TE RERENGA Ä TE PÏRERE

A LONGITUDINAL STUDY OF KÖHANGA REO AND KURA KAUPAPA MÄORI STUDENTS

PÜRONGO TUATAHI
PHASE 1 REPORT

Garrick Cooper, Vyletta Arago-Kemp, Cathy Wylie,
and Edith Hodgen

HE WHAKAMIHI
ACKNOWLEDGMENTS

Ehara taku toa i te toa takitahi, ëngari he toa takitini!

Ka whai wähi nei mätou ki te whakamihi i ngä tängata i kaha tautoko mai i a mätou. He nui ngä tängata. He mahi ohu te ähua o ngä mahi nei. He nui ngä tängata i takoha mai i ngä aho mö te whäriki i rärangatia ai, arä, ko te pürongo e whai iho nei. Ki te kore koutou, kua kore hoki tënei kaupapa rangahau!

Tuatahi, tënei ka mihi kau atu ki ngä tamariki, ngä mätua, ngä kaiako, ngä tümuaki no ngä köhanga reo me ngä kura kaupapa Mäori i whakaae ki te uru mai ki tënei kaupapa rangahau. He mihi aroha, he mihi mutunga kore ki a koutou. Tënä koutou katoa.

I whakatüria ai he kömiti whakaruruhau hei puna whakaaro mö tënei rangahau. He pükenga ä rätou mö ënei mea te rangahau me te mätauranga. Nä rätou i poipoi te anga me te kiko o tënei rangahau. No reira, he mihi nunui ki a koutou. Ko ngä tängata kei roto i te kömiti i tënei wä, ko Mere Berryman (Poutama Pounamu), ko Cath Rau (Kia Äta Mai Trust), ko Cathy Dewes (Te Rünanga Nui o Ngä Kura Kaupapa Mäori), ko Arapera Royal-Tangaere räua ko Kathie Irwin (Te Köhanga Reo National Trust), ko Stuart McNaughton räua ko Margie Hohepa (Te Whare Wänanga o Tamaki Makaurau), ko Lynette Carkeek räua ko Heleen Visser (Te Tähuhu o Te Mätauranga), ko Alice Patrick (Te Puni Kökiri), oti atu ko Dick Grace (te Pükenga o Te Rünanga o Aotearoa Mö Te Rangahau I Te Mätauranga). Kua wehe atu ëtahi o te kömiti mai i te wä i timata ai te rangahau nei; ko Peggy Luke-Ngaheke (Te Köhanga Reo National Trust), ko Kath Boswell (Te Puni Kökiri), ko Lynne Whitney rätou ko Fred Bishop, ko Airini (Te Tähuhu o Te Mätauranga), tae noa ki a Cedric Croft (Te Rünanga o Aotearoa Mö Te Rangahau i Te Mätauranga). I a mätou e wänanga ana i te anga rangahau nei, i whakaritea ai he kömiti iti. Ko töna kaupapa he hanga aromatawai mö te kaupapa ake. Koinei ngä tängata i whakapau kaha ki te hanga i ngä aromatawai; ko Mere Berryman, ko Cathy Dewes, ko Cath Rau, rätou ko Margie Hohepa. Tënä rawa atu koutou katoa! Käre i tua atu i a koutou.

He nui tonu ngä tängata nö Te Rünanga o Aotearoa Mö Te Rangahau I Te Mätauranga i mahi i runga i tënei rangahau. I töna tïmatatanga, ko Sheridan McKinley te kairangahau. Näna te käkano i whakatö. Tënä rawa atu koe Sheridan. Na Edith Hodgen räua ko Barb Bishop i tätari i ngä tatauranga. He kaha nä Roberta Tiatia räua ko Christine Williams ki te whakatikatika i ngä pëpa uiui, ki te whakawhiti-ä-tuhituhi i ngä kohinga körero. Na Cedric Croft i äwhina mai ki te mahi aromatawai. Na Maria Maniapoto i whakaröpü i ngä kohinga körero. Ko Taina McGregor, ko Vyletta Arago-Kemp rätou ko Garrick Cooper ngä kairangahau mö tënei kaupapa. Nä rätou anö hoki i whakatutuki i ngä uiuinga me ngä aromatawai ki te taha o ngä tamariki, ngä mätua, ngä kaiako, më ngä tumuaki. He mihi hoki ki a Cathy Wylie he kaha nöna ki te tiaki i te kaupapa i te wehenga atu o Sheridan. Näna anö hoki i äta titiro ki ngä whakahaeretanga, i äwhina atu i ngä kairangahau. Na Robyn Baker i whakawhitiwhiti körero, i wänanga i te kawenga o te kaupapa me ngä kairangahau kia tötika ai te whakahaere. Ahakoa, kätahi anö a Jane Gilbert ka eke mai ki runga i te waka, he përä anö täna mahi. Nö reira, ka nui te mihi. Tënä koutou katoa!

Na Te Tähuhu o Te Mätauranga te pütea mö tënei kaupapa i tuku mai i runga i te kirimana i waenga i a rätou me Te Rünanga o Aotearoa Mö Te Rangahau I Te Mätauranga. I te tïmatatanga o te rangahau nei ka tukuna mai e Te Puni Kokiri he pütea hei tätari i ngä momo aromatawai. Nö reira, ka mihi ake ki Te Tähuhu o Te Mätauranga me Te Puni Kökiri. Tënä korua!

CONTENTS

List of Tables

List of Figures

WHAKARÄPOPOTONGA MATUA

Ko te ingoa o tënei kaupapa rangahau, ko *Te Rerenga ä Te Pïrere*, ä, ko ngä pïrere e körerotia ake nei, ko ngä tamariki o te rangahautanga kua wehe atu, kua tata ränei te wehe atu i te köhanga reo, kua tïmata te rere i te ao mätauranga whänui, me te rapu i tënei mea te mätauranga Mäori mä roto i ngä kura kaupapa Mäori.

I raro i Te Rerenga ä te Pïrere, ka äta tirohia ngä tamariki i te köhanga reo me te kura kaupapa Mäori. Anei ngä whäinga o te rangahautanga nei:

- he whakaatu i te neke whakamua o ngä tamariki i roto i ngä tau e whä, me te whakaatu i ëtahi tauira o te pakari haere o ngä tamariki i roto i ngä akomanga kaupapa Mäori; hei whakatutuki i tënei, ka whäia ëtahi huinga tamariki e toru (ko ngä 'tëina' – kei te takiwä o te 5 tau te pakeke o ërä i te tïmatanga o te mahi rangahau, ko ngä 'taiohi' – kei te takiwä o te 8 tau ërä, me ngä 'tuäkana' – kei te takiwä o te 11 tau ërä);

- he whakaahua i te reo Mäori o ngä tamariki, me te ähua o tä rätou uru atu ki ngä tikanga Mäori, i tënä taumata, i tënä taumata o ngä akomanga kaupapa Mäori, mai i ngä tamariki he tata ki te 5 ö rätou tau, puta atu ki ërä he tata ki te 14 ö rätou tau;

- he whakaahua i ngä akoranga kaupapa Mäori i tënä taumata, i tënä;

- he whakaahua, he tätari i te wähi ki te käinga, ki te köhanga reo me te kura i roto i te matatau o ngä tamariki Mäori ki te körero me te tuhi i te reo Mäori, tö rätou möhio ki ngä tikanga Mäori, tö rätou möhio ko wai rätou, me tö rätou kaha ki ngä mahi pängarau.

I tua atu i tërä, ka tirohia te whakawhiti atu a ngä tamariki i te köhanga reo ki te kura kaupapa Mäori, ä, atu i te kura kaupapa Mäori ki te wharekura. Ka tirohia anö hoki te wähi ki te reo Mäori hei whakapakari i ëtahi atu pümanawa. Ko tëtahi tino painga o te kaupapa nei kua kitea i te takanga o te wä, kei te whakaata i ëtahi kura maha, e möhiotia ai ngä ähuatanga örite me ngä ähuatanga rerekë.

He rangahautanga tautini tënei, e whaiwhai haere ana i ngä tamariki i tïpakohia mö ngä tau e whä. I tïmataria i te wähanga tuarua o te tau 2001, ä, mai i tërä wä kua kohia he pärongo ia tau e pä ana ki ö rätou käinga, ö rätou akomanga kaupapa Mäori, me tö rätou kaha ki te whakatutuki i ëtahi mahi e pä ana ki te reo Mäori, ngä tikanga Mäori me te pängarau. I ia wä rangahau, ka patapataihia te tamaiti, ka whakaotia e ia ëtahi mahi, ä, ka patapataihia anö hoki ko tëtahi o öna mätua me tana kaiako. Ka kohia he pärongo mai i te tumuaki mö te akomanga kaupapa Mäori e noho ana te tamaiti. He mea patapatai anö hoki ngä mätua o te huinga tëina i waenga o te tau 2002, kia möhiotia ai pëhea te ähua o tä rätou takahi i te ara atu i te köhanga reo ki te kura.

E whakaatu ana te Hoahoa 1 i te wätaka mö te mahi rangahau nei. Ka whäia te huinga Tëina mai i te wä e 5 ngä tau ki te wä e 8 ngä tau, ko te huinga Taiohi mai i te wä e 8 ngä tau ki te wä 11 ngä tau, me te huinga Tuäkana mai i te wä 11 ngä tau ki te wä 14 ngä tau.

Hoahoa 1
Ngä huinga tamariki 2001–04
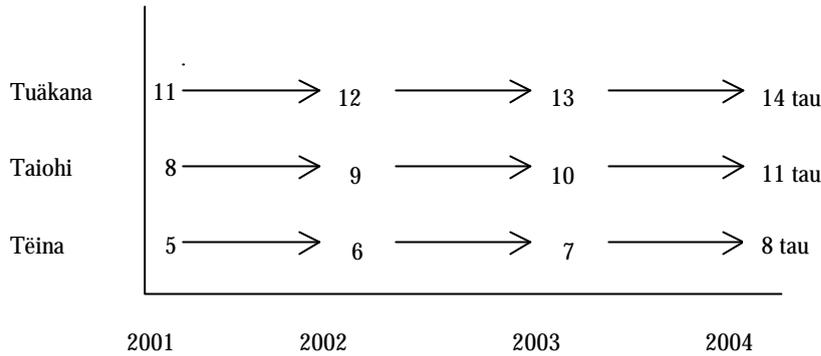
Ko te wähanga tuatahi o ngä mahi kohikohi pärongo te aronga o tënei pürongo. I tënei wähanga tuatahi, 111 ngä tamariki i uru mai ki te rangahautanga: e 33 ngä 'tëina', o roto i ngä köhanga reo 16, e 37 ngä 'taiohi', ä, e 41 ngä 'tuäkana', o roto i ngä kura kaupapa Mäori e iwa huri noa i te motu.

TE ÄHUA O NGÄ AKORANGA KAUPAPA MÄORI

He tokoiti ngä tamariki i te nuinga o ngä akomanga kaupapa Mäori i tirohia i tënei rangahautanga. Ko te hua o tënei, i möhio pai ngä tamariki me ngä kaiako ki a rätou anö. He tokomaha anö te hunga tüao, engari i waho kë o te akomanga te nuinga o ä rätou äwhina. Ko te take pea i përä ai, käore ëtahi i kaha ki te körero Mäori. Kotahi anake te kura nö te iwi kotahi te katoa o ana tamariki. Arä ëtahi kura/köhanga reo maha ko te reo Mäori te reo tuatahi o te nuinga o ngä tamariki, engari i te nuinga, he iti ake i te 10 örau te tokomaha o ngä äkonga ko te reo Mäori tö rätou reo tuatahi. Ko te nuinga o ngä hapori i noho ai ngä köhanga me ngä kura nei, käore i tino nui te moni e whiwhi ana tënä me tënä tangata.

Ko te kaupapa matua a ngä köhanga reo me ngä kura kaupapa Mäori, ko te whakaako i te reo me ngä tikanga Mäori i tëtahi taiao ähuru, ä, ko te whai kia pakari te tü a ngä äkonga i runga i tö rätou möhio ko wai rätou. Koia anö te tino take i tukuna ai e ngä mätua ä rätou tamariki ki reira. He mea nui anö ki ngä mätua te aro nui ki te whänau i roto i ngä mahi.

Ko ëtahi momo mätauranga me ëtahi whakaaro Mäori i häpaitia e te nuinga o ngä köhanga reo me ngä kura, ko: te karakia, te pepeha, te whakapapa, te manaakitanga, te waiata, te pakiwaitara, te whanaungatanga me te mihi. He manaaki tonu tä ngä tuäkana tokomaha, käore i tatari kia tohutohungia. Käore ngä ariä përä i te tapu, i te kaiako, me te mana i äta whakaakona ki te nuinga o ënei tamariki, engari i puta noa ake i roto i ngä mahi whakatauira me ngä whakawhitinga whakaaro i ngä wä e hängai ana, hei tauira, i te hokinga mai i tëtahi hui.

