different contexts. In indigenous language revitalisation, it is also important to be critically aware of barriers to using te reo Māori because the dominant language (English) can overpower the minority language in many contexts.

We looked at the enablers that helped rangatahi to use te reo Māori and at the barriers in public and private kanohi ki te kanohi contexts.

Public contexts

In public contexts, the agents of change or those who can actively do things to create supportive language environments can include the venue owner/operator, the organisers of a kaupapa Māori-related event, stallholders, and event attendees. Te Huia, Muller, & Waapu (2016) found that "community attitudes and support for te reo Māori have a direct impact on how people feel about Māori language engagement and use across communities" (p.9) which can either create barriers or reinforce positive associations with learning or using te reo Māori.

Planned language strategies at this level are important because of the role the community has in creating environments where te reo Māori becomes easy to use. Environments where te reo Māori is normal provide motivation for people to use the language, and make it easier for both adults and tamariki to use their reo (Hutchings et al., 2017).

Table 30 Te reo Māori support in public contexts

How te reo Māori was supported in public contexts
Visual reminders of common words relevant to whanaungatanga, shopping, and haka were present in: • temporary and permanent bilingual signage (images and writing) at the venue • use of relevant vocabulary in signage and products in stalls. People set the expectation and encouraged Māori use by: • making te reo Māori an integral part of the kaupapa • making announcements on stage in Māori • acting as language champions or pou reo, by starting and having conversations with others in te reo Māori • creating immersion domains within the wider event where the expectation is that people will speak Māori (for example, the Te Mātāwai and Te Taura Whiri i te reo Māori stalls).

Creating a supportive language environment and addressing barriers to using te reo Māori in public contexts might include making sure te reo is seen and heard, and creating opportunities for people to speak Māori with others. Table 30 lists the enablers we noticed in the public contexts rangatahi interacted in.

The barriers noted were that:

- most bilingual signage in the venues or locations was not permanent
- many people—particularly in the moderate to high-density contexts (Te Matatini and the Matariki Gala)—still chose to speak English
- in one of the public gardens there were no visual or aural instances of te reo Māori recorded other than those of the rangatahi and the kairangahau themselves.

Private contexts

At home or in other private contexts, the focus of support is on what the whānau, including the extended whānau, can do to normalise the reo and build the reo Māori knowledge of tamariki and rangatahi so they have the knowledge and confidence to use te reo wherever they are. The following table shows the enablers we noticed in the private contexts rangatahi interacted in.

Table 31 Te reo Māori support in private contexts

How te reo Māori was supported in private contexts
Whānau supported te reo Māori use by rangatahi through: • showing that te reo Māori was important to them • creating immersion spaces • adults speaking Māori to children and to other adults • adults or rangatahi acting as pou reo (language champions) who always use te reo Māori with the entire whānau, including prompting children to switch from English to Māori • encouraging rangatahi to kōrero Māori with each other • having Māori images and language resources present in homes • participating in sports and other activities where te reo Māori is used by participants • participating in Māori-medium education.

The barriers noted were that:

- in some whānau, not all members were able to speak Māori
- lack of extensive vocabulary use in some instances
- a default to English in some instances.

Summary and key themes

There are multiple factors that motivate rangatahi to use te reo Māori, some of which are deeply rooted in internalised belief systems, values and whakapapa. We have also seen that there are many ways of nudging rangatahi into or out of using te reo Māori in both public (kanohi ki te kanohi and online) and private spaces.

For those planning to support rangatahi to use te reo Māori, understanding these triggers could lead to actions that nudge rangatahi into te reo Māori, and where possible and practical, address the factors that nudge rangatahi out of te reo Māori.

In public contexts we saw how important it was to have te reo Māori as an integral and valued part of the kaupapa. Reo Māori use was supported visually by Māori writing and imagery, and by seeing and hearing people who had committed to speaking te reo Māori.

In the private contexts we noted the impact of whānau attitudes and support for te reo Māori and participation in immersion education. While codeswitching between languages in everyday life is natural for bilinguals, at the same time, it can be consciously (and usefully) limited in order to create immersion learning environments as we saw in Context 3: Student flat.

7. Conclusion

Te Reo o te Rangatahi has explored rangatahi exposure to, and use of, te reo Māori. The study focused on a cohort of 19 rangatahi from four iwi regions, who were able to kōrero Māori at least "fairly well". The study used six different data-gathering approaches to produce rich datasets, including video and audio recordings, collages, fieldnotes and reflections, and a small corpus of natural spoken language from rangatahi. Our analytical approach involved qualitative methods (including thematic analysis) and quantitative methods (including lexical/grammatical analysis). We note that results and findings from this study cannot be generalised across the rangatahi population. Instead, they give important insights into intertwined areas of te reo o te rangatahi, and point to pathways forward to support rangatahi and te reo Māori.

Key findings

How were rangatahi exposed to te reo Māori?

Qualitative analyses revealed that rangatahi were exposed to te reo ā-waha wherever there were people who used te reo ā-waha with them, including at kaupapa Māori events, at a restaurant, in public gardens, in homes, office spaces, kura, sports events, and kapa haka practices.

They were exposed to te reo Māori by people they knew—particularly whānau, friends, and kaiako—and also by a few others, including stall holders at kaupapa Māori events. They were exposed to ambient reo Māori when people talked to others around them, when people made announcements in te reo Māori, when people were singing, and when recorded songs in te reo Māori were being played.

Rangatahi were exposed to te reo ā-tuhi, including non-text imagery, at home and in public spaces. They saw te reo Māori on clothing, signs, resources, and labels, particularly in public places where te reo Māori was being promoted, such as at kaupapa Māori events.

Videos available online indicate that rangatahi are the target audience for—and therefore are likely to be exposed to—te reo Māori in some public online spaces. Te reo Māori content online included kaupapa such as events, rangatahi concerns, waiata, online gaming, and entertainment.

Often, exposure occurred because a person or people had set the tikanga to kōrero Māori. For example, the tikanga to kōrero Māori might be set by parents at home, organisers of a kaupapa Māori event, or the rangatahi themselves.

How were rangatahi using te reo Māori?

In public and private contexts, rangatahi were using te reo Māori in day-to-day situations. They were using te reo ā-waha for complex communicative functions, including whanaungatanga, whakaputa whakaaro, ārahi, wānanga take, and auahatanga. They used it to sing, play sport, buy jewellery, converse over meals, analyse kapa haka performances, and talk about te reo Māori. They were using te reo Māori innovatively, creating new words, playing with language, and making each other laugh. As bilingual people do around the world, rangatahi were translanguaging—drawing on their whole linguistic repertoire (Māori and English) to interact and make meaning with others. Rangatahi were using recurrent patterns of reo ā-tinana to communicate, which included elements such as hugging, kissing, hongi, shaking hands, and making hand gestures, as well as whistling, pūkana and other eye movements. Some rangatahi were cognisant of some elements of reo ā-tinana, referring to them as "kōrero", and considering them to be reo Māori.

Online, there is evidence that some rangatahi are creating and contributing to reo Māori content through recording and sharing current issues; waiata; opinion pieces; interests; and in day-to-day living.

What sort of reo Māori were rangatahi using?

Rangatahi were mostly using high-frequency words that are readily used or well known by reasonably proficient adult speakers of modern Māori. They used these words to talk about topics such as their whānau, friends, and interests.

Rangatahi use of a set of indicator words, and of grammatical structures and processes, was mostly accurate and acceptable, though there were some instances of unacceptable use.

In summary, rangatahi used mainly accurate structures, and high-frequency words in te reo Māori in sophisticated and innovative ways to talk about everyday topics. They were sufficiently proficient to meet their day-to-day language needs.

What is the frequency of rangatahi use of, and exposure to, te reo Māori in particular contexts?
Mostly, rangatahi heard and used te reo Māori from a few people with whom they had reo Māori relationships, including whanaunga, friends, and kaiako.

The highest density contexts in the study were homes and private spaces where rangatahi—and others they were with—made a commitment to use te reo Māori. These were the most common places they used te reo Māori.

The ambient language around rangatahi varied from almost all te reo Māori to a mix of Māori and English in homes, depending on the proficiency and expectation of adults. In public places most of the ambient language was English. When ambient English was factored in, rangatahi were exposed to less te reo Māori than English in public places.

Rangatahi exposure to reo Māori ā-tuhi was much lower than their exposure to English text. In public spaces, there were very few permanent signs in te reo Māori, and most of the temporary signs with reo Māori text also had English text.

Signage at Māori events gave rangatahi more exposure to te reo ā-tuhi than other public contexts. This was because of people who were actively promoting te reo Māori, rather than policies or practices, at the venues they were held in. Temporary signage illustrates what a more multilingual approach to written language could look like in public spaces.

Online, te reo ā-tuhi targeted at rangatahi was hard to find on publicly available sites. Te reo ā-waha in online videos analysed in this study ranged from a few words used by people speaking mostly English, to all te reo Māori.