Kei raro paku iho i te haurua o ngä kaiako me ngä tumuaki o ngä köhanga reo me ngä kura i rangahaua, ko te reo Mäori tö rätou reo mätämua. Ko tëtahi haurua i kï mai he matatau rätou ki te körero Mäori, ä, he tokomaha ake i tërä te hunga i kï mai ka märama pai noa iho rätou ki te reo Mäori e körerotia ana, ahakoa ki hea, ahakoa anö te kaupapa. E rua hautoru o ngä kaimahi i ngä kura i mea mai he kaha rätou ki te tuhi i te reo Mäori.

Ko te nuinga o ngä kaiako, kua roa e whakaako ana, kua whiwhi tohu mätauranga whakaako anö hoki. Ko te whakapono o te katoa, he mea nui ngä whakaakoranga kaupapa Mäori. He nui ake te örau o ngä kaimahi i ngä kura kua whai wähi atu ki ngä akomanga reo Päkehä, tënä i ngä kaimahi i ngä köhanga.

He wähi anö ki ngä whänau i roto i ngä whakahaere o ngä köhanga reo me ngä kura. He whai ohu te nuinga, me te äwhina tüao mai anö a ngä whänau. Ko tëtahi haurua pea o ngä köhanga me ngä kura i kï mai i tino kaha te tautoko mai a ngä mätua. He tata ki te huarua o ngä mätua o ngä tamariki i tirohia ka whai wähi atu ki te köhanga, te kura ränei kei reira ä rätou tamariki i tëtahi wä kotahi ia wiki. Ä ko tëtahi hauwhä, whai wähi atu ai i ia rä. Me te puta anö o ëtahi hua ki ngä whänau, i te mea kua kaha ake tä rätou körero Mäori, kua kaha ake te uru atu ki ngä akoranga reo Mäori. Me körero anö ngä kuia me ngä koroua o ngä tamariki, i äwhina atu i tëtahi haurua o ngä köhanga reo me ngä kura, he hiahia noa iho nö rätou ki te tautoko i te kaupapa.

He iti ake te örau o ngä whänau me ngä kaitüao i tipu ake ki te reo, he matatau ränei ki te reo Mäori, tënä i te tokomaha o ngä kaiako i përä te ähua. He paku iti ake i te hautoru o ngä mätua o ngä tamariki i tirohia, i körero Mäori i a rätou i te köhanga, i te kura ränei o ä rätou tamariki. E ai ki ngä kaiako o ngä tamariki, ko tëtahi 30 örau pea o ngä mätua he kupu ruarua kau, he mihi poto noa ränei te mea e taea ana e rätou ki te reo Mäori. Tekau mä whitu örau i kïia e ngä kaiako he matatau ki te reo, otirä, he tokomaha ake i tërä i waenga i ngä whänau o ngä tuäkana. E 24 örau i kïia he tino märama ki ngä körero Mäori a ëtahi atu, ahakoa te kaupapa. He mea akiaki ngä whänau e ngä kaiako kia körero Mäori, mä te körero Mäori tonu ki a rätou, mä te akiaki i a rätou kia uru ki ngä akoranga reo Mäori, kia äwhina anö i ä rätou tamariki ki te whakaotioti i ngä mahi kura ka whakahokia ki te käinga.

Ko te reo Mäori anake te reo körero o ngä tamariki i tëtahi rua hautoru o ngä köhanga reo, me te hautoru kotahi o ngä kura i rangahaua. Ko ngä tino wähi/wä i tahuri ai ki te reo Päkehä, ko te papa täkaro me te tina, käore i roto i te akomanga, ä, ko ngä tino take i körero Päkehä ai, he kore nö rätou i möhio ki te kupu Mäori, he höhä ränei, i te mea ränei e körero ana ki tëtahi atu käore i möhio ki te körero Mäori.

Whakaakona ai te reo Päkehä e ngä kura katoa, ä, i te nuinga i tïmata ngä akoranga nei i te Tau 6. Whakaritea ana e te nuinga he rüma motuhake mö tënei, he wähi motuhake ränei i waho o te kura.

Ko ngä tino puna körero mö ngä mätua i möhio ai rätou e pëhea ana te haere o ä rätou tamariki, ko ngä pürongo ä-tuhi, tae atu ki ngä whakawhitiwhiti körero noa. Ko tëtahi huarua pea o ngä mätua o ngä tamariki i äta tirohia, i hoatu noa i ngä körero ki ngä kaiako mö ä rätou tamariki, käore i tatari kia uiuia. He huarahi tënei i tautokona ai e ngä mätua te ako a ngä tamariki. He tata ki te katoa o ngä mätua he pai noa iho ki a rätou te körero tahi ki te kaiako, ä, kei raro paku iho i te huarua kua äta mahi tahi ki te kaiako ki te whakatatü i tëtahi raruraru kua pä ki ä rätou tamariki. Ko te nuinga o ënei momo raruraru i ngä köhanga, he raruraru whanonga, kare-ä-roto ränei; i ngä kura, ko ngä raruraru whanonga, kare-ä-roto, tae atu anö pea ki ngä raruraru taha mätauranga.

Ko te whakaaro o te katoa o ngä mätua o ngä tamariki i ngä köhanga reo, me te tino nuinga o ngä mätua o ngä tamariki i ngä kura, he pärekareka ki ä rätou tamariki ö rätou huarahi rapu mätauranga, ä, i pai anö ki ngä nuinga o ngä mätua te ähua o te ako a ngä tamariki.

Ki tä ngä kaiako, ko te mahi kia whaikiko, kia ngahau anö ngä akoranga, kia kaua ngä tamariki e matemoe, e matekai ränei, me te noho mai o ngä kaiako pai ngä mea nui e pai ai te noho a ngä

tamariki i te köhanga me te kura. Ka whakaaturia anö e ngä kaiako ngä ähuatanga i te käinga tërä ka whakararu i tënei, ä, ko te korekore o te reo Mäori i reira tëtahi mea nui.

Ngä tirohanga ä ngä tamariki mö ä rätou akoranga

Kei te takiwä o te haurua ngä tamariki kua roa ake i te 3 tau i roto i te köhanga reo. Ka mutu, kua noho te nuinga ki te köhanga/kura kotahi, me te aha, kua whiwhi hoa pümau. I möhio ngä tuäkana ko te kaupapa matua e haere nei rätou ki tëtahi kura kaupapa Mäori, hei ako i te reo Mäori. Ngahau ana ki a rätou tö rätou huarahi ako, me tö rätou pärekareka anö ki te ako i te reo Mäori. I whakahuatia ake anö e ëtahi te pai o ëtahi wähanga ako o te marautanga, me ngä tikanga Mäori. Ki tä rätou, nä tö rätou huarahi rapu i te mätauranga, kua möhio ake rätou ko wai rätou, ä, kua möhio ake ki te reo Mäori. Ka pätaihia atu ngä tuäkana nei he aha ngä mea nui ki a rätou ka pakeke ana rätou, i reira ka kitea ëtahi o ngä uara koia te tüäpapa o te kura kaupapa Mäori: ko te whänau, ko te eke ki ngä taumata o te mätauranga me te whiwhi mahi, tae atu hoki ki te ako i te reo Mäori.

Ko te pängarau te kaupapa ako i rata ai te nuinga o ngä äkonga i ngä kura i rangahaua. Ko ngä mea käore i pai ki a rätou, ko te taunu me ngä mahi tükino a ëtahi äkonga. Whakaritea ai e ngä kura he 'mahi käinga' mä te nuinga o ngä taiohi me ngä tuäkana i ia wiki, ä, i whakaae te nuinga o ngä äkonga e tika ana anö kia oti i a rätou aua mahi. Ko te wä toharite i pau i ngä taiohi ki ngä mahi kura i whakaritea mö te käinga, he ähua 1-1.5 häora. Mö ngä tuäkana, he ähua 1.5-2 häora. Käore he raruraru ki tëtahi 42 örau o ngä tamariki te whakaoti i ä rätou mahi kura i te käinga; ko ngä uauatanga matua, ko te uaua tonu o ngä mahi, me ërä atu tamariki o te whänau waiho ai mä ngä tuäkana nei e tiaki.

Te reo Mäori i te käinga me ngä rauemi tautoko ä ngä mätua

Ko te reo Mäori te reo tuarua o tëtahi 78 örau o ngä mätua/kaitiaki o ngä tamariki i patapataihia. He tokomaha ake ngä mätua/kaitiaki o nga tuäkana i pakeke mai ki te reo, tënä i ngä mätua/kaitiaki o ërä atu huinga tamariki. Ko tëtahi take i përä ai, ko ngä kuia me ngä koroua ngä kaitiaki o tëtahi hauwhä o tërä huinga. E ai ki tä ngä mätua i tohu ai mö rätou anö, kei runga ake rätou i ngä tatauranga mö ngä pakeke Mäori o te motu whänui mö te pai ki te körero Mäori, te märama ki te reo Mäori, me te tuhituhi i te reo Mäori. E 29 örau o ngä tamariki e noho ana ki tëtahi käinga kotahi, nui ake ränei, ngä pakeke ka maringi noa te reo Mäori i a rätou, he hauwhä e noho ana ki tëtahi käinga kotahi, nui ake ränei, ngä pakeke ka märama noa ki te reo Mäori, ahakoa te kaupapa, he hautoru e noho ana ki tëtahi käinga kotahi, nui ake ränei, ngä pakeke he kaha ki te tuhi i te reo Mäori. Ko te reo Mäori te reo matua i tëtahi 15 örau o ngä käinga o ngä tuäkana; he rere ngätahi te reo Mäori me te reo Päkehä i tëtahi hauwhä o ngä käinga.

Arä tëtahi hauwhä o ngä mätua/kaitiaki i mea mai ko te nuinga, ko te katoa ränei o ä rätou körerorero tahi ki ä rätou tamariki, kei te reo Mäori. He haurima noa iho i mea mai korekore nei, he tino iti ränei ä rätou körerorero tahi ki te reo Mäori. Ko tä tënei e tohu ana, ko te nuinga o ngä tamariki e körerorero Mäori ana i ö rätou käinga. I tua atu i te whakawhiti körero noa, ko ngä mahi i oti i te tamaiti i te köhanga, i te kura ränei i taua rä, koia tëtahi tino kaupapa i körerotia ki te reo Mäori. Ko te häkinakina me te whakapapa ëtahi atu kaupapa i körero nuitia ki te reo Mäori. Körero Mäori ai te nuinga o ngä tuäkana ki ngä mea e noho ana i ö rätou käinga, tae atu anö hoki ki ërä atu tamariki.

He tata ki tëtahi huarua o ngä tuäkana ka rongo anö i te reo Mäori e körerotia ana i te marae, ä, i ëtahi atu o te whänau käore e noho tahi ana ki a rätou. Ko ö rätou kuia, koroua ërä, tae atu ki ö rätou päpä, whaea, me ëtahi anö. Kei raro paku iho i te hautoru o ngä tamariki i tirohia, haere ai ki ö rätou ake marae i ia marama, ä, haere ai tëtahi toru haurima ki tëtahi marae kë atu i ia marama.

Kei raro paku iho i te rua haurima o ngä tamariki kite ai i tëtahi atu e pänui ana, e tuhi ana ki te reo Mäori i ia rä, engari ko ëtahi, me uaua ka kite i tëtahi atu e tuhi ana, e pänui ana i te käinga, ahakoa reo Mäori, reo Päkehä kë ränei. Ko te nuinga o ngä tuhinga e pänuitia ana e ngä pakeke, he tuhinga poto noa.

Ko te tokomaha o te hunga he reo tuarua mö rätou te reo Mäori, kei te ako i te reo Mäori, e mea ana ränei ki te ako. E rua whakaraunga te kaha ake o te whäia o ngä akoranga körero Mäori, tënä i ngä akoranga wetewete reo, tuhituhi ränei.

He tata ki tëtahi haurua o ngä käinga käore i tino nui te moni e whiwhi ana rätou, ä, he iti ake te örau o ngä käinga he hipa ake i te $70,000 ä rätou whiwhinga moni, tënä i te örau mö te iwi Mäori whänui. E honoa ana te iti o ngä moni e whiwhi ana tënä me tënä ki te rahi o te kore mahi i waenga i ngä mätua/kaitiaki i rangahaua (otirä, 10 ngä kaumätua i roto i tënei röpü). Heoi anö, he nui ake te örau o ngä mätua/kaitiaki he türanga mahi ngaio ö rätou, tënä i te örau o te iwi Mäori whänui, otirä, o te motu whänui. Ko te take i përä ai, he tokomaha tonu nö ngä kaiako ko rätou ngä mätua/kaitiaki o ngä tamariki i äta tirohia.

Waihoki, he iti ake te örau o ngä mätua/kaitiaki karekau ö rätou tohu mätauranga kura, tënä i te taupori Mäori pakeke. Heoi anö, he tokoiti ake ngä pakeke kua whiwhi i te Tiwhikete Pae Tuaono, i te Tohu Whakauru Whare Wänanga ränei. Kua whiwhi te nuinga o ngä mätua/kaitiaki i t/ëtahi tohu mätauranga i muri i te putanga i te kura, engari ko te nuinga, he tohu 'ringarehe', he akoranga poto noa ränei. He tata ki tëtahi haurua e whai ana i tëtahi momo akoranga.