What motivates/affects rangatahi use of te reo Māori?

Multiple factors relating to rangatahi beliefs and aspirations, people, and environment motivated rangatahi to use te reo Māori.

Rangatahi were motivated to use te reo Māori because of their own aspirations relating to:

- **Mana—prestige:** they see te reo Māori as an important and integral part of their world
- **Pūkenga—personal growth:** they want themselves and others to become capable and proficient reo speakers
- **Whakapapa**—they feel a responsibility to pass te reo Māori on to future generations
- **Rangatiratanga—leadership:** they have a desire to actively support strong reo Māori communities.

Rangatahi were motivated to use te reo Māori by:

- hearing and talking to people who had committed to speaking te reo Māori (pou reo)
- whānau support for te reo Māori
- people setting the expectation or tikanga and encouraging Māori use (including creating immersion reo-Māori spaces)
- people (including rangatahi) using te reo Māori, and acting as pou reo
- whānau showing that te reo Māori was important to them.

Rangatahi were motivated to use te reo Māori by environments that included:

- having te reo Māori as an integral and valued part of the kaupapa
- Māori writing and imagery
- immersion education
- non-text Māori images including art, whakairo, and taonga
- temporary and permanent bilingual signage
- use of relevant and acceptable language in signage and products
- images and language resources in homes
- interacting with (creating and viewing) online reo Māori content.

Concluding comments

Our study indicated that people who promoted te reo Māori in an environment were pivotal to rangatahi exposure to, and use of, te reo Māori. These people included proficient adults and rangatahi themselves, who set the tikanga and expectation for te reo Māori to be used, and gave status to te reo Māori. This contributed to a linguistic environment where rangatahi were hearing, seeing, and using te reo Māori. Rangatahi were also contributing to these environments by having reo Māori aspirations, and taking on revitalisation roles as reo Māori speakers and advocates, and as pou reo.

Rangatahi heard te reo Māori in homes and private spaces where everyone could speak Māori, where there was an expectation for this to occur, and where there were reo ā-tuhi resources. Outside of these places, even at kaupapa Māori events, the dominance of English was visible and audible. In public places, some rangatahi had made a conscious commitment to kōrero Māori, and mostly they spoke to people with whom they already had reo Māori relationships. There were indications that the proficiency, desire, and motivation to do this had its grounding in strongly reo-Māori immersion environments at home and at kura, and in the critical awareness that rangatahi had of their role in reo Māori revitalisation.

As long as they had someone to kōrero Māori with, rangatahi in the study could kōrero Māori. They were sufficiently proficient to talk about everyday topics, and to meet their day-to-day language needs. They were also using te reo ā-tuhi and ā-tinana to interact and make meaning with others.

Rangatahi mostly heard te reo Māori from, and used it with, whānau, friends, and kaiako in places where the tikanga to kōrero Māori was set. Private spaces were the highest density places where everyone spoke te reo Māori with each other. In public spaces, reo Māori density was reduced by ambient English.

Our findings that rangatahi in the study were using te reo Māori proficiently, and were being innovative with te reo Māori, are good news. In doing so rangatahi are contributing to te reo Māori being a vibrant and living language. This is a heartening sign for reo Māori revitalisation. Word play and innovation is fun and is a feature of the language of young people around the world. It can motivate people to use te reo Māori and improve attitudes towards te reo.

On the other hand, unacceptable usage by rangatahi—even some of their experimental and innovative usage—may provide evidence of the continued stress that te reo Māori is under from English.

Ideally, rangatahi would get sufficient exposure to high-quality reo Māori (for example, from highly proficient adult speakers) so that they internalise acceptable structures at a young age, grow into proficient adults, and can in turn expose children, rangatahi, second-language learners, and others to acceptable structures. This is what normalising te reo Māori is really about.

Implications for language revitalisation and further research

A primary aim of this research has been to gather evidence that contributes pathways forward to support rangatahi to use te reo Māori more and thus to contribute to te reo Māori revitalisation.

Two ongoing challenges we see are:

- making high-quality reo Māori more visible and audible for rangatahi, so that it is easier for them to learn and use and thus for them to develop adult proficiency
- raising critical awareness about aspects of language and revitalisation.

Regarding these, some questions for future exploration are:

- What aspects of recent knowledge and research into bilingualism can help inform language revitalisation approaches?
- How is te reo Māori changing over time? What sort of changes are occurring, and what does this mean for reo Māori revitalisation? How much change is too much?
- How can rangatahi be supported to play and innovate with language naturally, while at the same time being supported and encouraged to learn and use the grammar and vocabulary of our tupuna?

Because of the small amount of existing research, the are many possibilities for further research. For example:

- Case-study research to capture more in-depth data from a smaller number of rangatahi. For example, an in-depth retrospective exploration of the language trajectories of the rangatahi in our study who were exceptionally proficient might reveal ideas to support other rangatahi and their whānau.
- Studies about the impact of online reo Māori content in motivating rangatahi to use te reo Māori. These would be useful to help people understand how to harness the power of this medium to expose rangatahi to te reo Māori and encourage language use.
- Longitudinal studies of young children growing into rangatahitanga and pakeketanga would give insights into language acquisition and socialisation over time. Such projects could focus, for example, on the role of proficient adults and pou reo in the language socialisation of rangatahi.
- The collection of more and larger corpora would permit increasingly robust, generalisable analyses of, for example, exposure to and acquisition of vocabulary, the impact of English, and language change over time. In addition, a growing corpus of te reo Māori online could also be explored further. In this digital age, life activities are being recorded and shared publicly more and more often.
- Identifying and documenting rangatahi innovations in te reo Māori.
- Further research into reo-ā-tinana by reo Māori speakers.

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Appendix A: Information sheets and consent forms

Te Reo o te Rangatahi Study Group 1

Kia ora! Would you like to help us? We are researchers from Te Wāhanga/NZCER. We have been asked by Te Mātāwai to find out more about how rangatahi are using, hearing and seeing te reo Māori.

He aha tēnei rangahau kaupapa Māori? What is this kaupapa Māori study about?

The aim of the study is to describe how rangatahi are using, hearing and seeing te reo Māori, and why and how they are using it.

Learning more about rangatahi use of te reo Māori will help us understand how we can better support te reo Māori as a living language.

What are we asking you to do?

We would like to visit you to tell you about the project. While there, we'd like to have a chat about you and the things that are important to you. If you agree, we would like to record this conversation.

We would then ask you to wear a Bluetooth microphone for one hour in a place where there will be opportunities to kōrero Māori. At the same time, we (the researchers) will be video recording what you are doing. You can turn the microphone off at any time if you want to say something in private.

Participation is voluntary

You do not have to take part in this study if you don't want to. You can also withdraw your information up to two weeks after our visit if you decide you don't want to be involved in the study. You don't have to give a reason.

What will happen to the information that you share with us?

The information we collect from you will be kept in a secure place and only the researchers will view or listen to it. We will analyse the videos and audio to help answer our research questions about te reo o te rangatahi. Then we will write a report and a set of stories for Te Mātāwai. We will only use things you share that are relevant to the study.

In the report and stories, we may use some of the things you have said, and images from the videos. We will ask whether you wish to have your name appear beside these things. You decide whether this happens. You will be able to check and approve the images and stories before they are published. If you say no, we won't use your name, image, or any words that might identify you.

Thank you for helping us with this study. As a small thank you, we would like to offer you a voucher. If you want to know more, please contact us:

Maraea Hunia, Kairangahau. Email: maraea.hunia@nzcer.org.nz DDI: 04 802 1626

Nicola Bright, Kairangahau Matua. Email: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Or by text on 021 0862 8542

He mihi nui

Te Reo o te Rangatahi
Rōpū 1

Kia ora! E hiahia ana koe ki te āwhina i a mātou? He kairangahau mātou nō te Wāhanga/Rangahau Mātauranga o Aotearoa. Kua tonoa mai mātou e Te Mātāwai kia rapua he kōrero mō te reo Māori e kōrerotia ana, e rangona ana, e kitea ana e te rangatahi.

He aha tēnei rangahau kaupapa Māori?

Ko te whāinga o te rangahau he whakamārama he pēhea te whakamahi, te whakarongo, te kite hoki a te rangatahi i te reo Māori, he aha e whakamahia ai e rātou, āhea hoki.

Mā te ako i ngā āhuatanga o te whakamahi a te rangatahi i te reo Māori tātou e ārahi, kia pai ake tā mātou tautoko i te reo Māori hei reo ora.

He aha tā mātou tono ki a koe?

E hiahia ana mātou ki te peka atu ki a koe ki te kōrero mō te kaupapa. I a mātou i konā i tō taha, e hiahia ana mātou ki te kōrero ki a koe mōu, mō ō mea kaingākau. Ki te whakaae koe, e hiahia ana mātou ki te hopu i tēnei kōrerorero ki te rīpene.