He tiketike tonu ngä wawata taha mätauranga o ngä pakeke nei mö ä rätou tamariki. E 45 örau i hiahia kia tae atu ä rätou tamariki ki te whare wänanga, ki tëtahi atu whare mätauranga pae tuatoru ränei. Ko te tümanako anö o te tokomaha, kia mätau tonu ä rätou tamariki ki te reo me ngä tikanga Mäori, kia möhio pü ko wai rätou, kia pakari te tü i te ao Mäori me te ao Päkehä, ä, kia pai ake tö rätou huarahi rapu i te mätauranga, tënä i te huarahi i whäia e rätou, e ngä pakeke.

TE WHAKAMAHINGA A NGÄ TAMARIKI I TE REO MÄORI ME Ä RÄTOU MAHI I TE KAINGA

Ngahau ana te körero Mäori ki te nuinga o ngä tamariki i äta rangahaua. Heoi anö, arä tëtahi haurima o ngä tuäkana i kï mai i öna wä anö pea i ngahau, käore ränei rätou i tino möhio mehemea i ngahau. Körero Mäori ai tëtahi toru hauwhä i ëtahi wä i ö rätou käinga, ki ö rätou hoa hoki. He körero Mäori tëtahi hautoru i roto i ngä toa. Heoi anö, ko te köhanga reo me te kura ngä tino wähi i tautokona ai tä rätou körero i te reo Mäori koia anake. Arä në, ko te tino take i tahuri ai ki te reo Päkehä, he kore nö te hoa körero i möhio ki te reo Mäori. He tokoiti noa i körero Päkehä he hiahia noa iho nö rätou ki te përä. Engari e rua whakaraunga te kaha ake o te puta o tënei take i ngä tuäkana, tënä i ngä äkonga tamariki ake.

Engari ki ngä whakaaturanga mai a ngä mätua/kaitiaki, mö tëtahi rua hautoru o ngä tamariki i tirohia, ko te reo Päkehä te reo körero nuitia ai i te käinga, i ngä körerorero anö ki ngä hoa. I përä

ai, i te mea ko te reo Päkehä te reo matua o aua käinga. Arä tëtahi haurima i whakaaro he mämä ake ki ä rätou tamariki te whakapuaki i ö rätou whakaaro ki te reo Päkehä. Ki tä ngä whakaaturanga, e whakaae ana ngä tamariki he wähi anö kei te reo Päkehä i roto i ngä kawenga o ia rä.

He whakawhitiwhiti tonu te nuinga o ngä tamariki mai i te reo Mäori ki te reo Päkehä, ä, mai te reo Päkehä ki te reo Mäori. Ko ngä take nui i pënei ai, ko te kore o te hoa körero i möhio ki te reo Mäori ka tahi, ko tö rätou ake kore möhio ki te kupu tika ka rua, ki te whakatakoto tika ränei i te whakaaro ki te reo Mäori ka toru.

Pänuitia ai he tuhinga reo Mäori ki tëtahi haurua o ngä tëina i ia rä. Ka pänuitia anö he tuhinga reo Päkehä ki a rätou, engari kaua i ia rä. He möhio anö te nuinga e honoa ana ëtahi oro ki ëtahi pü - he tohu pai tënei o ngä pükenga pänui 'pitomata'. I takea mai te maha tonu o ngä tuhinga reo Mäori i whakaritea e ngä mätua mä ngä tamariki i te köhanga reo tonu. E ai ki ngä mahara o ngä tamariki, he kaha ake te pänuitanga o ngä tuhinga reo Mäori ki a rätou, tënä i ngä tuhinga reo Päkehä.

Pänui ai te tino tokomaha o ngä tuäkana i ngä tuhinga reo Mäori i te käinga. Häunga ngä hautaka kura me ërä atu tuhinga mai i te kura, pänui ai rätou i ngä momo körero e pänuitia ana e ngä pakeke. E ai ki ngä rongo, he hanga pärekareka ki ngä tamariki te pänui. Ko te kura te puna matua o ngä tuhinga reo Mäori i pänuitia i te käinga, engari ko te whare pukapuka anö tëtahi.

He pänui tuhinga reo Päkehä anö tëtahi haurua o ngä taiohi, me tëtahi toru hauwhä o ngä tuäkana i ö rätou käinga.

He möhio te tino tokomaha o ngä tëina ki te tuhi i ö rätou ake ingoa, ä, he whai hoa ëtahi i te käinga e pai ai tä rätou kawe ngätahi i ëtahi mahi tuhituhi ki te reo Mäori, ki te reo Päkehä anö.

Ko te tuhituhi tëtahi mahi i kawea e te tino nuinga o ngä tuäkana i te käinga – ko ä rätou mahi kura tërä, ko te tuhi pakiwaitara tërä, ä, ko tä ëtahi, he tuhi reta ki te reo Mäori ki ngä hoa. Kei te takiwä o te toru haurima o ngä tamariki i tuhituhi anö ki te reo Päkehä. Heoi anö, ko tä ngä tamariki i whakaatu mai ai mö te rahi o tä rätou tuhituhi, käore i eke ki tä ngä pakeke i tohu ai mö rätou.

Ahakoa he whäinga nä te köhanga reo me te kura te whakaako i ngä pepeha, ki tä ngä whänau, he kawenga anö kei runga i a rätou anö ki te whakaako i ërä momo mea. He möhio te nuinga o ngä taiohi me te tino nuinga o ngä tuäkana ki ä rätou ake pepeha. He kaha anö te möhio o ngä tuäkana ki ngä ingoa o ö rätou marae.

Ki tä ngä mätua, he wähi nui kei te köhanga reo me te kura i möhio ai ngä tamariki ko wai rätou. Otirä, he mea nui anö ngä kaupapa a te whänau, te haere ki te marae me ngä hui, te körero i ngä whakapapa me ngä körero tuku iho.

E kawe ana tëtahi rua hautoru o ngä tëina i ëtahi mahi pängarau e 6, nui ake ränei, o roto i te 10 i uiuitia, i te käinga. Mö te wähi ki ngä tuäkana, ko ngä mahi pängarau käore i uru mai te körero tahi ki tëtahi atu, koirä ngä mahi i tino kaha ai tä rätou whakamahi i te reo Mäori.

Whakarongo ai tëtahi hautoru pea o ngä tamariki ki ngä reo irirangi Mäori. O roto i tënei röpü, ko ngä tuäkana ngä mea kaha te whakarongo. He tata ki te katoa o ngä tamariki mätaki ai i ëtahi

whakaaturanga pouaka whakaata Mäori. Ko Pükana te mea i tino kaha te mätakihia, koia tëtahi o ngä tino whakaaturanga e ono ki ngä tamariki i rangahaua.

E 64 örau o ngä tuäkana i tirohia, i ähei ki te whäwhä rorohiko i te käinga. Ko ngä tino kaupapa i whäia i runga i te rorohiko, ko ngä këmu, ko te paopao körero, me te whakaoti mahi kura i whakaritea mö te käinga. Ko te reo Päkehä te reo matua hei kawe i ngä mahi rorohiko whänui, engari mö te paopao körero, te mahi kura, me te whakamahi CD Rom, ko te reo Mäori kë te reo matua. He kaha ake ngä tuäkana ki te whäwhä rorohiko hei whakaoti mahi kura, tënä i ngä taiohi.

Ko tëtahi toru huarima o ngä tuäkana, kua uru ki tëtahi röpü, karapu ränei, ko te nuinga, he karapu häkinakina, he kapa haka, he röpü hähi ränei. Ko te kapa haka me ngä röpü hähi ngä wähi kaha ki te häpai i tä rätou körero Mäori.

Ko ngä mahi pärekareka tino pai ki ngä tuäkana, ko te mätaki pouaka whakaata, te noho tahi ki ngä hoa, me te häkinakina. He teitei tonu te örau o ngä tamariki kore rawa e pänui pukapuka reo Mäori (atu i ngä pukapuka kua tohua hei pänui mä rätou e te kura), moheni reo Mäori, nüpepa reo Mäori ränei. Ko te mate pea, ko te ruarua noa iho o ngä tuhinga reo Mäori ngahau, otirä, te ruarua o ngä pukapuka reo Mäori kua tuhia ahakoa he aha te kaupapa.

Ko te körero mai a te nuinga o ngä tuäkana, he piri tata rätou ki ö rätou whänau, ä, he tika te ähua o te tiaki, o te 'whakahaere' a ö rätou matua/kaitiaki i a rätou i te käinga, he maha ngä mahi parekareka hei whäinga mä rätou, ä, he kaha tonu te aro mai, te tautoko mai a te whänau i ä rätou mahi kura. Te ähua nei he tino taonga ki ngä tuäkana ö rätou whänau. Ka pätaihia rätou ko wai ä rätou tino tängata, ko te whakautu a tëtahi rua haurima, ko ö rätou whänau tonu.

Ngä tirohanga a ngä kaiako mö ngä tamariki i roto i te rangahau nei

Ki tä ngä kaiako, ko tëtahi 40 örau o ngä tamariki i tirohia, he kaha tonu, he matatau ränei ki te körero Mäori, ä, ko te nuinga o ngä tamariki he märama ki ëtahi kupu Mäori huhua, ki ëtahi rerenga Mäori huhua, i roto i ëtahi kaupapa, he pai ake ränei i tërä. E 29 örau o ngä tuäkana he kaha ki tuhi i te reo Mäori.

Ina tirohia whänuitia ngä whakaaro o ngä kaiako mö te reo Mäori o ngä tamariki i rangahaua, tae atu ki ö rätou pükenga mahi tahi, noho tahi ki ëtahi atu, ö rätou reo torohü, te kaha ü, me te uiui, e äta kitea ana he mahi nui te ako i te reo Mäori mä ngä tamariki, ä, mö ngä tamariki i ngä käinga käore i tino kaha te reo Mäori ki reira, kätahi ka tino uaua rawa atu. He mäia ake ngä tuäkana 11 ngä tau ki te körero, te märama ki te reo, me te tuhituhi i te reo Mäori, tënä i ngä mea tamariki ake. Engari mö te whakarongo, te kaha ü, me te uiui, ka ähua paheke haere. Waihoki, he nui ake te örau o ënei kua raruraru i tëtahi ähuatanga ako. Ka pätaihia te pätai he aha i pënei ai? E tohu ana ränei i ngä taumahatanga o te whakamahi tonu i te reo Mäori hei kawe i ngä mahi o ngä taumata teitei ake, he ähuatanga noa iho ränei nö te rangatahi, e whänui haere nei ö rätou ao me ö rätou hiahia, he ähuatanga whäiti ränei nö ngä tamariki o tënei rangahautanga?

Ko te "kore e mäia", ko te 'whakamä' ëtahi whakaaro i kaha te puta ake i ngä kaiako mö ngä mea e whakararu ana i te whakamahi a ngä tamariki i te reo Mäori, me tö rätou kaha ki te pängarau.

Ngā ia whānui

I kitea iho āe, he pakari ake ngā tuākana i ngā taiohi, he pakari ake anō ngā taiohi i ngā tēina, mō te wāhi ki ngā mahi i whakatakotoria hei aromatawai i ō rātou reo, tō rātou mōhio ki ngā tikanga Māori, me te pāngarau. Waihoki, he kaha ake te whakaaro ariā o ngā tuākana, he hōhonu ake ō rātou reo.

I ngā huinga e toru, mai i ngā tamariki e 5 puta atu ki te 11 ngā tau, he hononga i waenga i te kaha o tā rātou whakamahi i te reo Māori me te tutuki pai o ngā mahi i whakaritea mā rātou. He hononga anō i waenga i te tutuki pai o ngā mahi me te kaha o tō rātou rongo i te reo Māori e kōrerotia ana e te hunga matatau, i te kura, i waenga anō i te whānau me ngā hoa. Ā, i roto i ngā kaupapa ngahau pērā i te purei kāri, i te kōrerorero i te waea, he mea nui kia whiwhi hoa, whānau rānei ngā tamariki he mōhio ki te kōrero Māori, kia reo Māori ai ā rātou pārekareka tahi ki ētahi atu.

Kei ngā huinga taiohi, tēina i rangahaua ētahi atu hononga i waenga i te whakamahia o te reo Māori me te tutuki pai o ngā mahi, e tohu ana ko ngā tamariki kei te kaha ki ngā mahi, ka tipu haere tō rātou mōhiotanga, tō rātou matatau ki te reo i te takanga o te wā, ā, he tautoko tēnei i te kaha whakamahia o te reo. Ka mutu, i tērā tonu, kua pakari haere ko ngā mōhiotanga me ngā pūkenga. He hononga anō i waenga i te whakamahi i te reo Māori me ngā tikanga Māori, e whakaū ana i te whakaaro he haere kōtui ēnei taonga, te reo Māori me ngā tikanga Māori.

Mō ngā tamariki i āta tirohia, kāore te reo Māori i te noho whāiti ki te wāhi kotahi o waho atu o te kura. Koia e tuitui ana i ngā kawenga huhua ki ngā whānau i te kāinga, i hea ake rānei, ki ngā hoa, ā, i roto i te maha atu o ā rātou nekeneke o ia rā. Ko ngā tāngata, wāhi rānei e tino tautoko ana i te rere o te kupu Māori, ko te whānau, ko te marae, ko ngā hui Māori, ko ngā mahi kapa haka, ā, mō ētahi, ko te hāhi. Ko ngā wāhi me uaua ka makere mai he kupu Māori, ko ngā kōrero tahi ki te hunga kōrero Pākehā anake, inā hoki, he tamariki reorua ēnei, kua tahuri rātou ki te kōrero i te reo e mārama ana ō rātou hoa kōrero.

He mea āta kōwhiri e ngā whānau te kōhanga reo, te kura kaupapa Māori rānei hei huarahi rapu mātauranga mō ā rātou tamariki. Ko te whakaaro ia, mā te noho o ngā tamariki ki tētahi taiao e hāpai ana, e tautoko ana i tō rātou tuakiri, ka pakari haere rātou, taha mātauranga nei. He rite tonu te whakahuatia o ngā kōrero pērā i te "tū pakari" me te "tū māia" hei whakaahua i te whāinga a te kōhanga reo me te kura kaupapa Māori, me te neke whakamua o ā rātou tamariki. He mea tino nui hoki ēnei ka tipu ana te tamaiti. Kāore e kore, he hāpai anō tā rāua i te tutuki pai o ngā mahi i te tamaiti, ā, mā te tutuki pai o ngā mahi, ka tipu ko te tū pakari me te tū māia. E kitea ana ko te tuakiri, te reo, ngā taura tāngata, te mātauranga me ngā pūkenga, he aho, he whenu ka whatua ngātahitia hei kākahu whakaāhuru mō te tamaiti.

EXECUTIVE SUMMARY

Te Rerenga ä Te Pïrere means "The flight of the fledgling". The fledglings are the children in this study who have left their nest or language nest, and are taking their journey into the world of education and their pursuit of mätauranga Mäori, through köhanga reo and kura kaupapa Mäori.

Te Rerenga ä Te Pïrere is a study of children in köhanga reo and kura kaupapa Mäori, which aims to:

- chart the children's progress over a 4-year period and illuminate patterns of development of children in kaupapa Mäori education, by following three cohorts of children (Tëina, who were aged around 5 when the study started, Taiohi, who were aged around 8, and Tuäkana, who were aged around 11 years old);

- provide a description of children's use of te reo Mäori and involvement in tikanga Mäori, at each stage of kaupapa Mäori education from age near-5, to age 14;

- provide a description of their kaupapa Mäori environments at each stage; and

- describe and analyse the roles of home, köhanga reo, and kura in Mäori children's competencies in spoken and written te reo Mäori, knowledge of tikanga Mäori, their identity, and pängarau.

The project also investigates children's transition between köhanga reo and kura kaupapa Mäori, and kura and wharekura; and the role that te reo Mäori plays in the development of other competencies. One of the values of the project that has become more apparent over time is that it can provide a description of a number of kura, both their similarities and differences.

It is a longitudinal project, which follows the sample children over a 4-year period, starting in mid-late 2001, with annual collection of information about their home and kaupapa Mäori educational environments, and their performance on a set of measures related to te reo Mäori, tikanga, and pängarau. In each round, the child is interviewed, and performs tasks, and interviews are held with a parent and the child's kaiako. Information on the kaupapa Mäori educational environment is also collected from the tumuaki. The parents of the Tëina cohort were also interviewed in mid 2002 to gain a picture of their children's transition from köhanga reo into kura.

Figure 1 sets out the timelines for the project, as we follow the Tëina cohort from age 5 to age 8, the Taiohi cohort from age 8 to age 11, and the Tuäkana cohort from age 11 to age 14.

Figure 1
Cohort coverage 2001–04

```
Tuäkana   | 11 ———————> 12 ———————> 13 ———————> 14 years

Taiohi    | 8 ———————> 9 ———————> 10 ———————> 11 years

Tëina     | 5 ———————> 6 ———————> 7 ———————> 8 years
          |_____
            2001        2002        2003        2004
```
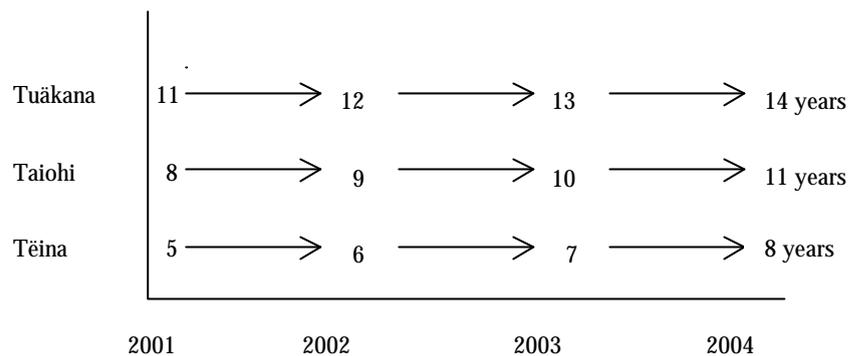
In the first phase of fieldwork, which is covered in this report, we included 111 children: 33 tëina children, from 16 köhanga reo, and 37 taiohi children and 41 tuäkana children, from nine kura kaupapa Mäori around the country.

KAUPAPA MÄORI EDUCATIONAL SETTINGS

The kaupapa Mäori educational settings in this study tended to have small rolls, allowing all children and kaiako to know each other. They also tended to have regular volunteers, with more voluntary help outside the classroom than within it, probably reflecting volunteers' confidence in te reo Mäori. All but one of the settings served children from more than one iwi. At several, most of the children were first language speakers of te reo Mäori, but it was more usual for the proportion of students who were first language speakers to be less than 10 percent. Most köhanga reo and kura in the study served low-income or low to middle-income communities.

Teaching te reo Mäori me öna tikanga in a safe environment, to develop a strong sense of pride and identity, was the main philosophy of the köhanga reo and kura, and the main reason why parents chose it for their children. It was also important to parents that it was whänau oriented.

Particular cultural knowledge and values which were emphasised in most of the köhanga reo and kura were karakia, pepeha, whakapapa, manaakitanga, waiata, pakiwaitara, whanaungatanga, and mihi. Many of the tuäkana children carried out manaakitanga without being told to do so. Values such as tapu, kaiako, and mana were not usually taught formally at these ages, but through modelling, and discussions at times when they were relevant, for example, after returning from a hui.

Mäori was the first language for just under half the kaiako, and tumuaki of the köhanga reo and kura in the study. Around half rated themselves as fluent speakers, and somewhat more thought they could confidently understand Mäori in any situation. Two-thirds of the kura staff rated themselves as confident writers in te reo Mäori.

Most of them were experienced teachers, and had teaching qualifications. They shared a strong belief in the importance of kaupapa Mäori education. Kura staff were more likely than köhanga reo staff to have had experience in English-medium education.

Whänau were involved in the organisation of the köhanga reo and kura, and most had ohu, or working parties, and whänau providing regular voluntary help. Around half the köhanga reo and

kura gave high ratings to the overall level of parental support. Just under half the parents of the study children were involved in their child's kōhanga reo or kura at least once a week, and around a quarter on a daily basis. Involvement benefited whānau, leading them speaking more te reo Māori, and pursuing te reo Māori lessons. Grandparents provided voluntary support in around half the kōhanga reo and kura.

The proportion of native and fluent second language speakers of te reo Māori was lower among the whānau and volunteers than the teachers. Just under a third of the study children's parents spoke te reo Māori when they were at their child's kaupapa Māori education centre. Around 30 percent of the parents were thought by their child's kaiako to be limited to a few words or short greetings in Māori. Seventeen percent were regarded as fluent speakers, with more for tuākana whānau, and 24 percent as confidently able to understand Māori in any situation. Teachers encouraged whānau to speak te reo Māori by speaking Māori to them, encouraging them to join te reo Māori classes, or by assisting them to help their children complete their homework.

Children spoke te reo Māori all the time in about two-thirds of the kōhanga reo, and one third of the kura in the study. They were most likely to speak English in the playground or at lunchtime, rather than in class, and to do so if they did not know a Māori word, if they were frustrated, or if they were speaking to someone who did not know te reo Māori.

All the kura taught English, most starting at Year 6 and above. It was usually taught in a separate room or off-site.

The main source of information for parents about their child's progress was through written reports and informal discussions. Around half the parents also provided kaiako with information about the study children without being asked, which helps adults support children in their learning. Nearly all the parents were comfortable talking with their child's kaiako, and just under half had worked with them on a problem their child was experiencing, mainly social-emotional in kōhanga reo, and both socio-emotional and academic at kura.

All the parents of children at kōhanga reo and almost all the parents of children at kura thought their child enjoyed their education, and most were happy with their child's learning.

Teachers thought that having an interesting programme, being well-rested and fed, and having good teachers allowed children to make the most of their time at kōhanga reo and kura. They sourced the things that could make it hard for a child to make the most of this time in the home, particularly a lack of te reo Māori.

CHILDREN'S VIEWS OF THEIR EDUCATIONAL EXPERIENCE

Around half the children had had more than 3 years' experience in kōhanga reo. They had stable peers, with most staying in the same kōhanga reo or kura. The tuākana children understood the main purpose of their attendance at kura was to learn te reo Māori. They were positive about their experiences, and enjoyed learning te reo Māori. They also spoke of curriculum areas and tikanga Māori. They saw the benefits of their education in terms of strengthening their own identity and knowledge in te reo Māori. The values underlying kura kaupapa Māori came through when we asked them what would be important for them when they grew up: whānau, getting a good education and job, and learning in te reo Māori.

Pängarau was the most popular curriculum area for kura students. Teasing and bullying were the main things the study children did not like about their kura. Most children in taiohi and tuākana had some homework each week, and thought it important to do it. The average amount of time spent on homework by taiohi children was around 1 to 1.5 hours a week, and for tuākana children, around 1.5 to 2 hours. Forty-two percent of the children did not have trouble completing their homework; the main obstacles were its difficulty, and siblings, for whom, as older children, they would have had some responsibility for.

TE REO MÄORI IN THE HOME AND PARENTAL RESOURCES

Mäori was the second language for 78 percent of the parents/caregivers of the study children whom we interviewed. Tuākana children had a higher proportion of native speakers, partially reflecting the fact we spoke to grandparents for around a quarter of these children. Overall, parents rated their Mäori speaking ability, comprehension, and writing higher than national survey data for Mäori adults. Twenty-nine percent of the children were living in households where at least one adult was a confident or fluent speaker of Mäori, a quarter in households where at least one adult could confidently understand Mäori in any situation, and a third in households where at least one adult was a confident writer in Mäori. Mäori was the main language in around 15 percent of tuākana children's homes; and either Mäori or English for around a quarter.

A quarter of the parents/caregivers said that most or all of their conversations with their child in the study were in Mäori. Around a fifth said that none or very little of their conversations were in Mäori. That means that most of the children were having at least some conversational experience in Mäori in their homes. Besides general conversation, the child's day at köhanga reo or kura afforded a topic for these conversations; sports and whakapapa were other main topics in Mäori. Most of the tuākana children also spoke in Mäori with others in their household, particularly other siblings.

Around half the tuākana children also had opportunities to hear Mäori on marae, and with whänau living outside their home, particularly grandparents and aunties and uncles. Just under a third of the study children got to their own marae, and three-fifths to another marae, at least once a month.

Just under two-fifths of the children would see someone read and write daily in Mäori, though some would see little reading or writing occurring in their home, whether in Mäori or English. Most of the Mäori reading material adults read was in the form of short pieces.

Most of those whose Mäori was a second language were learning Mäori, or intending to. Lessons in spoken Mäori were twice as frequent as those involving grammar or written work.

Almost half the households were low-income, and there were fewer households earning more than $70,000 than the total Mäori population. Income levels were related to low levels of employment among the study parents/caregivers (who included 10 grandparents). However, there was a higher proportion of parents/caregivers employed in professional occupations than for Mäori or the general population nationally, reflecting a high proportion of teachers amongst the study parents/caregivers.
There was a lower proportion of parents/caregivers with no school qualifications than the Mäori adult population, though fewer with Sixth Form Certificate or UE. Most of the parents/caregivers had gained post-school qualifications, mainly through trade and short courses. Nearly half were involved in some formal study.

Their educational aspirations for their children were high, with 45 percent identifying university or tertiary education as their preference. Most wanted their child to be strong in their knowledge of te reo Māori me ngā tikanga, have a strong identity, or be confident in walking in both worlds – and to experience a better education than they themselves had.

CHILDREN'S USE OF TE REO MÄORI AND THEIR ACTIVITIES

Most of the study children enjoyed speaking te reo Mäori. However, around a fifth of the tuäkana children said their enjoyment varied, or that they were unsure if they enjoyed it. Around three-quarters used te reo Mäori at least sometimes in their homes and with their friends, and around a third when they visited shops. Köhanga reo and kura gave them their best opportunity to use only te reo Mäori. The main reason for speaking English was the other person's lack of te reo Mäori. Only a few spoke English because they wanted to, although tuäkana children were twice as likely to give this as a reason than their younger peers.