Ki te whakaae koe kia uru mai, ko tā mātou inoi kia mauria e koe tētahi hopureo Bluetooth mō te hāora kotahi i tētahi wāhi e mōhio nei mātou, he whāinga wāhi i reira mōu kia kōrero Māori. Hei taua wā anō, mā mātou (ngā kairangahau) e hopu ō mahi ki te kāmera ataata. Ka taea e koe te whakaweto i te hopureo ahakoa te wā, ki te hiahia koe ki te kōrero ki tētahi atu tangata anake.

Kei a koe anake te tikanga o te whakauru mai, kāhore rānei.

Ehara i te mea me whai wāhi mai koe ki tēnei rangahau ki te kore koe e hiahia. Ka āhei hoki koe ki te kume i ō kōrero ki waho, i roto i te rua wiki i muri i tā mātou torongo atu, ki te tatū ō whakaaro kua kore koe e hiahia kia noho i te rangahau. Ehara i te mea me homai e koe tētahi take.

Ka ahatia ngā kōrero ka homai e koe ki a mātou?

Ka puritia ngā kōrero ka kohia e mātou i tētahi wāhi haumaru, mā ngā kairangahau anake e tirotiro, e whakarongo. Ka tātaritia e mātou ngā ataata me ngā ororongo hei whakautu i ā mātou pātai rangahau mō te reo o te rangatahi. Kātahi mātou ka tahuri ki te tuhi pūrongo me ētahi kōrero whakamārama mā Te Mātāwai. Heoi anō ngā āhuatanga ka whakamahia e mātou o ngā mea nāu i tuku mai, ko ērā e hāngai ana ki te rangahau.

I roto i te pūrongo me ngā kōrero whakamārama, ka whakamahia e mātou ētahi o ō kōrero, me ētahi pikitia mai i ngā ataata. Mā mātou e pātai atu ki a koe mehemea e hiahia ana kia noho tō ingoa i te taha o ēnei mea. Māu e whakatau mehemea ka pērā. Ka taea e koe te tirotiro, te whakaae hoki ki ngā ataata me ngā kōrero i mua i te whakaputanga. Ki te kī koe, kāo, e kore e whakamahia tō ingoa, ō pikitia, ētahi kupu rānei e tautuhitia ai koe.

Kei te mihi mātou ki a koe, mōu i āwhina i tā mātou rangahau. Hei whakawhetai ki a koe, e tāpae ana mātou i tētahi tīkiti hoko i te taha. Ki te hiahia koe ki ētahi atu kōrero, tēnā whakapā mai ki a mātou:

Maraea Hunia, Kairangahau. Ī-mēra: maraea.hunia@nzcer.org.nz DDI: 04 802 1626

Nicola Bright, Kairangahau Matua. Ī-mēra: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Mā te kuputuhi rānei ki 021 0862 8542

He mihi nui

Te Reo o te Rangatahi Study Group 2

Kia ora! Would you like to help us? We are researchers from Te Wāhanga/NZCER. We have been asked by Te Mātāwai to find out more about how rangatahi are using, hearing and seeing te reo Māori.

He aha tēnei rangahau kaupapa Māori? What is this kaupapa Māori study about?

The aim of the study is to describe how rangatahi are using, hearing and seeing te reo Māori, and why and how they are using it.

Learning more about rangatahi use of te reo Māori will help us understand how we can better support te reo Māori as a living language.

What are we asking you to do?

We would like to visit you to tell you about the project. While there, we'd like to have a chat about you and the things that are important to you. If you agree, we would like to record this conversation.

We will then ask you to carry a phone for one hour in a place where there will be opportunities to see and read te reo Māori. A camera app on the phone will take photos automatically. You can turn the app off if at any time. We will also ask you to take photos on a camera of te reo Māori that you see. We (the researchers) will be taking photos on another camera.

Participation is voluntary

You do not have to take part in this study if you don't want to. You can also withdraw your information up to two weeks after our visit if you decide you don't want to be involved in the study. You don't have to give a reason.

What will happen to the information that you share with us?

The information we collect from you will be kept in a secure place and only the researchers will view it. We will analyse the photos to help answer our research questions about te reo o te rangatahi. Then we will write a report and a set of stories for Te Mātāwai. We will only use things you share that are relevant to the study.

In the report and stories, we may use some of the photographs, and things you have said. We will ask whether you wish to have your name appear beside these things. You decide whether this happens. You will be able to check and approve the images and stories before they are published. If you say no, we won't use your name, image, or any words that might identify you.

Thank you for helping us with this study. As a small thank you, we would like to offer you a voucher. If you want to know more, please contact us:

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Or by text on 021 0862 8542

He mihi nui

Te Reo o te Rangatahi
Rōpū 2

Kia ora! E hiahia ana koe ki te āwhina i a mātou? He kairangahau mātou nō te Wāhanga/Rangahau Mātauranga o Aotearoa. Kua tonoa mai mātou e Te Mātāwai kia rapua he kōrero mō te reo Māori e kōrerotia ana, e rangona ana, e kitea ana e te rangatahi.

He aha tēnei rangahau kaupapa Māori?

Ko te whāinga o te rangahau he whakamārama he pēhea te whakamahi, te whakarongo, te kite hoki a te rangatahi i te reo Māori, he aha e whakamahia ai e rātou, āhea hoki.

Mā te ako i ngā āhuatanga o te whakamahi a te rangatahi i te reo Māori mātou e ārahi kia pai ake tā mātou tautoko i te reo Māori hei reo ora.

He aha tā mātou tono ki a koe?

E hiahia ana mātou ki te peka atu ki a koe ki te kōrero mō te kaupapa. I a mātou i konā i tō taha, e hiahia ana mātou ki te kōrero ki a koe mōu, mō ō mea kaingākau. Ki te whakaae koe, e hiahia ana mātou ki te hopu i tēnei kōrerorero ki te rīpene.

Kātahi mātou ka inoi kia kawea e koe tētahi waea mō te hāora kotahi i tētahi wāhi e mōhio nei mātou, he whāinga wāhi i reira mōu kia kōrero Māori Mā tētahi taupānga kāmera i te waea e tango whakaahua aunoa. Ka taea e koe te whakaweto te waea ahakoa te wā. Ka inoi hoki mātou kia tango whakaahua koe i te kāmera o te reo Māori e kitea ana e koe. Mā mātou (ngā kairangahau) e tango whakaahua ki tētahi atu kāmera.

Kei a koe anake te tikanga o te whakauru mai, kāhore rānei.

Ehara i te mea me whai wāhi mai koe ki tēnei rangahau ki te kore koe e hiahia. Ka āhei hoki koe kia kume i ō kōrero ki waho, i roto i te rua wiki i muri i tā mātou torongo atu, ki te tatū ō whakaaro kua kore koe e hiahia kia noho i te rangahau. Ehara i te mea me homai e koe tētahi take.

Ka ahatia ngā kōrero ka homai e koe ki a mātou?

Ka puritia ngā kōrero ka kohia e mātou i tētahi wāhi haumaru, mā ngā kairangahau anake e tirotiro. Ka tātaritia e mātou ngā whakaahua hei whakautu i ā mātou pātai rangahau mō te reo o te rangatahi. Kātahi mātou ka tahuri ki te tuhi pūrongo me ētahi kōrero whakamārama mā Te Mātāwai. Heoi anō ngā āhuatanga ka whakamahia e mātou o ngā mea nāu i tuku mai, ko ērā e hāngai ana ki te rangahau.

I roto i te pūrongo me ngā kōrero whakamārama, ka whakamahia e mātou ētahi o ngā whakaahua, me ētahi o ō kōrero. Mā mātou e pātai atu ki a koe mehemea e hiahia ana koe kia noho tō ingoa i te taha o ēnei mea. Māu e whakatau mehemea ka pērā. Ka taea e koe te tirotiro, te whakaae hoki ki ngā ataata me ngā kōrero i mua i te whakaputanga. Ki te kī koe, kāo, e kore e whakamahia tō ingoa, ō pikitia, ētahi kupu rānei e tautuhitia ai koe.

Kei te mihi mātou ki a koe, mōu i āwhina i tā mātou rangahau. Hei whakawhetai ki a koe, e tāpae ana mātou i tētahi tīkiti hoko i te taha. Ki te hiahia koe ki ētahi atu kōrero, tēnā whakapā mai ki a mātou:

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Nicola Bright, Kairangahau Matua. Ī-mēra: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Mā te kuputuhi rānei ki 021 0862 8542

He mihi nui

Te Reo o te Rangatahi Study Group 3

Kia ora! Would you like to help us? We are researchers from Te Wāhanga/NZCER. We have been asked by Te Mātāwai to find out more about how rangatahi are using, hearing and seeing te reo Māori.

He aha tēnei rangahau kaupapa Māori? What is this kaupapa Māori study about?