However, parents/caregivers reported that English was the preferred language at home and with friends for about two-thirds of the study children, largely because English was the main language at home. A fifth thought their child found it easier to express themselves in English. The study children were reported to accept English as a normal part of their lives.

Most of the children switched from te reo Mäori to English while they were speaking te reo Mäori, and vice versa. The main reasons were again because the people they were with did not know te reo Mäori, or because they did not have an adequate vocabulary or knowledge of sentence structure.

Half the tëina children were read to in te reo Mäori on a daily basis, and somewhat less, in English, and most knew that certain sounds go with certain letters, a good indicator of good emergent reading skills. Köhanga reo was a major source for parents getting reading material in te reo Mäori for their children. The children remembered being read to in te reo Mäori more than they did in English.

Almost all the tuäkana children read in te reo Mäori at home, and with the exception of school journals and other material from the kura, much the same kinds of things as the adults in the household. Most of the children were said to enjoy reading. The kura was important as the main source of home reading in te reo Mäori, though the library was also a useful source.

Around half the taiohi and around three-quarters of the tuäkana children were also reading in English at home.

Almost all the tëina children could write their own name, and many had someone at home who did writing activities in te reo Mäori with them, as well as in English.

The tuäkana children almost all wrote something at home, primarily homework and stories, with some tuäkana children using te reo Mäori to correspond with others. Around three-fifths also wrote in English. Children's reports of writing indicated less activity than their parents' reports.

While kōhanga reo and kura teachers aimed to teach children their pepeha, whānau members also saw this as their responsibility. Most taiohi and almost all tuākana children knew their pepeha. Marae names were also most likely to be known by tuākana children.

Kōhanga reo and kura were seen by the parents as key experiences in the maintenance of their child's identity. Whānau activities, attendance at the marae and at hui, and talking about whakapapa and history were also important.

Two-thirds of the tēina children were undertaking at least 6 of the 10 pāngarau activities we asked about, at home. The highest use of te reo Māori for these activities in tuākana was for mathematics activities which did not necessarily involve social interaction.

About a third of the children listened to Māori radio programmes, more so for tuākana students than their younger peers. Almost all watched some Māori television programmes, particularly Pūkana, which appears in the 6 favourite programmes for the study children.

Sixty-four percent of the tuākana children had access to a computer at home. The most common use of the computer was for games, wordprocessing, and doing homework. Overall, English was the main language with which the computer was used. However, for wordprocessing, doing homework projects, and using CD Roms, Māori was the main language. Tuākana children were more likely to use the computer for doing homework or a project in te reo Māori than taiohi children.

Three-fifths of the tuākana children belonged to a club or group, mainly sports clubs, kapa haka, or church. Kapa haka and church provided the best opportunities to use te reo Māori.

Favourite spare time activities of the tuākana children included watching television, hanging out with friends, and playing sport. The proportions of those who never read a Māori book, other than for kura, or read Māori magazines or newspapers is quite high. There appears to be little leisure reading in te reo Māori, which reflects the paucity of reading material available.

Most tuākana children felt close to their whānau, felt fairly treated at home, had lots of interesting things to do, and their whānau showed interest in their school life. Whānau are highly valued: when we asked who their heroes were, they were likely to be cited by two-fifths of the tuākana children.

KAIAKO PERSPECTIVES ON THE STUDY CHILDREN

Around 40 percent of the study children were seen as confident or fluent speakers in te reo Māori, and most of the children understood at least many different words and sentences in Māori in some situations. Twenty-nine percent of the tuākana children were writing confidently in Māori.

Taken as a whole, the kaiako ratings of the study children's te reo Māori, social skills, receptive language, perseverance, and curiosity, underline the work in mastering te reo Māori that needs to occur for children who come from a range of backgrounds in terms of their exposure to, and use of, te reo Māori. As a group, the 11-year-olds in tuākana were generally more confident in their speaking, understanding, and writing Māori than their younger peers. But the slippage in their ratings for listening, perseverance, and curiosity, and the higher proportion of those identified as having some difficulty in their learning, raise the question of whether this is due to the additional

work required of them in using te reo Māori, as the level of their work in it grows more complex, or whether it is simply a reflection of an older age-group with growing outside interests, or the nature of the particular students in this study.

It is interesting that "confidence" was a key word used by kaiako in terms of barriers that were holding back children's use of te reo Māori and performance in pāngarau.

OVERALL TRENDS

We found steady growth between the cohorts for the tasks we used to assess their language, tikanga, and pāngarau, with tuākana children more able to show more conceptual thinking and complex language.

In all three cohorts, from age 5 to age 11, usage of Māori was associated with higher performance on the measures we used. There were also associations between high performance and children's opportunities to hear fluent Māori in both their kaupapa Māori education setting, and with whānau and friends. The associations with children's use of Māori in recreational activities, such as playing card, or phoning people, also show the importance for children of having whānau and friends with whom they can speak Māori while relaxing and in their social life.

There are more associations between the study children's use of Māori and higher performance for the taiohi and tēina cohorts, suggesting that for the children who are showing high performance levels, knowledge and fluency grow over time, and therefore support greater use. This use in turn develops further knowledge and skills. The associations between use of Māori and the Ngā Tikanga measure underline the critical interplay between te reo Māori and te ao Māori.

Te reo Māori does not reside in a single "place" outside the study children's educational experience, but threads through many of their interactions with whānau, in and outside the home, and in interactions with friends, and through many of their everyday practices. The opportunities to use te reo Māori are greatest with whānau, on the marae, in Māori hui, kapa haka groups, and, for some, their church. The opportunities are least with monolingual people who speak only English, because the children are bilingual and they use the language which those they are interacting with will understand.

Whānau of the study children had made a deliberate choice of kōhanga reo and kura kaupapa Māori. They expected their children to develop educationally in an environment which could affirm and support their identity. "Pride" and "confidence" were terms often used when they talked of the purpose of kōhanga reo and kura kaupapa Māori, and of what they saw of their child's progress. These are crucial to children's development. Doubtless, they contribute to children's performance, which also affirms pride and confidence. Identity, language, relationships, knowledge, and skills are interwoven.

1. TE RERENGA Ä TE PÏRERE – HE KUPU WHAKATAKI
TE RERENGA Ä TE PÏRERE – INTRODUCTION

THE JOURNEY THROUGH KÖHANGA REO AND KURA KAUPAPA MÄORI

The name of this project uses the symbolism of a fledgling beginning its journey. *Te Rerenga ä Te Pïrere* means "The flight of the fledgling". The fledglings are the children in the study who have left their nest or language nest, and are taking their journey into the world of education and their pursuit of Mätauranga Mäori, through köhanga reo and kura kaupapa Mäori. Both of these are also young, but they have grown strongly, welcomed by whänau and communities seeking to restore language and culture. Köhanga reo have now existed for 21 years. There are now 701 köhanga reo, educating 10,500 children. Kura kaupapa Mäori have now existed for 18 years. In 2002, there were 61 kura kaupapa Mäori, and 9 kura tëina, satellites of existing kura kaupapa Mäori that are supported so that they can develop into autonomous kura kaupapa Mäori, serving some 5,400 students (Ministry of Education, 2003, p. 61).

The primary goal of köhanga reo and kura kaupapa Mäori is to preserve te reo Mäori me öna tikanga Mäori and in so doing, to foster children's self-confidence and pride in being Mäori (May, 1999; Durie, 1999; Penetito, 2002; Smith, 2002).

Köhanga reo and kura kaupapa Mäori have created learning environments where te reo Mäori is the medium of communication and Mäori cultural values, knowledge, and customs are the norm. It is through total immersion that the children become fluent in te reo Mäori me öna tikanga. *Te Whäriki* and *Te Korowai* (köhanga reo), and *Te Aho Matua* (kura kaupapa Mäori) are written expressions of these values and customs that guide how learning is encouraged and enhanced within these environments.

Te Whäriki (the mat) is founded on 4 principles: Whakamana (empowerment); Kotahitanga (holistic development); Whänau Tangata (family and community); and Ngä Hononga (relationships). The "mat" in turn is made of a series of "strands" which include: mana atua (well-being); mana whenua (belonging); mana tangata (contribution); mana reo (communication); tinana (physical aspects); hinengaro (intellectual aspects); wairua (spiritual aspects); and whatumanawa (emotional aspects) (Ministry of Education, 1993).[1]

In addition to *Te Whäriki*, köhanga reo are run by the following principles which form a part of *Te Korowai* (the Te Köhanga Reo National Trust charter):

- The right of a Mäori child to be raised in the Mäori language within the bosom of the whänau.

- The right of the whänau to nurture and care for the mokopuna.

- It is the obligation of the hapü to ensure that the whänau is strengthened to carry out its responsibilities.

---

[1] See www.kohanga.ac.nz for more complete discussion of these principles. Te Whäriki is the curriculum document for all early childhood education service providers (köhanga reo included). Tamati and Tilly Reedy were involved in the development of this curriculum document.

- It is the obligation of the iwi to advocate, negotiate, and resource the hapü and whänau.

- It is the obligation of the Government under the Treaty of Waitangi to fulfil the aspirations of the Mäori people for its future generations[2].

Te Aho Matua contains a series of statements under 6 headings. They are:

- Te Ira Tangata (Physical and spiritual);

- Te Reo (Communication);

- Ngä Iwi (Identity);

- Te Ao (Environment);

- Ähuatanga Ako (Pedagogy); and

- Te Tino Uaratanga (main Outcomes).

Broadly speaking *Te Aho Matua* places emphasis on respect for individuals and the ways in which we are all different, learning through total immersion in te reo Mäori, on children becoming fully competent in both Mäori and English; the importance of a child learning about their tribal connections and respect for all iwi and peoples, children developing respect for the environment, children not being restricted to learning about things from te ao Mäori, on learning that is fun and stimulating for the child, on learning that does not just occur in the formal classroom setting, and on preparing children to continue learning and take on the challenges of modern society.[3]

Köhanga reo and kura kaupapa Mäori both emphasise a holistic approach to a child's learning by nurturing all aspects of a child's growth and development including physical, intellectual, social-emotional, and spiritual dimensions. They also embrace the belief that education and learning occur in the many environments that a child participates in, and that kaiako are not the only educators in a child's life.

But there are issues of resourcing and support which confront kaupapa Mäori education. Bishop, Berryman and Richardson (2001) note that "Mäori-medium programmes have not had the same level of access to resources, professional development, support and body of knowledge to inform practice specifically designed for a Mäori language setting as their mainstream colleagues" (p. 31). The Ministry of Education in its latest annual report on Mäori education has an emphasis on improving teacher quality and supply, and notes "the need for an increase in the quantity and quality of Mäori-medium teaching materials" (Ministry of Education, 2003, p. 64).

When this project began to take shape in late 1999, there was great interest in knowing more about kura kaupapa Mäori students' performance and progress overall, for both policy and educational purposes.

WHAT DOES THE INTERNATIONAL RESEARCH TELL US?

Reviews of the international research literature on bilingualism and second language learning in

---

[2] See www.köhanga.ac.nz for more complete discussion of these principles.
[3] See Mataira (1997) for a summary discussion in English of *Te Aho Matua.*

early educational contexts shows that, if certain conditions are present, bilingual education can be highly beneficial for children's language development and for their cognitive development in general. There can also be significant effects in developing children's sense of identity and their self-confidence (Keegan, 1996).

Reviews of the effectiveness of community language programmes in a number of different countries point to a number of advantages for children in being educated in their "community" language, especially where this language is their "mother tongue" (*see*, for example, Baker, 2001; Cummins, 1983; Cummins and Danesi, 1999; Dutcher, [1994]). According to these reviews, children in community language bilingual programmes: (1) maintain their ability to speak the community language; (2) perform at least as well as – in most cases better than – other children who are also native speakers of the community language but who were "mainstreamed" in "dominant language" programmes from the beginning of their schooling; (3) develop positive attitudes – to the language, to schooling, and to themselves; and (4) perform better in the dominant language than other community language-speaking children who were mainstreamed.

The research literature contains many different ideas about how bilingualism is best developed in early childhood. However, all of these ideas share a common set of important features that, put simply, involve providing large amounts of meaningful input, in a caring environment which is fully committed to the child's learning of the second language (Holmes, 1984, 1987; Krashen, 1985; Spolsky, 1989; Siraj-Blatchford and Clarke, 2000; Whitehead, 2002).

It is important to acknowledge that learning a second language (like learning a first language) takes a long time, and that it does not take place in a series of well-defined, measurable stages. It takes little children 4–5 years of constant exposure to learn their first language. Children in a bilingual education context can reasonably be expected to show evidence of linguistic proficiency in the target language after 5–6 years learning it – *if* the conditions in which they are learning it are ideal. If conditions are less than ideal it will take a lot longer. Most second language learning children (like first language learning children) will exhibit long "silent periods" in which they produce little or no language but, if they are receiving large amounts of comprehensible input in a caring environment, their understanding of the language will be developing. In language learning, understanding always precedes – and far exceeds – the ability to produce the language. Understanding, because it is less easy to detect, is often underestimated.