The aim of the study is to describe how rangatahi are using, hearing and seeing te reo Māori, and why and how they are using it.

Learning more about rangatahi use of te reo Māori will help us understand how we can better support te reo Māori as a living language.

What are we asking you to do?

We would like to visit you to tell you about the project. While there, we'd like to have a chat in te reo Māori about you and the things that are important to you. If you agree, we would like to record this conversation. We will also provide materials for you to create a picture if you would like. This will help us understand what is important to you.

This will take up to one and a half hours and we can come to your home if that suits. We just need somewhere comfortable where we can spread out the art materials. Others in your whānau are welcome to join in if they want to. The most important thing is the kōrero which we will be recording.

Participation is voluntary

You do not have to take part in this study if you don't want to. You can also withdraw your information up to two weeks after our visit if you decide you don't want to be involved in the study. You don't have to give a reason.

What will happen to the information that you share with us?

The information we collect from you will be kept in a secure place and only the researchers will view it. We will analyse the audio recordings to help answer our research questions about te reo o te rangatahi. Then we will write a report and a set of stories for Te Mātāwai. We will only use things you share that are relevant to the study.

In the report and stories, we may use some of what you have said and created. We will ask whether you wish to have your name appear beside these things. You decide whether this happens. You will be able to check and approve the images and stories before they are published. If you say no, we won't use your name, image, or any words that might identify you.

Thank you for helping us with this study. As a small thank you, we would like to offer you a voucher. If you want to know more, please contact us:

Maraea Hunia, Kairangahau. Email: maraea.hunia@nzcer.org.nz DDI: 04 802 1626

Nicola Bright, Kairangahau Matua. Email: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Or by text on 021 0862 8542

He mihi nui

Te Reo o te Rangatahi
Rōpū 3

Kia ora! E hiahia ana koe ki te āwhina i a mātou? He kairangahau mātou nō te Wāhanga/Rangahau Mātauranga o Aotearoa. Kua tonoa mai mātou e Te Mātāwai kia rapua he kōrero mō te reo Māori e kōrerotia ana, e rangona ana, e kitea ana e te rangatahi.

He aha tēnei rangahau kaupapa Māori?

Ko te whāinga o te rangahau he whakamārama he pēhea te whakamahi, te whakarongo, te kite hoki a te rangatahi i te reo Māori, he aha e whakamahia ai e rātou, āhea hoki.

Mā te ako i ngā āhuatanga o te whakamahi a te rangatahi i te reo Māori mātou e ārahi kia pai ake tā mātou tautoko i te reo Māori hei reo ora.

He aha tā mātou tono ki a koe?

E hiahia ana mātou ki te peka atu ki a koe ki te kōrero mō te kaupapa. I a mātou i konā i tō taha, e hiahia ana mātou ki te kōrero ki a koe mōu, mō ō mea kaingākau. Ki te whakaae koe, e hiahia ana mātou ki te hopu i tēnei kōrerorero ki te rīpene. Ka hoatu hoki e mātou ētahi rauemi kia hangaia e koe tētahi whakaahua, ki te hiahia koe kia pērā. Mā tēnei mātou e akoako ki ō mea kaingākau.

Ka pau pēa te hāora me te haurua, ā, ka taea e mātou te haere atu ki tō kāinga, mehemea he pai ki a koe. Ko te mea nui e hiahiatia ana mō te taha ki te rūma, he wāhi hei horahora i ngā rauemi toi. He pai noa iho kia uru mai ētahi atu o tō whānau, ki te hiahia rātou. Ko te mea nui rawa ko ngā kōrero, ka hopukina e mātou ki te rīpene.

Kei a koe anake te tikanga o te whakauru mai, kāhore rānei.

Ehara i te mea me whai wāhi mai koe ki tēnei rangahau ki te kore koe e hiahia. Ka āhei hoki koe kia kume i ō kōrero ki waho, i roto i te rua wiki i muri i tā mātou torongo atu, ki te tatū ō whakaaro kua kore koe e hiahia kia noho i te rangahau. Ehara i te mea me homai e koe tētahi take.

Ka ahatia ngā kōrero ka homai e koe ki a mātou?

Ka puritia ngā kōrero ka kohia e mātou i tētahi wāhi haumaru, mā ngā kairangahau anake e tirotiro. Ka tātaritia e mātou ngā ororongo hei whakautu i ā mātou pātai rangahau mō te reo o te rangatahi. Kātahi mātou ka tahuri ki te tuhi pūrongo me ētahi kōrero whakamārama mā Te Mātāwai. Heoi anō ngā āhuatanga ka whakamahia e mātou o ngā mea nāu i tuku mai, ko ērā e hāngai ana ki te rangahau.

I roto i te pūrongo me ngā kōrero whakamārama, ka whakamahia e mātou ētahi o ō kōrero, ētahi hoki o ngā mea nāu i waihanga. Mā mātou e pātai atu ki a koe mehemea e hiahia ana koe kia noho tō ingoa i te taha o ēnei mea. Māu e whakatau mehemea ka pērā. Ka taea e koe te tirotiro, te whakaae hoki ki ngā ataata me ngā kōrero i mua i te whakaputanga. Ki te kī koe, kāo, e kore e whakamahia tō ingoa, ō pikitia, ētahi kupu rānei e tautuhitia ai koe.

Kei te mihi mātou ki a koe, mōu i āwhina i tā mātou rangahau. Hei whakawhetai ki a koe, e tāpae ana mātou i tētahi tīkiti hoko i te taha. Ki te hiahia koe ki ētahi atu kōrero, tēnā whakapā mai ki a mātou:

Maraea Hunia, Kairangahau. Ī-mēra: maraea.hunia@nzcer.org.nz DDI: 04 802 1626
Nicola Bright, Kairangahau Matua. Ī-mēra: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Mā te kuputuhi rānei ki 021 0862 8542

He mihi nui

Te Reo o te Rangatahi Study Group 4

Kia ora! Would you like to help us? We are researchers from Te Wāhanga/NZCER. We have been asked by Te Mātāwai to find out more about how rangatahi are using, hearing and seeing te reo Māori.

He aha tēnei rangahau kaupapa Māori? What is this kaupapa Māori study about?

The aim of the study is to describe how rangatahi are using, hearing and seeing te reo Māori, and why and how they are using it.

Learning more about rangatahi use of te reo Māori will help us understand how we can better support te reo Māori as a living language.

What are we asking you to do?

We would like to visit you to tell you about the project. While there, we'd like to have a chat about you and the things that are important to you. If you agree we would like to record this conversation.

In the week following our visit, we'd like you to do an activity (e.g., kapa haka practice, sport, etc) where you use and hear te reo Māori. We would like you to do the activity as you normally would, and then fill in a short online survey about it. The survey is about the reo you heard and used during the activity.

Participation is voluntary

You do not have to take part in this study if you don't want to. You can also withdraw your information up to two weeks after our visit if you decide you don't want to be involved in the study. You don't have to give a reason.

What will happen to the information that you share with us?

The information we collect from you will be kept in a secure place and only the researchers will view it. We will analyse the survey answers, then we will write a report and a set of stories for Te Mātāwai. We will only use things you share that are relevant to the study.

In the report and stories, we may use some of what you have told us. We will ask whether you wish to have your name appear beside these things. You decide whether this happens. You will be able to check and approve the images and stories before they are published. If you say no, we won't use your name, image, or any words that might identify you.

Thank you for helping us with this study. As a small thank you, we would like to offer you a voucher. If you want to know more, please contact us:

Maraea Hunia, Kairangahau. Email: maraea.hunia@nzcer.org.nz DDI: 04 802 1626

Nicola Bright, Kairangahau Matua. Email: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Or by text on 021 0862 8542

He mihi nui

Te Reo o te Rangatahi
Rōpū 4

Kia ora! E hiahia ana koe ki te āwhina i a mātou? He kairangahau mātou nō te Wāhanga/Rangahau Mātauranga o Aotearoa. Kua tonoa mai mātou e Te Mātāwai kia rapua he kōrero mō te reo Māori e kōrerotia ana, e rangona ana, e kitea ana e te rangatahi.

He aha tēnei rangahau kaupapa Māori?

Ko te whāinga o te rangahau he whakamārama he pēhea te whakamahi, te whakarongo, te kite hoki a te rangatahi i te reo Māori, he aha e whakamahia ai e rātou, āhea hoki.

Mā te ako i ngā āhuatanga o te whakamahi a te rangatahi i te reo Māori mātou e ārahi kia pai ake tā mātou tautoko i te reo Māori hei reo ora.

He aha tā mātou tono ki a koe?

E hiahia ana mātou ki te peka atu ki a koe ki te kōrero mō te kaupapa. I a mātou i konā i tō taha, e hiahia ana mātou ki te kōrero ki a koe mōu, mō ō mea kaingākau. Ki te whakaae koe, e hiahia ana mātou ki te hopu i tēnei kōrerorero ki te rīpene.

I roto i te wiki i muri i tā mātou toronga atu ki a koe, ko te inoi kia mahia e koe tētahi mahi (hei tauira, whakaharatau kapa haka, hākinakina, te aha) e whakamahi ai koe e rongo ai koe i te reo Māori. Ko tā mātou hiahia kia rite tonu tō mahi me ō kōrero ki ō mahi ia wiki, ka whakakī ai i tētahi uiui tuihono poto mō ō mahi i muri. Ko ngā pātai i te uiui he pātai mō te reo i rangona ai, i whakamahia ai e koe, i roto i ngā mahi.

Kei a koe anake te tikanga o te whakauru mai, kāhore rānei.

Ehara i te mea me whai wāhi mai koe ki tēnei rangahau ki te kore koe e hiahia. Ka āhei hoki koe kia kume i ō kōrero ki waho, i roto i te rua wiki i muri i tā mātou torongo atu, ki te tatū ō whakaaro kua kore koe e hiahia kia noho i te rangahau. Ehara i te mea me homai e koe tētahi take.

Ka ahatia ngā kōrero ka homai e koe ki a mātou?

Ka puritia ngā kōrero ka kohia e mātou i tētahi wāhi haumaru, mā ngā kairangahau anake e tirotiro. Kātahi mātou ka tahuri ki te tātari i ngā whakautu ki te rangahau, ā, mā mātou e tuhi tētahi pūrongo me ētahi kōrero whakamārama mā Te Mātāwai. Heoi anō ngā āhuatanga ka whakamahia e mātou o ngā mea nāu i tuku mai, ko ērā e hāngai ana ki te rangahau.

I roto i te pūrongo me ngā kōrero whakamārama, ka whakamahia e mātou ētahi o ō kōrero. Mā mātou e pātai atu ki a koe mehemea e hiahia ana koe kia noho tō ingoa i te taha o ēnei mea. Māu e whakatau mehemea ka pērā. Ka taea e koe te tirotiro, te whakaae hoki ki ngā ataata me ngā kōrero i mua i te whakaputanga. Ki te kī koe, kāo, e kore e whakamahia tō ingoa, ō pikitia, ētahi kupu rānei e tautuhitia ai koe.

Kei te mihi mātou ki a koe, mōu i āwhina i tā mātou rangahau. Hei whakawhetai ki a koe, e tāpae ana mātou i tētahi tīkiti hoko i te taha. Ki te hiahia koe ki ētahi atu kōrero, tēnā whakapā mai ki a mātou:

Maraea Hunia, Kairangahau. Ī-mēra: maraea.hunia@nzcer.org.nz DDI: 04 802 1626

Nicola Bright, Kairangahau Matua. Ī-mēra: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Mā te kuputuhi rānei ki 021 0862 8542

He mihi nui

Te Reo o te Rangatahi Study Information for the Public

Tēnā koutou. We are kairangahau from Te Wāhanga NZCER. We have been commissioned by Te Mātāwai to explore rangatahi exposure to and use of te reo Māori.

He aha tēnei rangahau kaupapa Māori? What is this kaupapa Māori study about?

The aim of the study is to describe how rangatahi are using, hearing and seeing te reo Māori, and why and how they are using it.

Learning more about rangatahi use of te reo Māori will help us understand how we can better support te reo Māori as a living language.

He aha ngā pātai rangahau? What are the research questions?

- How are rangatahi using and being exposed to te reo Māori in different domains?
- What is the frequency of rangatahi use of, and exposure to te reo Māori in particular domains?
- What motivates/affects rangatahi use of te reo Māori?
- What sort of reo Māori are rangatahi using?

Ka aha rā tātou? What will we be doing?

Kairangahau from Te Wāhanga NZCER will be taking notes, videos and photographs for a short time. Rangatahi will be walking around with either a Bluetooth microphone (to record te reo Māori) or a camera (to take photos of written reo Māori).

The information we collect will be kept in a secure place that only the researchers will have access to. We will analyse the videos, photographs and audio recordings to help answer our research questions. Then we will write a report and a set of stories for Te Mātāwai.

How will you know we're filming?

Our researchers will be wearing pink Te Mātāwai T-shirts so you can see where we are filming. Rangatahi with Bluetooth microphones or mini cameras will be near the researchers.

Who do I ask if I want more information?

If you want to know more, you can contact one of us at Te Wāhanga-NZCER.

Maraea Hunia, Kairangahau. Email: maraea.hunia@nzcer.org.nz DDI: 04 802 1626
Nicola Bright, Kairangahau Matua. Email: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Or by text on 021 0862 8542

He mihi nui

Te Reo o te Rangatahi
He whakamārama mō te marea

Tēnā koutou. He kairangahau mātou nō te Wāhanga, Rangahau Mātauranga o Aotearoa. Kua tonoa mai mātou e Te Mātāwai kia tūhuratia te noho o te rangatahi i waenga i te reo Māori, me tā rātou whakamahi i te reo.

He aha tēnei rangahau kaupapa Māori?

Ko te whāinga o te rangahau he whakamārama he pēhea te whakamahi, te whakarongo, te kite hoki a te rangatahi i te reo Māori, he aha e whakamahia ai e rātou, āhea hoki.

Mā te ako i ngā āhuatanga o te whakamahi a te rangatahi i te reo Māori mātou e ārahi kia pai ake tā mātou tautoko i te reo Māori hei reo ora.

He aha ngā pātai rangahau?

- He pēhea te whakamahi, te noho hoki i waenga i te reo, o te rangatahi, i ngā wāhi reo huhua?
- He pēhea te auau o te whakamahi i te reo, te noho hoki i waenga i te reo, o te rangatahi, i ētahi wāhi reo whāiti?
- He aha ngā mea e hihiri ai/e pāngia ai te whakamahi a te rangatahi i te reo Māori?
- He aha te momo reo Māori e whakamahia ana e te rangatahi?

Ka aha rā mātou?

Mā ngā kairangahau o Te Wāhanga, Rangahau Aotearoa e tuhi kōrero, e tango ataata, whakaahua hoki mō te wā poto.

Ka hīkoi haere noa te rangatahi me tētahi hopureo Bluetooth (hei hopu i te reo Māori) i tētahi kāmera rānei (hei tango whakaahua o te reo Māori kua tuhia).

Ka puritia ngā kōrero ka kohia e mātou i tētahi wāhi haumaru, mā ngā kairangahau anake e whakapā atu. Kātahi ka tātaritia ngā ataata, ngā whakaahua me ngā ororongo hei āwhina i ā mātou pātai rangahau. Kātahi mātou ka tahuri ki te tuhi pūrongo me ētahi kōrero whakamārama mā Te Mātāwai.

He pēhea koe e mōhio ai kei te tango whakaahua mātou?

Ka mauria he Tī-hāte māwhero Mātāwai, kia pai ai tō kitekite ki a mātou i mātou e mahi ataata ana. Ka noho tūtata he rangatahi me ngā hopureo Bluetooth, kāmera iti rānei, ki ngā kairangahau.

Ko wai tāku e uiui atu ai mō ētahi atu kōrero?

Ki te hiahia koe ki ētahi atu kōrero, ka taea te whakapā mai ki tētahi o mātou i Te Wāhanga, Rangahau Aotearoa.

Maraea Hunia, Kairangahau. Email: maraea.hunia@nzcer.org.nz DDI: 04 802 1626
Nicola Bright, Kairangahau Matua. Email: nicola.bright@nzcer.org.nz DDI: 04 802 1466
Or by text on 021 0862 8542

He mihi nui

NZCER
Rangahau Mātauranga o Aotearoa

Te Reo o te Rangatahi study
Consent form for rangatahi

Agreement to participate in the study	
Yes, I agree to be part of the study. I have read the Information Sheet and understand the purpose of the study. I understand that things I share which are not relevant to the study won't be used.	☐ YES ☐ NO
Names and images	
I agree that my name can be used when the researchers write or talk about the study. I can change my mind about my name being used within two weeks of the kōrero.	☐ YES ☐ NO
I agree that my image can be used in the report or in stories, which may be published.	☐ YES ☐ NO
I understand that before any images or stories are published, I will get a chance to check and approve them.	☐ YES ☐ NO

Group 1: Bluetooth microphone	
I agree to wear a Bluetooth microphone for one hour to record myself and others speaking te reo Māori. I know I can turn the microphone off if I want. I agree to be videoed during this time.	☐ YES ☐ NO
Group 2: Cameras	
I agree to wear a mini camera for one hour to take photos of te reo Māori. I know I can turn the camera off if I want. I agree to be photographed during this time.	☐ YES ☐ NO
Group 3: Talking pictures	
I agree that images I create during the interview will be photographed and may be used in the report.	☐ YES ☐ NO
Group 4: Online survey	
I agree to take part in a short online survey about te reo Māori.	☐ YES ☐ NO