Children learn a language from the input they receive – so the higher the quality of this input the better. The richer the vocabulary, the more diverse the grammatical forms, and the wider the range of styles they are exposed to, the greater (and more varied) their linguistic competence will be (Holmes, 1987). Thus it is best if their input comes from native speakers of the language (or those with native-like fluency). However, in communities that are attempting to maintain or revitalise a community or indigenous language, this is of course not always possible (Fishman, 1991). In this case it is best if the children are exposed to a wide range of sources – including visitors and, where available, taped material and radio or television programmes that use the target language.

There is widespread agreement in the research literature that young children's language learning in school contexts is most likely to be successful if it mirrors the kinds of experiences the child is likely to have learning their first language in the home. In other words, a child needs to be exposed to a large amount of input (in the target language) from people they are closely attached

to. These people need to use the target language in ways that "scaffold" the child's developing ability to engage in significant everyday activities The language used needs to be comprehensible to the child, but at the same time it also needs to be richer and more complex than the language the child is capable of producing at that time: that is, it needs to be in the child's "zone of proximal development" (Vygotsky, 1962; Krashen, 1982, 1985; Bruner 1977; Foster-Cohen, 1990, 1999; Baker, 2001).

In order to develop competence in any language, children need to be able to hear and use the language in a wide variety of different, meaningful contexts. It is particularly important that they are able to use it to communicate with their friends (Fishman, 1991; Baker, 2001). They also need to be able to hear the language being used – and to use it themselves – to deal with a wide range of subject matter. Children will learn a language best through games, stories, songs, and fantasy, and through immersion in varied programmes that involve them in reading, writing, listening to and speaking the language. Using the language as a medium of instruction to teach something else – *anything* else – is a highly effective way to teach the language (Holmes, 1987). This approach is now widely known as the "immersion" method. The research literature shows that children's knowledge of the different curriculum areas can be developed in any language.

Children's attitudes and motivation are obviously important factors in their ability to learn a second language. Learning does not happen instantaneously, nor does it happen without effort (although for very young children much of the effort is unconscious). It requires many thousands of hours of exposure to – and processing of – the target language, much of which is hard work. The individual child's self-confidence, their relationships with their teachers and classmates, and their attitudes to particular classroom contexts and/or particular activities are all important, as is their attitude to the language they are learning and to those who speak it (Baker, 2001). Some researchers argue that there is an "affective filter" that allows only some of the input a learner hears to reach their mind. The rest can be "screened out" if the individual – or people who are important to them – have negative or ambivalent attitudes to the language, or if they perceive others in the wider community to have negative attitudes (Dulay and Burt, 1977; Krashen, 1981; Fishman, 1991). If this is the case the presence of these attitudes will obviously impede the child's learning. In addition, while the learners' motivation is important, the learners' "support systems" – their teachers, their parents, and their wider whänau – must want them to succeed and have high expectations that they will be successful.

In contexts in which the development of bilingualism is part of a wider attempt to revitalise or maintain a community language, it is important that the children's language learning is not confined to the school context (Benton, 1981). Proficient bilingualism requires the active support of the target language's community. However, if the language is to be used as a normal means of personal and public communication, then social and legal support from the wider (or "dominant" language) community is also required.

In addition, if the goal of a bilingual programme is to revitalise the target language and the culture it expresses, then it is important that the programme is developed and controlled by speakers of that language. It is also important that the primary beneficiaries of the programme be members of the cultural group to which the language belongs. Otherwise it is likely that the target language will become an Anglo-American language that expresses Anglo-American concepts in translated form (Benton, 1981).

4

The research literature shows that learning a second language does not, in general, interfere with or have a deleterious effect on the child's first language competence (Skutnabb-Kangas, 1983; Cummins, 1981). The two languages are not stored in separate places but tend to "interact" with each other, so that adding a second language is likely to produce changes in the behaviour of the first. This interaction is usually helpful: for example, bilingual children's "meta-linguistic" awareness – that is, their ability to reflect on language, to notice that some words sound like or rhyme with others, that some sentences sound ungrammatical ("funny" or "odd") and to play language games – tends to develop earlier (Gombert, 1992), as does their readiness for reading (where they have been bilingual from an early age), and their ability to learn a third – or fourth-language (Cenoz, 2000).

Another important issue identified in research on children's development in bilingual educational contexts is the importance of strategies for developing their competence in the more "advanced" (the more de-contextualised, abstract, or "academic") forms of the second language as well as their competence in its more social, concrete, or "everyday" forms. Teachers of children in bilingual programmes need to find ways to help children become competent in using the second language in culturally appropriate ways, in using the language strategically, and in accessing and using the language's literary or poetic traditions. This kind of competence will of course take many years to develop, just as it does in a first language (Cummins, 1984; Siraj-Blatchford and Clarke, 2000): however its foundations need to be laid at an early stage.

THE DEVELOPMENT OF THIS STUDY

When we began thinking about this study in 1999, anecdotal information suggested that students whose entire schooling had been through Mäori immersion did well, and better than their peers whose entire schooling had been in English-medium education.[4] Yet anecdotal information also suggested that there was a different pattern to the progress that Mäori immersion students made, leading some parents whose expectations were formed in English-medium education, to shift their children back to English-medium education if, for example, they did not show the same fluency in English at the same age as their peers attending English-medium education.

Te Wähanga Kaupapa Mäori (TWKM), of the New Zealand Council for Educational Research (NZCER), has long been involved in research on Mäori language and Mäori language initiatives. Richard Benton's socio-linguistic study during the 1970s and 1980s made a significant contribution to Mäori language revitalisation efforts.

Te Rerenga ä Te Pïrere evolved from an initial proposal from Sheridan McKinley in 1999, as she was researching Mäori parents' involvement in their children's education in 3 different paths: kura kaupapa Mäori, bilingual units, and English-medium education. This initial proposal focused

---

[4]   Analysis of 2001 secondary qualifications provides a breakdown of Mäori performance in full immersion and bilingual schools (however, kura kaupapa Mäori are not separated out), schools with full immersion and/or bilingual classes, and schools with no immersion or bilingual classes (Ministry of Education, 2003, p. 121). This shows a far higher performance in te reo Mäori for School Certificate for students in full immersion and bilingual schools, and for other School Certificate subjects, better performance than students in schools with full immersion and/or bilingual classes, and comparable with students in schools with no immersion or bilingual classes. Patterns are similar for te reo Mäori at Bursary and Scholarship level, but lower than other school types for other subjects. This may reflect differences in resources, as well as the greater difficulty that small schools have in offering a full secondary curriculum. The Ministry of Education notes that the small number of students and schools involved means that the figures should be treated with caution.

on the transition of Māori children from kōhanga reo into Māori-medium and English-medium schools, and then following the children to age 9 to look at the impact that the transition and experience in 2 different educational paths had on the children's language and culture.

An advisory group first met in early 2000 to provide advice and guidance to the project. The group comprises Māori and Pākehā educators, researchers, and policymakers. They are Mere Berryman (Poutama Pounamu), Cath Rau (Kia Äta Mai Trust), Arapera Royal-Tangaere and Peggy Luke-Ngaheke (Te Kōhanga Reo National Trust), Cathy Dewes (Te Rünanga Nui o Ngä Kura Kaupapa Māori), Stuart McNaughton and Margie Hohepa (School of Education University of Auckland), Heleen Visser and Lynette Carkeek (originally Lynne Whitney, Fred Bishop and Airini) (Te Tähuhu o Te Mätauranga), and Alice Patrick (originally Tui McDonald and Kath Boswell) (Te Puni Kōkiri). Dick Grace, NZCER Pükenga was involved in the development of the project, and Cedric Croft from NZCER also contributed to the original discussions.

The original TWKM/NZCER researchers for the project were Sheridan McKinley and Vyletta Arago-Kemp. Sheridan left NZCER as the project got underway, and was replaced by Garrick Cooper and Taina McGregor. Taina McGregor left as the first round of fieldwork was being completed, in late 2001. The current research team is Garrick Cooper and Vyletta Arago-Kemp, supported by TWKM research leader Pauline Waiti, and NZCER colleagues Cathy Wylie and Edith Hodgen.

The NZCER research team provided the first advisory group meeting committee with some background information about the project. Included was an evaluation of the assessment tasks that were then available to gauge near 5-year-olds' Māori and English language (oral, vocabulary, reading comprehension, and writing), mathematics, communication, perseverance, and individual responsibility.[5] The assessment tasks were evaluated against the following criteria:

- suitability of the assessment for children who are learning through the Māori language;

- relevance to the children's environment/experiences/lives;

- viability of translation of English tasks into Māori;

- bias (gender, culture, socio-economic, ethnicity);

- validity;

- ages for which the task can be used (5 to 9);

- time;

- part-use of the test possible; and

- cost.

The advisory group and researchers discussed the research project design, framework, and the assessment tasks at the first hui in February 2000. This hui crystallised the importance of basing assessment instrument development within a Māori framework of learning, and provided a clear foundation for the development of that framework. A series of advisory group hui over the next few months fleshed out the project design, making it more ambitious and able to provide more

---

[5] This work and the initial development of Te Ira Tangata was funded by Te Puni Kōkiri.

information about different stages of children's development through kaupapa Mäori education. The advisory group also worked on the development of appropriate assessments.

Project design

Kura kaupapa Mäori practice is based on the understanding that each child has their own development path and pace, with no expectations of age-related achievement standards (e.g., that by age 6 every child should be reading, or in receipt of remedial attention such as Reading Recovery). In the advisory group's experience, kura kaupapa Mäori students could develop reading and writing later than their counterparts in English-medium education, but their grasp of literacy was as firm and fluent as others. To show this pattern of development, it would be necessary to follow the sample through until at least age 10, and preferably longer. However, the advisory group thought it important to provide information on the full pattern of development as quickly as possible. This led to the idea that the study sample should comprise 3 cohorts: starting at ages near-5, 8, and 11, with each cohort to be followed for 4 years. Following the cohorts over 4 years would also incorporate 2 transition points – from köhanga reo into kura kaupapa Mäori and from kura kaupapa Mäori into wharekura (usually within the same site and structure, unlike English-medium education, which separates primary and secondary education into separate institutions and sites). These changes to the original design were made at an advisory group hui in May 2000.

Te Rerenga ä Te Pïrere became a study of children in köhanga reo and kura kaupapa Mäori, which aimed to:

- chart the children's progress over a 4-year period and illuminate patterns of development of children in kaupapa Mäori education;

- provide a description of children's use of te reo Mäori and involvement in tikanga Mäori, at each stage of kaupapa Mäori education from age near-5 to age 14;

- provide a description of their kaupapa Mäori environments at each stage; and

- describe and analyse the roles of home, köhanga reo and kura in Mäori children's competencies in spoken and written te reo Mäori, knowledge of tikanga Mäori, their identity, and pängarau.

The project also investigates children's transition between köhanga reo, and kura kaupapa Mäori, and kura and wharekura, and the role that te reo Mäori plays in the development of other competencies. One of the values of the project that has become more apparent over time is that it can provide a description of a number of kura, both their similarities and differences.

It is a longitudinal project, which follows the sample children over a 4-year period, starting in mid-late 2001, with annual collection of information about their home and kaupapa Mäori educational environments, and their performance on a set of measures related to te reo Mäori, tikanga, and pängarau. In each round, the child is interviewed and performs tasks, and interviews are held with a parent and the child's kaiako to gather information about the child's use of te reo Mäori, and the environments they participate in. Kaiako also rate the children's perseverance and curiosity. Information on the kaupapa Mäori educational environment is also collected from the tumuaki. The parents of the tëina children were also interviewed in mid 2002 to gain a picture of their children's transition from köhanga reo into kura.

NZCER's longitudinal *Competent Children* project following some 500 children in English-medium education from near age 5[6] (with current fieldwork as they turn 14), research on children's acquisition of literacy, and the research on mother-tongue and bilingual research were drawn on to decide what kinds of information related to children's experience would be useful to focus on in this study.

The project is funded by NZCER's purchase agreement with the Ministry of Education.