Your full name: _____

Date of birth: _____

Iwi: _____

Address: _____

Email: _____

Signed: _____ Date: _____

Best contact phone number: (0)_____

NZCER
Rangahau Mātauranga o Aotearoa

Te Reo o te Rangatahi study Consent form for other participants

Agreement to participate in the study	
Yes, I agree to be part of the study. I have read the Information Sheet and understand the purpose of the study. I understand that information that is not relevant to the study won't be used.	☐ YES ☐ NO
Audio recording of kōrero	
I understand that this session will be recorded, and I agree to this.	☐ YES ☐ NO
Names and images	
I agree that my name can be used when the researchers write or talk about the study. I can change my mind about my name being used within two weeks of the kōrero.	☐ YES ☐ NO
I agree that my image can be used in the report or in stories, which may be published.	☐ YES ☐ NO
I can change my mind about the image being used within two weeks of the kōrero.	☐ YES ☐ NO
I understand that images I create during the interview will be photographed and may be used in the report.	☐ YES ☐ NO

Your full name: _____

Date of birth: _____

Address: _____

Email: _____

Signed: _____ Date: _____

Best contact phone number: (0)_____

Te Reo o te Rangatahi study Consent form for whānau whose child is aged 13-15 years old

Agreement to participate in the study	
I have read the Information Sheet and understand the purpose of the study. I agree that my child (who is aged 13,14 or 15 years old) may take part in the study. I understand that information that is not relevant to this project will not be analysed or used in reporting.	☐ YES ☐ NO

Your full name: _____

Date of birth: _____

Address: _____

Email: _____

Signed: _____ Date: _____

Best contact phone number: (0)_____

Appendix B: Questions for kanohi ki te kanohi interviews and self-report online survey

Interview questions

General demographics

- How old are you?
- Where do you live?
- Which kura/schools have you attended?
- What sports do you play or what are your interests or hobbies?
- What social-media apps do you use most?

Reo Māori

- When do you use te reo Māori, or hear or see te reo Māori being used? At home? Other places? Who is using it?
- How do you rate your ability to use te reo Māori? Can you point to statement on the card that sounds like it describes where you think you are (see chart below)?
- When you think about te reo Māori in the future, what would you like to see happen for you, your whānau, or for anyone else?

Set time for data collection (Kids cam and researcher observation visits, apps for self reporting and social media)

Negotiate when participants will record their data and give instructions for using apps and cameras.

Pātai 1

He pēhea tō kaha ki te kōrero Māori i ngā kōrero o ia rā?

a. He pai rawa atu (Ka taea e au te kōrero ki te reo Māori mō te tino nuinga o ngā kaupapa)
e. He pai (Ka taea e au te kōrero mō ngā mea maha ki te reo Māori)
i. He āhua pai (Ka taea e au te kōrero mō ētahi mea ki te reo Māori)
o. Kāore i te tino pai (Ka taea e au te kōrero mō ngā mea māmā anake ki te reo Māori)
u. Kāore i tua atu i ētahi kupu noa iho ētahi kīanga rānei

Question 1

How well are you able to speak Māori in day-to-day conversation?

1. Very well (I can talk about almost anything in Māori)
2. Well (I can talk about many things in Māori)
3. Fairly well (I can talk about some things in Māori)
4. Not very well (I can only talk about simple/basic things in Māori)
5. No more than a few words or phrases

Questions for self-report online survey

Name: _____

Possible stems: 'In the hour you chose'

Questions

Who you spoke to

1. Who did you speak te reo Māori to?
   a) My friend(s)
   b) My parent / aunty / uncle
   c) My grandparent
   d) My sibling(s)
   e) My teacher / coach
   f) Someone I didn't know

Someone else _____

Who spoke to you

2. Who spoke te reo Māori to you
   a. My friend(s)
   b. My parent / aunty / uncle
   c. My grandparent
   d. My sibling(s)
   e. My teacher / coach
   f. Someone I didn't know

Someone else? _____

What you talked about

3. What did you talk about?
   a. Kai
   b. The game / kapa haka
   c. What we did / are going to do
   d. Jokes
   e. Relationships
   f. About anything and everything

Something else_____

Motivation

4. Why did you speak Māori with that person?
   a. Because they spoke Māori to me first
   b. I felt I was expected to speak Māori
   c. We have fun when we use te reo Māori
   d. We use Māori as a secret code so that no one else can understand us
   e. It just seemed like the normal thing to do

Something else_____

What others talked about

Did you hear te reo Māori being used by others?

- Yes
- No

If yes, what did they talk about?

3. What did you talk about?
    a. Kai
    b. The game / kapa haka
    c. What we did / are going to do
    d. Jokes
    e. Relationships
    f. About anything and everything

Something else:_____

Phrases in Māori you remember using

What kind of things can you remember saying in Māori?

Can you write down some examples please?

_____
_____
_____
_____

Phrases in Māori you remember others using

What kind of things can you remember others saying in Māori?

Can you write down some examples please?

_____
_____
_____
_____

Māori writing

Where did you notice Māori writing? Was it on:

- Signs on shops
- Signs on the roadside
- Shelves at the library
- T-shirts
- Books
- Pamphlets
- Products for sale

On something else? _____

- I didn't see anything

Māori Images

Where did you notice Māori images?

- Signs on shops
- Signs on the roadside
- Shelves at the library
- T-shirts
- Books
- Pamphlets
- Products for sale
- I didn't see anything

On something else? _____

Appendix C: Online video dataset

Note that where there is no URL, the video concerned was an ephemeral (Instagram) video that is no longer accessible.

Video 1: Te Ao (2019, July A). #Ihumātao: Waiata at the frontline [Video file]. Retrieved from https://www.facebook.com/TeAoMaoriNews/videos/2391740491104490/

Video 2: Protect Ihumātao (2019, July). Update from Kaitiaki Village [Video file]. Retrieved from https://www.facebook.com/protectihumatao/videos/390849368215424/

Video 3: Te Māwhai (2014, September 4). Tea o o Mahia [Video file]. Retrieved from https://www.youtube.com/watch?v=R9KioxPxEX4&t=109s

Video 4: Hudson, Puawai (2019, July). Live video [Video file]. Retrieved from https://www.facebook.com/jordanpuawaiwaller/videos/2294129380703781/?eid=ARAnNNVjpieEiAWMV_ZkZjo82pm5GulnLEp9tAiaVROfjbvozFjJEXbnRCG5o8MoYZZWuqk6W4Tmjq4B

Video 5: Te Ao (2019, July B). #LIVE Tauira sing waiata and haka at Ihumātao [Video file]. Retrieved from https://www.facebook.com/TeAoMaoriNews/videos/353717948856826/

Video 6: Thomas, Dewi (2019, July). So powerful! Today at Ihumatao as the line was pushed back. Rakau was planted with hands,feet connected with Papatūānuku and voices rang beautiful, strong and emotional [Video file]. Retrieved from https://www.facebook.com/dewi.thomas.165/videos/10157741203302150/

Video 7: Marae (2019, March). Pronouncing Māori names wrong—does something need to happen? [Video file]. Retrieved from https://www.facebook.com/maraetv/videos/305907070014504/?v=305907070014504

Video 8: Te Huinga Tauira ki te Ūpoko o te Ika a Māui (2016). Kapa Haka Draw THT '16 [Video file]. Retrieved from https://www.facebook.com/tehuingatauira2016/videos/821939894608350/?v=821939894608350

Video 9: Ngāi Tauira—VUW Māori Students' Association (2015). Te Huinga Tauira ki Ōtautahi [Video file]. Retrieved from https://www.facebook.com/ngaitauiraVUW/videos/737009899760370/?v=737009899760370

Video 10: Pūkana (2019, March). E te iwi, koinei te Tīhohe tuatahi mō te tau! Anei rā ko Kīara me tōna waiata, Pūkana! [Video file]. Retrieved from https://www.facebook.com/pukana2019/videos/2324196401145835/?v=2324196401145835

Video 11: RNZ (2019, July). Waiata at Ihumātao police cordon [Video file]. Retrieved from https://www.facebook.com/watch/?v=370167073655271

Video 12: Sharon, Mānia (2019, July). E tō e te marama [Video file]. Retrieved from https://www.facebook.com/mania.campbell.7/videos/2768770893135127/

Video 13: Te Ao (2019, July C). Te Ao with Moana [Video file]. Retrieved from https://www.facebook.com/TeAoMaoriNews/videos/365971810730353/?v=365971810730353

Video 14: Te Ao (2019, July D). #IHUMĀTAO Peaceful resistance endures the first night, the call has gone out for more people to come to Ihumātao [Video file]. Retrieved from https://www.facebook.com/TeAoMaoriNews/videos/372566003460588/?v=372566003460588

Video 15: tepuawaioteatua (2019, August 5). No title [Video file].

Video 16: tepuawaioteatua (2019, August 5). No title [Video file].

Video 17: Coco Crew (2019, January 18). Rei—Nōhea ft. Tyna (No way Māori Remix) [Video file]. Retrieved from https://www.youtube.com/watch?v=bIpiVxlb3dE

Video 18: Pūkana 2019 (2018, June 21). #URUWHETŪ2018—Aroha Crown—Hinemoa [Video file]. Retrieved from https://www.youtube.com/watch?v=HtzhuhFUS8g

Video 19: Wānanga TV (2018, September 9). Mahuru Māori—Fortnight [Video file]. Retrieved from https://www.youtube.com/watch?v=9TgDNhddRmI

Video 20: Pūkana 2019 (2015, July 5). PAO—Tū Māia [Video file]. Retrieved from https://www.youtube.com/watch?v=U6dRaKW2_0w&list=PLTXHQ2D9mzOEIJXUdw5SmyA1syDtxDE3s&index=51

Video 21: Flavell, Miria (2017, June 14). Simple Glam Makeup Tutorial in Te Reo Māori [Video file]. Retrieved from https://www.youtube.com/watch?v=dUsArL2ei8w

Appendix D: MAONZE corpus rangatahi speaker lexical summary

Table 33 displays the total words, types, and TTR ratios from four rangatahi in the MAONZE corpus. These are roughly comparable (rangatahi who were a similar age and speaking for about the same length of time). Rangatahi data have yet to be compared with data gathered from older generations, and this is research that can and should be done. Table 34 displays the words, types, and TTR ratios from the 2019 book *He Kupu Tuku Iho* by Timoti Karetu and Wharehuia Milroy (2019), two reknowned Māori speakers.

Table 32 Four MAONZE corpus rangatahi speaker lexical summary

Speaker	Group	Time (minutes)	Words (total)	Words per minute	Types	TTR (%)
1	Interview	60	6,739	112.31	645	9.57
2	Interview	60	5,627	93.78	551	9.79
3	Interview	60	3,651	60.85	435	11.91
4	Interview	60	4,814	80.23	617	12.83
Total		**240**	**20,831**	**86.79**	**1325**	**6.36**

Table 33 He Kupu Tuku Iho lexical summary

Chapter	Words (total)	Types	TTR (%)
1	4,011	387	9.65
2	3,912	417	10.66
3	5,803	515	8.87
4	5,977	562	9.40
5	3,699	422	11.50
6	13,414	642	4.79
7	4,966	451	9.08
8	9,272	684	7.38
9	6,327	608	9.61
10	5,769	576	9.98

Chapter	Words (total)	Types	TTR (%)
11	2,758	344	12.47
12	3,703	412	11.13
13	8,317	585	7.03
14	7,015	597	8.51
15	4,333	440	10.15
16	1,375	216	15.71
17	7,524	705	9.37
18	1,197	489	40.85
Total	99,342	2,681	2.70

Appendix F: Frequency lists

Table 34 List of words and frequency of their appearance in spoken data

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
1	te	71	7.75	2	100.00	0.89
2	i	48	5.24	2	100.00	0.90
3	ki	47	5.13	2	100.00	0.86
4	au	28	3.06	2	100.00	0.81
5	mai	21	2.29	2	100.00	0.62
6	kei	20	2.18	2	100.00	0.69
7	ngā	19	2.07	2	100.00	0.75
8	taku	16	1.75	2	100.00	0.77
9	he	15	1.64	2	100.00	0.73
10	ka	14	1.53	2	100.00	0.60
11	tēnei	13	1.42	2	100.00	0.72
12	ko	13	1.42	2	100.00	0.80
13	haere	13	1.42	1	50.00	0.65
14	o	10	1.09	2	100.00	0.61
15	Ko	10	1.09	2	100.00	0.71
16	kai	10	1.09	1	50.00	0.61
17	e	10	1.09	2	100.00	0.75
18	reira	9	0.98	2	100.00	0.69
19	rā	9	0.98	2	100.00	0.69
20	pai	9	0.98	2	100.00	0.57
21	ahau	9	0.98	2	100.00	0.48
22	a	9	0.98	2	100.00	0.65
23	mahi	8	0.87	1	50.00	0.43
24	konei	8	0.87	2	100.00	0.58
25	kākahu	8	0.87	1	50.00	0.47
26	atu	8	0.87	1	50.00	0.67
27	aku	8	0.87	1	50.00	0.50
28	ā	8	0.87	2	100.00	0.62

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
29	tae	7	0.76	1	50.00	0.41
30	ora	7	0.76	1	50.00	0.55
31	me	7	0.76	2	100.00	0.45
32	Kia	7	0.76	1	50.00	0.55
33	ētahi	7	0.76	2	100.00	0.66
34	wā	6	0.66	2	100.00	0.58
35	tērā	6	0.66	2	100.00	0.58
36	rātou	6	0.66	2	100.00	0.58
37	kēmu	6	0.66	1	50.00	0.30
38	Kei	6	0.66	2	100.00	0.58
39	ināianei	6	0.66	2	100.00	0.58
40	whai	5	0.55	2	100.00	0.58
41	tātou	5	0.55	2	100.00	0.48
42	nā	5	0.55	2	100.00	0.71
43	muri	5	0.55	2	100.00	0.58
44	kua	5	0.55	2	100.00	0.58
45	kori	5	0.55	1	50.00	0.33
46	kia	5	0.55	2	100.00	0.48
47	kāore	5	0.55	2	100.00	0.58
48	hoki	5	0.55	2	100.00	0.40
49	anō	5	0.55	1	50.00	0.20
50	tauira	4	0.44	1	50.00	0.24
51	nō	4	0.44	2	100.00	0.24
52	Nā	4	0.44	2	100.00	0.62
53	mō	4	0.44	2	100.00	0.47
54	koutou	4	0.44	2	100.00	0.62
55	Ka	4	0.44	2	100.00	0.24
56	ingoa	4	0.44	2	100.00	0.24
57	ana	4	0.44	2	100.00	0.47
58	wānanga	3	0.33	1	50.00	0.30
59	wāhi	3	0.33	2	100.00	0.30
60	Tūwharetoa	3	0.33	1	50.00	0.00
61	tuatahi	3	0.33	2	100.00	0.30
62	tonu	3	0.33	1	50.00	0.30

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
63	toa	3	0.33	1	50.00	0.30
64	tino	3	0.33	2	100.00	0.30
65	tākaro	3	0.33	1	50.00	0.30
66	rua	3	0.33	2	100.00	0.30
67	rima	3	0.33	1	50.00	0.30
68	pōro	3	0.33	1	50.00	0.00
69	parakuihi	3	0.33	1	50.00	0.00
70	Onehunga	3	0.33	1	50.00	0.30
71	mea	3	0.33	2	100.00	0.51
72	mate	3	0.33	1	50.00	0.30
73	mātaki	3	0.33	1	50.00	0.51
74	māku	3	0.33	1	50.00	0.00
75	katoa	3	0.33	1	50.00	0.51
76	kāinga	3	0.33	1	50.00	0.51
77	I	3	0.33	2	100.00	0.51
78	āe	3	0.33	2	100.00	0.51
79	whānau	2	0.22	1	50.00	0.35
80	whakaaro	2	0.22	1	50.00	0.35
81	Whai	2	0.22	1	50.00	0.35
82	wiki	2	0.22	1	50.00	0.00
83	wawata	2	0.22	1	50.00	0.35
84	wairua	2	0.22	2	100.00	0.35
85	tona	2	0.22	1	50.00	0.00
86	Tino	2	0.22	1	50.00	0.00
87	tīni	2	0.22	1	50.00	0.35
88	tiki	2	0.22	1	50.00	0.00
89	tētahi	2	0.22	2	100.00	0.35
90	tekau	2	0.22	1	50.00	0.00
91	tatari	2	0.22	1	50.00	0.35
92	tahi	2	0.22	1	50.00	0.35
93	taha	2	0.22	2	100.00	0.35
94	runga	2	0.22	1	50.00	0.00
95	roto	2	0.22	1	50.00	0.35
96	rerekē	2	0.22	1	50.00	0.00