The project gathers information on the 3 cohorts which, taken together, will provide a picture of children's patterns of development in kaupapa Māori education from their last year in kōhanga reo to age 14:

Figure 1

Cohort coverage 2001–04

	2001	2002	2003	2004
Tuākana	11	12	13	14 years
Taiohi	8	9	10	11 years
Tēina	5	6	7	8 years
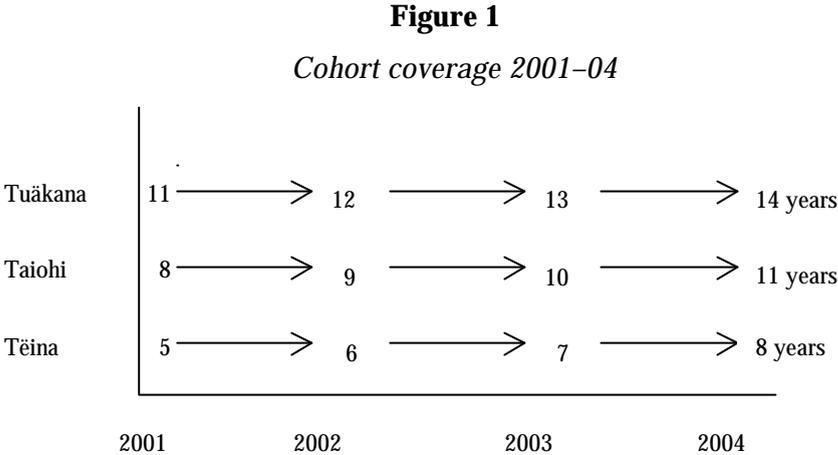
We aimed to start the research with 36 children in each cohort. The sample size was governed to a large extent by the need to gather as much information as possible on each child, so that we could provide a comprehensive picture of children's language opportunities and practices, and of their kaupapa Māori environments within the funding available. This does mean that the analysis of relationships between language practices and other factors, such as opportunities at home and the community, is reasonably limited, but the overlap in ages will allow this analysis to be fuller when all 3 cohorts have been followed through.

Te Ira Tangata

Arapera Royal-Tangaere of the Te Kōhanga Reo National Trust provided a framework based on the kōhanga reo curriculum, *Te Korowai*. This framework is a matrix, which shows strong holistic inter-relations between different aspects of what it means to be Māori, and the different ways and areas in which these aspects are made manifest. The research team then wove in *Te Aho Matua*, the kura kaupapa Māori curriculum, to develop *Te Ira Tangata* framework. This framework would help ensure that what is important and valued in Māori-medium education would be the centre of the research, for example, the holistic and positive approach to children; the importance of building what had been neglected in English-medium New Zealand schooling (e.g., wairua, whatumanawa, auaha, and pūmanawa).

---

[6] Reports and papers from this project can be found on www.nzcer.org.nz.

Central to the framework is the holistic development of the child and that every child develops in each dimension at a pace that is appropriate to them. This is encapsulated in the following whakataukï.

> A töna wä ka möhio te tangata, he tangata ia.
> Each person will know their own readiness.

The 6 dimensions of the child identified are:

- Tinana (physical)

- Hinengaro (intellectual)

- Wairua (spiritual)

- Whatumanawa/Ngäkau (socio-emotional)

- Auaha (creativeness)

- Pümanawa (talents/intuitiveness/cleverness)

These dimensions evolve and develop through their interaction with

- Mana atua

- Mana whenua

- Mana tangata

- Mana reo

- Mana aotüroa

Mana atua (esoteric) – Our relationships with the spiritual world, the divine; our sense of the divine in our lives.

Mana whenua (land) – We are spiritually linked to our ancestral land and we gain our strength and identity from it. We are the guardians of the land and take from it only what is needed, and use it appropriately.

Mana tangata/ngä iwi (people) – Every person is important and needs to be nurtured and respected.

Mana reo/te reo (language) – the Mäori language is a taonga (treasure).

Mana aotüroa/te ao – Our understanding of the environment, and our understanding that we are its caretakers.

Table 1 on page 11 sets out the Te Ira Tangata matrix, and the tasks and information which were gathered through this project in relation to the 6 dimensions. All aspects of the assessment tasks and interview design can be located within the Te Ira Tangata framework. For example, the Tikanga Task tested the children's understanding of tikanga on the marae. This included aspects of manaaki tangata (mana tangata – tinana), koha (mana tangata – tinana), marae (mana whenua-

tinana, mana whenua-hinengaro, mana whenua-wairua) etc., and many other aspects of the framework. The Kōrero Task tested the children's pronunciation (mana reo-hinengaro) and creative language use (mana reo-auaha) etc. We asked the children about their knowledge of their pepeha (mana whenua-hinengaro), and we asked the kaiako about the children's perseverance (mana aotūroa-whatumanawa/ngākau). The research design enabled us to create a picture of the children's progress as a group, as cohorts, and as individuals within the Ira Tangata framework.

Table 1

Te Ira Tangata

	Tinana (Physical)	Hinengaro (Intellectual)	Wairua (Spiritual)	Whatumanawa/ngakau (Socio-emotional)	Auaha (Creativity)	Pümanawa (Talents, intuitiveness, cleverness)
Mana atua (Esoteric)	Practice of manaaki tangata Involvement in hui Rules and responsibilities Spare time activities	Knowledge of tapu, noa, and karakia Tikanga task Körero task Tuhituhi task Papa Kupu Hono task	Practice of karakia			Tikanga task Körero task Tuhituhi task Papa Kupu Hono task
Mana whenua (Land)		Knowledge of tribal affiliations/pepeha Tikanga task Körero task Tuhituhi task Papa Kupu Hono task	Regularity of marae visits	Child's feelings about marae visits	Tikanga task Papa Kupu Hono task	Tikanga task Körero task Tuhituhi task Papa Kupu Hono task
Mana tangata/ngä iwi (People)		Knowledge of tribal affiliations/pepeha Child interaction with whänau, hapü, iwi Tikanga task Körero task Tuhituhi task Papa Kupu Hono task	Child interaction with whänau, hapü, iwi	Child interaction with whänau, hapü, iwi		Tikanga task Körero task Tuhituhi task Papa Kupu Hono task
(Language)		Use and exposure to languages at tkr/kkm and hone Körero task Tuhituhi task	Recitation of karakia, waiata, etc.	Language use in different situations Attitude towards languages Child's communication as rated by kaiako	Körero task Tuhituhi task	Körero task Tuhituhi task
Mana aotüroa/te ao (Environment)		Pängarau at tkr/kkm and in the home Tikanga task Pängarau task	Observation of tapu and noa at tkr/kkm and in the home	Child, parent, and kaiako aspirations	Papa Kupu Hono task	Tikanga task Körero task Tuhituhi task Papa Kupu Hono task
Ähuatanga ako (Learning and teaching)		Child's progress at tkr/kkm Parental expectations Kaiako experience, language skills Classroom environment		Child's enjoyment of tkr/kkm Child's curiosity, perseverance as rated by kaiako		

*   Drawing on Arapera Royal-Tangaere's outline of *Te Whäriki* given at the first advisory meeting and Katerina Mataira's outline of *Te Aho Matua.*

*   Shading in the framework shows the intangible principles of mauri, tapu, wehi, mana, ihi, and aroha at work throughout each aspect of the person.

It was also clear from the hui that existing assessment tasks were inappropriate and invalid for the task of showing student performance, and that new tasks would need to be created.

One set of assessment tasks could not fit both students who stayed within Mäori immersion education, and those who moved out to English-medium education, making it very difficult to provide valid comparisons. It was decided that the project would only follow children into kura kaupapa Mäori, and not the children who entered into English-medium schools from köhanga reo, and focus on children who had attended köhanga reo for at least 2 years, so that there would be commonality in their "starting points".

A second advisory group hui in March 2000 discussed the *Te Ira Tangata* framework, and sharpened the focus of the research. The research should provide data and analysis to illuminate the pattern of development of Mäori children in Mäori-medium education. The pattern would encompass the relationships between children's experience of Mäori language and Mäori values, at home and in educational institutions, and their development of languages and values, and their development as a whole person, including spiritual, socio-emotional, creative, and critical thinking aspects, i.e., putting competencies in context.

The advisory group for this project played an integral role in the development of the assessment tasks, first through several all-day hui of the group, discussing ideas and tasks which members developed between hui; second, through a smaller group of Cathy Dewes, Arapera Royal-Tangaere, Cath Rau, and Mere Berryman working closely with the NZCER research team; and finally, Cath Rau and Mere Berryman's detailed development of the tasks chosen by the advisory group for inclusion in the research. Without their expertise and support, this research could not have gone ahead.

Draft assessment tasks and structured interviews were trialled in late 2000 with 16 children, their parents, and kaiako, in 3 köhanga reo and 2 kura kaupapa Mäori. The trials led to fine-tuning of both tasks and interviews before the fieldwork for the first round of the study began in mid-2001.

KAUPAPA MÄORI APPROACH TO THE RESEARCH

Köhanga reo and kura kaupapa Mäori are quite different educational institutions from English-medium schools in New Zealand on a number of fronts. It was important to the research team, and ultimately to those who were to be involved, that the research design and how this project was carried out acknowledged and reflected those differences. It was also important that the research was done in a manner which maintained the integrity of these kaupapa Mäori educational initiatives.

The advisory committee included people who were actively involved in köhanga reo and kura kaupapa Mäori, to provide advice and guidance during the conceptual, research design, and pilot phases of the project. The advisory committee ensured that the design of the project focused on the main objectives of köhanga reo and kura kaupapa Mäori, particularly te reo Mäori language development and knowledge of tikanga Mäori.

Our formal approach to the köhanga reo and kura involved in the project was consistent with the principle of kanohi-ki-te-kanohi (face-to-face). It is important to Mäori that we meet face-to-face

with the people we are approaching to be involved. This included being formally welcomed where connections between the researchers and the whänau were made, or in some cases reinforced, at a personal, whänau, and tribal level first and foremost. We then made a presentation to the whänau on our proposal and whänau asked questions about the project. Whänau wanted to know in detail how the research was going to benefit their particular köhanga reo or kura, as what we were asking of them was a major commitment in terms of time.

A formal welcome at the kura (and in some cases at the köhanga reo) after a whänau had agreed to participate meant that the children had a chance to see the researchers around their köhanga reo or kura at least once before taking part in interviews and assessment tasks. This whakahoahoa (getting to know one another) before the interview and assessment tasks was important for both the child and the researcher.

Respect for the "kaupapa" of köhanga reo and kura kaupapa Mäori was also an important part of the research approach. For example, *Te Aho Matua* and *Te Korowai* advocate conducting all activities and lessons in te reo Mäori. To a large extent we communicated with whänau and kaiako in te reo Mäori. This was not always the case. There were occasions when children were not around that kaiako and parents chose to speak to us in English. Parents and kaiako were given the option of speaking in te reo Mäori, English, or both. All communication with children was in te reo Mäori.

Three of the research team and all of the researchers involved in the fieldwork had extensive involvement in köhanga reo and kura kaupapa Mäori. Their experiences were also important in ensuring that our approach to whänau and the research project was consistent with what is expected within kaupapa Mäori contexts.

The research team has reported back on the preliminary findings of the first phase study to each of the whänau of the köhanga reo and kura involved. Each whänau will receive a copy of this report, and copies of the executive summary, as well as oral report-backs of each phase.

Whänau were given information sheets and signed consent forms before taking part in the study. We have undertaken to keep individuals from being identifiable in written reports from the research.

SAMPLING

The selection of kura kaupapa Mäori to be approached needed to ensure that the sample was representative of the range of kura kaupapa Mäori. Because of our need to include tuäkana students who would be entering wharekura during the research, and the practical complexity that could arise if we tried to follow children from kura into different wharekura, we restricted ourselves to kura with wharekura. In 2001 there were 17 kura kaupapa Mäori with wharekura.

The following criteria were used to get a demographic cross-section of kura:

- urban/rural;
- large/medium/small; and
- a spread from throughout the country.

We also tried to take into account information about the extent to which Mäori was spoken in the community and the involvement of kura in other research projects, using information from advisory group members and the research team based on their whanaungatanga (connections) with the köhanga reo and kura kaupapa Mäori. We decided that we would not approach kura that were or had been already involved in a lot of research projects.[7]

We initially approached 10 kura. Three declined to participate because they had busy programmes during the proposed time of fieldwork. Seven kura accepted the invitation to participate. At that stage, we only had 22 tëina children who would be moving from their köhanga reo into one of these 7 kura. We were aiming for 36 children in each cohort. Taiohi and tuäkana numbers were also not quite at 36. We then approached 2 more kura. Although they did not then have wharekura, they had been involved in the pilot study and had expressed an interest in participating in the main study. They were both well-established kura kaupapa Mäori and were in the process of developing a wharekura. They accepted the invitation to participate.

Once we received consent from the kura we approached, we then approached the köhanga reo whose graduates were entering into the sample kura kaupapa Mäori.

Nine kura kaupapa Mäori and 16 köhanga reo took part in the first phase of the project. This means that the study includes around half of the kura kaupapa Mäori with wharekura, and around 15 percent of the total number of kura kaupapa Mäori.

Negotiating participation

Each köhanga reo and kura kaupapa Mäori was approached individually. Initial phone calls were made to ascertain interest in discussing the project. Then a letter outlining the project was sent, and a time arranged to hui with the tumuaki/kaiako and/or the whänau. At this hui, the research team presented the project and answered questions from whänau about the project. We were later contacted by the köhanga reo/kura about the whänau decision. Some köhanga reo and kura whänau were interested to know about the involvement of those advising on the project in either köhanga reo or kura, e.g., if kaiako were involved. We mentioned involvement by representatives of the Te Köhanga Reo National Trust and Te Rünanga Nui o Ngä Kura Kaupapa Mäori in the advisory committee and this was positively received by a number of whänau.