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
97	rawe	2	0.22	1	50.00	0.35
98	pā	2	0.22	2	100.00	0.35
99	Ngāti	2	0.22	1	50.00	0.00
100	mātakitaki	2	0.22	1	50.00	0.35
101	marama	2	0.22	1	50.00	0.00
102	manako	2	0.22	1	50.00	0.00
103	mākete	2	0.22	1	50.00	0.00
104	mā	2	0.22	1	50.00	0.35
105	kawe	2	0.22	1	50.00	0.00
106	inu	2	0.22	1	50.00	0.35
107	ia	2	0.22	1	50.00	0.35
108	hoko	2	0.22	1	50.00	0.35
109	hinga	2	0.22	1	50.00	0.00
110	He	2	0.22	1	50.00	0.00
111	ētehi	2	0.22	2	100.00	0.35
112	ēnei	2	0.22	2	100.00	0.35
113	E	2	0.22	1	50.00	0.00
114	Aniwa	2	0.22	1	50.00	0.35
115	ake	2	0.22	1	50.00	0.00
116	āhua	2	0.22	1	50.00	0.35
117	aha	2	0.22	1	50.00	0.35
118	Āe	2	0.22	1	50.00	0.35
119	Ā	2	0.22	1	50.00	0.35
120	Whiua	1	0.11	1	50.00	0.00
121	whitu	1	0.11	1	50.00	0.00
122	whare	1	0.11	1	50.00	0.00
123	whakatoi	1	0.11	1	50.00	0.00
124	whakatata	1	0.11	1	50.00	0.00
125	whakatā	1	0.11	1	50.00	0.00
126	whakarenarena	1	0.11	1	50.00	0.00
127	whakapau	1	0.11	1	50.00	0.00
128	whakahirahira	1	0.11	1	50.00	0.00
129	whakahīhī	1	0.11	1	50.00	0.00
130	whakaatu	1	0.11	1	50.00	0.00

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
131	whakaako	1	0.11	1	50.00	0.00
132	whāinga	1	0.11	1	50.00	0.00
133	Whā	1	0.11	1	50.00	0.00
134	whā	1	0.11	1	50.00	0.00
135	Wild-Pair	1	0.11	1	50.00	0.00
136	wikitoria	1	0.11	1	50.00	0.00
137	wehe	1	0.11	1	50.00	0.00
138	waru	1	0.11	1	50.00	0.00
139	waho	1	0.11	1	50.00	0.00
140	wahine	1	0.11	1	50.00	0.00
141	Wā	1	0.11	1	50.00	0.00
142	uru	1	0.11	1	50.00	0.00
143	ua	1	0.11	1	50.00	0.00
144	ū	1	0.11	1	50.00	0.00
145	tūmanako	1	0.11	1	50.00	0.00
146	tuku	1	0.11	1	50.00	0.00
147	toru	1	0.11	1	50.00	0.00
148	tōna	1	0.11	1	50.00	0.00
149	toku	1	0.11	1	50.00	0.00
150	tōia	1	0.11	1	50.00	0.00
151	tohi	1	0.11	1	50.00	0.00
152	titiro	1	0.11	1	50.00	0.00
153	tīmata	1	0.11	1	50.00	0.00
154	tima	1	0.11	1	50.00	0.00
155	tīkina	1	0.11	1	50.00	0.00
156	tī	1	0.11	1	50.00	0.00
157	Tēnā	1	0.11	1	50.00	0.00
158	tēnā	1	0.11	1	50.00	0.00
159	tāwāhi	1	0.11	1	50.00	0.00
160	taukaea	1	0.11	1	50.00	0.00
161	tau	1	0.11	1	50.00	0.00
162	taputapu	1	0.11	1	50.00	0.00
163	tangata	1	0.11	1	50.00	0.00
164	tana	1	0.11	1	50.00	0.00

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
165	tamariki	1	0.11	1	50.00	0.00
166	take	1	0.11	1	50.00	0.00
167	so	1	0.11	1	50.00	0.00
168	rohe	1	0.11	1	50.00	0.00
169	roa	1	0.11	1	50.00	0.00
170	Reka	1	0.11	1	50.00	0.00
171	reka	1	0.11	1	50.00	0.00
172	reanga	1	0.11	1	50.00	0.00
173	rautaki	1	0.11	1	50.00	0.00
174	Ranginui	1	0.11	1	50.00	0.00
175	pouri	1	0.11	1	50.00	0.00
176	poto	1	0.11	1	50.00	0.00
177	pōraruraru	1	0.11	1	50.00	0.00
178	piro	1	0.11	1	50.00	0.00
179	pikinga	1	0.11	1	50.00	0.00
180	patu	1	0.11	1	50.00	0.00
181	parakatihi	1	0.11	1	50.00	0.00
182	pakanga	1	0.11	1	50.00	0.00
183	oti	1	0.11	1	50.00	0.00
184	ōrite	1	0.11	1	50.00	0.00
185	oranga	1	0.11	1	50.00	0.00
186	Ono	1	0.11	1	50.00	0.00
187	ono	1	0.11	1	50.00	0.00
188	ōna	1	0.11	1	50.00	0.00
189	Ōku	1	0.11	1	50.00	0.00
190	ōku	1	0.11	1	50.00	0.00
191	ō	1	0.11	1	50.00	0.00
192	Ngā Puhi	1	0.11	1	50.00	0.00
193	noho	1	0.11	1	50.00	0.00
194	nekunga	1	0.11	1	50.00	0.00
195	nau	1	0.11	1	50.00	0.00
196	nama	1	0.11	1	50.00	0.00
197	mutu	1	0.11	1	50.00	0.00
198	mōhio	1	0.11	1	50.00	0.00

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
199	moe	1	0.11	1	50.00	0.00
200	mimiti	1	0.11	1	50.00	0.00
201	Mika	1	0.11	1	50.00	0.00
202	mēnā	1	0.11	1	50.00	0.00
203	mehemea	1	0.11	1	50.00	0.00
204	mau	1	0.11	1	50.00	0.00
205	mātou	1	0.11	1	50.00	0.00
206	matatau	1	0.11	1	50.00	0.00
207	Mātaki	1	0.11	1	50.00	0.00
208	Māku	1	0.11	1	50.00	0.00
209	makariri	1	0.11	1	50.00	0.00
210	kura	1	0.11	1	50.00	0.00
211	Kua	1	0.11	1	50.00	0.00
212	koura	1	0.11	1	50.00	0.00
213	koti	1	0.11	1	50.00	0.00
214	kore	1	0.11	1	50.00	0.00
215	kōnae	1	0.11	1	50.00	0.00
216	Koirā	1	0.11	1	50.00	0.00
217	koe	1	0.11	1	50.00	0.00
218	kite	1	0.11	1	50.00	0.00
219	kiriata	1	0.11	1	50.00	0.00
220	kiore	1	0.11	1	50.00	0.00
221	kimi	1	0.11	1	50.00	0.00
222	kī	1	0.11	1	50.00	0.00
223	Ki	1	0.11	1	50.00	0.00
224	kē	1	0.11	1	50.00	0.00
225	Kātahi	1	0.11	1	50.00	0.00
226	karaka	1	0.11	1	50.00	0.00
227	karaehe	1	0.11	1	50.00	0.00
228	kapu	1	0.11	1	50.00	0.00
229	Kahupapa	1	0.11	1	50.00	0.00
230	kahupapa	1	0.11	1	50.00	0.00
231	kaha	1	0.11	1	50.00	0.00
232	iti	1	0.11	1	50.00	0.00

WordSmith Tools: List of words excluded from word-cloud analyses						
N	Word	Frequency	%	Texts	%	Dispersion
233	Nāianei	1	0.11	1	50.00	0.00
234	ihipani	1	0.11	1	50.00	0.00
235	ihiihi	1	0.11	1	50.00	0.00
236	hunga	1	0.11	1	50.00	0.00
237	hū	1	0.11	1	50.00	0.00
238	hokohoko	1	0.11	1	50.00	0.00
239	Hokianga	1	0.11	1	50.00	0.00
240	hinuhinu	1	0.11	1	50.00	0.00
241	hiahia	1	0.11	1	50.00	0.00
242	here	1	0.11	1	50.00	0.00
243	Heoi	1	0.11	1	50.00	0.00
244	heoi	1	0.11	1	50.00	0.00
245	heke	1	0.11	1	50.00	0.00
246	hei	1	0.11	1	50.00	0.00
247	hau	1	0.11	1	50.00	0.00
248	hātakēhi	1	0.11	1	50.00	0.00
249	Harley	1	0.11	1	50.00	0.00
250	hāpai	1	0.11	1	50.00	0.00
251	Engari	1	0.11	1	50.00	0.00
252	engari	1	0.11	1	50.00	0.00
253	eke	1	0.11	1	50.00	0.00
254	ehara	1	0.11	1	50.00	0.00
255	Dress-Smart	1	0.11	1	50.00	0.00
256	boy	1	0.11	1	50.00	0.00
257	awhi	1	0.11	1	50.00	0.00
258	Auē	1	0.11	1	50.00	0.00
259	ata	1	0.11	1	50.00	0.00
260	ara	1	0.11	1	50.00	0.00
261	Anei	1	0.11	1	50.00	0.00
262	anei	1	0.11	1	50.00	0.00
263	Akuhata	1	0.11	1	50.00	0.00
264	aka	1	0.11	1	50.00	0.00
265	ai	1	0.11	1	50.00	0.00
266	ahakoa	1	0.11	1	50.00	0.00


Te
Mātāwai