Fieldwork

The first phase of *Te Rerenga ä Te Pïrere* fieldwork began in June 2001 and was completed in December 2001. Where possible a classroom was made available for the team of 3 researchers to administer the assessment tasks and conduct interviews; otherwise any available room that was free of distractions was used (e.g., wharenui, sick bay). All parents were given the option of where they would like to be interviewed, either at the köhanga reo/kura, or at their homes. Most of the parents were interviewed kanohi-ki-te-kanohi. A few were interviewed on the phone as this was the only convenient option because of their own commitments at the time the research team was at the kura. Most of the teachers were interviewed on site. A few teachers chose to complete the schedules themselves as we were unable to arrange a time for the interview while the researchers were on site.

---

[7] The research team discussed this with other researchers on our advisory group and with Te Tähuhu o Te Mätauranga (Ministry of Education) officials.

The interviews were structured, with the interviewers using a common set of questions. The questions were open-ended. The interviewers coded replies, using existing codes on the interview schedule for some questions, and for other questions, using coding developed after the conclusion of the fieldwork, based on the answers given.

All 3 researchers could speak and understand te reo Mäori. All the child interviews were conducted in te reo Mäori. The assessments were all conducted in te reo Mäori. We interviewed the kaiako about each child in the study, and also about themselves. At each kura we also interviewed the tumuaki. All of the tumuaki, kaiako matua,[8] and kaiako were given the option of conducting the interview in te reo Mäori or in English. Most of these interviews were conducted in te reo Mäori but occasionally we switched between te reo Mäori and English. This was because either some of the terminology used was unfamiliar to the kaiako or the interviewer or kaiako wanted to elaborate on the questions or responses. The parents' interviews were for the most part conducted in English. However, some of the parents responded in te reo Mäori.

All the 8-year-old and 11-year-old children at each kura site were invited to participate in the project. Not all of the age-5 children in the köhanga reo who were graduating from köhanga reo that year were included, because some were not going on to kura kaupapa Mäori. We found that we needed to include children who had already begun kura (for between 1 and 14 weeks) because there were sometimes not enough children at the köhanga reo. The timing of our fieldwork in the second half of the year also meant that we had missed some children who had gone onto kura in the first half of the year. All of the children in köhanga reo in the first year of the project entered into one of the 9 kura kaupapa Mäori in the second half of 2001.

The study children and their parents

Children

111 children took part in the first phase of *Te Rerenga ä te Pïrere*:

- 33 tëina children (17 male, 16 female);

- 37 taiohi children (18 male, 19 female); and

- 41 tuäkana children (16 male, 25 female).

Two-thirds of the *tëina children* were aged between 5 and 5 years 6 months at the time they were interviewed, 24 percent were aged between 4 years 6 months and 5 years, 6 percent were between 4 and 4.5 years, and 3 percent were just over 5 years 6 months.

Fifty-one percent of the *taiohi children* were aged between 8 and 8.5 years at the time they were interviewed, 31 percent were aged between 7.5 and 8, and 16 percent were aged between 8.5 and 9 years old.

Forty-one percent of the *tuäkana children* were age 11, 48 percent were aged between 10.5 and 11, and 10 percent were aged between 10 and 10.5 years old.

---

[8] This term was not used in köhanga reo. We have used it to differentiate between the most senior kaiako who were interviewed about the köhanga reo and the other kaiako who we interviewed about the study children.

Parents

Tëina

We interviewed 31 parents/caregivers: 23 mothers, 4 fathers, 3 grandparents, and 1 whangai. Twenty-eight were Mäori, 3 were Päkehä, and 1, Samoan. Forty-three percent of the Mäori interviewees were living in their own tribal area. Three were sole-parent families, 27 had Mäori partners, and 2 had Päkehä partners. Thirty-one percent of the Mäori partners of those interviewed were living within their own tribal area.

Taiohi

We interviewed 37 parents/caregivers: 28 mothers, 6 fathers, 1 grandparent, and 2 whangai. Thirty-two were Mäori, 4 were Päkehä, 1 was Samoan, and 1 Rarotongan. Fifty-six percent of the Mäori interviewees were living in their own tribal area. Five were sole-parent families, 26 had Mäori partners, 3 had Päkehä partners, 1 had a Samoan partner, 1 a Samoan/Mäori partner, 1 a Mäori/Niuean partner, 1 a Cook Island partner, 1 a Chinese partner. Forty-eight percent of the Mäori partners of those interviewed were living within their own tribal area.

Tuäkana

We interviewed 38 parents/caregivers: 24 mothers, 4 fathers, and 10 grandparents. Thirty-seven were Mäori, and 1 was Päkehä. Forty-six percent of the Mäori interviewees were living in their own tribal area. Seven were sole-parent families, 29 had Mäori partners, 1 had a Päkehä partner and did not give the partner's ethnicity. Thirty-four percent of the Mäori partners of those interviewed were living within their own tribal area.

Sites and numbers of children at each site

Table 2

Characteristics of the different sites and number of children in the study

Site	Rural/urban	Proportion of Mäori speakers in area	Size of the kura[9]	Tëi*	Tai	Tuä
Site 1	Rural	Large	Small	1	4	4
Site 2	Town	Medium-Large	Medium	2	6	5
Site 3	Town	Medium-Large	Medium	2	4	2
Site 4	Major city	Small	Medium	0	1	3
Site 5	Major city	Small	Medium	7	5	5
Site 6	Provincial city	Medium-Large	Large	7	6	10
Site 7	Provincial city	Small	Large	3	4	3
Site 8	Town	Small	Medium	6	3	4
Site 9	Major city	Medium	Large	5	4	5
TOTAL				**33**	**37**	**41**

* We use abbreviations for each of the cohorts in some of the tables: Tëi = Tëina, Tai = Taiohi, and Tuä = Tuäkana.

THIS REPORT

This report covers the first phase of this project. It provides a comprehensive base-line with which the children's development over the next few years can be compared, and we can build up a full picture of development and experiences from age 5 to age 14, and the pathways that children take through kaupapa Mäori education. We start with a description of the children's kaupapa Mäori education settings, looking at philosophy and approach, teachers' fluency in te reo and teaching experience, whänau involvement, and whänau views. Then we move to the home setting, looking at parental language and use of languages in the home, children's language and use of languages at home and with friends, and children's activities. Next, we report kaiako views of the children's strengths and their proficiency in Mäori, before describing the assessment tasks we used, and the children's performance on these assessments. Finally, we provide an analysis of the relationships between the children's performance on these assessments, and their language and tikanga environments. Because of the small number of children in each cohort, this analysis is exploratory only.

---

[9] Small = (1–50), Medium = (51–120), Large = (121+).

2. TE ÄHUA O NGÄ AKORANGA KAUPAPA MÄORI
KAUPAPA MÄORI EDUCATIONAL SETTINGS

In this chapter, we describe the kaupapa Mäori educational settings of the study children. Since our interest is in patterns of progress over time, we describe köhanga reo and kura kaupapa Mäori material together. One notable feature of both is the higher proportion of teachers to students than is found in English-medium schools. This is consistent with the philosophies of köhanga reo and kura kaupapa Mäori, and with the conclusions from the international research about the additional attention that is needed for children learning through a language that may not be the language spoken at home, or where the language is not widely spoken, reducing the opportunities to hear and speak it.

PROFILE OF KÖHANGA REO PARTICIPATING

Table 3 provides an outline of the location, roll size, staffing, and regular voluntary support for the 13 köhanga reo participating in the study for whom we have full information. One köhanga reo had closed when we returned to do the interview with the kaiako, and children from 2 of the köhanga reo in the sample had gone onto kura. Most of the köhanga reo had rolls between 24–29. The number of full-time staff in the 13 köhanga reo for which we gathered this information was usually around 3–4, even in the 2 smaller köhanga reo. The average ratio of full-time teachers to children was 1:5.5. This is better than the minimal staffing provided in the early childhood regulations, even without taking into account part-time staff. Te Köhanga Reo National Trust guidelines are a 1:5 ratio for children aged more than 2 years, 1:2 for children aged 1–2 years, and 1:1 for children aged less than a year.[10]

Eight of the 13 had part-time staff. Ten of the 13 had regular kaiäwhina, or volunteers, ranging from 3 to 20.

---

[10] In all-day mixed-age centres, current minimum staffing is 1 teacher for every 5 children under 2 years, and 2 teachers for 7–20 children, and 3 for 21–30 children over 2 years.

Table 3

Profiles of the köhanga reo that participated in this study

Köhanga reo	Köhanga graduates attend	Location	2001 roll size	Full-time staff	Part-time staff	Regular kaiäwhina	Teacher:child ratio[11]
Köhanga 1	Kura 1	Rural	14	4	0	4	1:4
Köhanga 2	Kura 2	Town	29	4	1	-	1:7
Köhanga 3	Kura 2	Town	8	3	0	5	1:3
Köhanga 4	Kura 3	Town	12	3	4	12	1:4
Köhanga 5	Kura 5	Major city	21	3	2	3	1:7
Köhanga 6	Kura 5	Major city	24	6	9	8	1:4
Köhanga 7	Kura 6	Provincial city	27	4	1	10	1:7
Köhanga 8	Kura 6	Provincial city	25	4	0	-	1:6
Köhanga 9	Kura 6	Provincial city	23	3	5	0	1:8
Köhanga 10	Kura 8	Town	40	10	0	6	1:4
Köhanga 11	Kura 8	Town	29	4	2	9	1:7
Köhanga 12	Kura 9	Major city	24	4	2	20	1:6
Köhanga 13	Kura 9	Major city	30	6	0	5	1:5

- = missing data.

PROFILE OF KURA KAUPAPA MÄORI PARTICIPATING

All but one of the kura kaupapa Mäori were operating in accordance with *Te Aho Matua.* Five of the 9 kura in the study had rolls of less than 100 students. All but one were decile 1 or 2 in terms of the socio-economic rating used by the Ministry of Education for funding purposes. This gives a weighting to Mäori ethnicity. It also uses information on family income and education. Thus most of the kura were serving communities which were predominantly low-income, without high qualification levels.

All but one kura employed part-time teachers, and all but 2 had regular volunteers, with 5 having between 10–15, an indication of marked whänau involvement and community interest. The average teacher:student ratio was 1:13.7. This is somewhat lower than the staffing entitlement, indicating that kura kaupapa Mäori were using operational funding to provide sufficient teachers for the needs of their students. There were some interesting variations, for example, 2 of the kura were of a similar size, but one had a teacher:student ratio of 1:9 compared to the other's 1:17.

---

[11] Part-time staff were not added into the equation for the köhanga reo and kura teacher:child ratio because we did not collect information on the number of hours that each of these staff members were employed. The teacher to child ratio would be lower than indicated here for centres employing part-time staff.

Table 4

Profiles of the kura kaupapa Mäori participating in this study

Kura	2001 Roll size	Location	Full-time teaching staff	Part-time teaching staff	Regular volunteers	Children per teacher ratio
Kura 1	30	Rural	4	2	-	1:8
Kura 2	94	Town	6	10	7	1:16
Kura 3	60	Town	7	5	15	1:9
Kura 4	68	Major city	4	1	10	1:17
Kura 5	103	Major city	9	15	20	1:11
Kura 6	149	Provincial city	8	3	10	1:19
Kura 7	140	Provincial city	12	0	10	1:12
Kura 8	79	Town	4	2	15	1:20
Kura 9	246	Major city	20	1	-	1:12

- = missing data.

KÖHANGA REO AND KURA KAUPAPA MÄORI COMMUNITIES

Half the köhanga reo for whom we have information were located in predominantly Mäori communities, as were 6 of the kura. Most of these had several iwi. This has some implications for what tikanga might be emphasised in the curriculum.

Table 5

Profiles of communities where köhanga reo and kura situated

Community	Köhanga reo n=13*	Kura n=9
Predominantly Mäori – one iwi	2	2
Predominantly Mäori – several iwi	4	4
Predominantly non-Mäori	6	3

*   One köhanga reo did not answer this question.

None of the köhanga reo in fact had children from only one iwi attending, although one kura did. The median number of iwi represented in 11 of the 19 köhanga reo was between 5–7, and the same for 7 of the 9 kura. The range was from 2 to 23 iwi for the köhanga reo, and 1 to 33 for the kura.

We asked the kaiako matua and tumuaki to estimate the proportion of children at their köhanga reo or kura who were first language speakers of te reo Mäori. We found that most kura were at the extremes – either a high proportion of children who were native speakers, or none or very few.

Two of the kura tumuaki had more than 80 percent of their roll who were first language speakers, but the median was around 5 percent. Four small köhanga reo had between 90–100 percent of

their roll who were first language speakers of te reo Māori, but 5 had no children on their roll whose first language was te reo Māori. The median was around 1 percent.

All of the kura in this study were rated decile 1 or 2 at the time of the study, except for one kura rated decile 3. We asked the kaiako matua and tumuaki of each kōhanga reo and kura to summarise the socio-economic background of the whānau whose children attended their kōhanga reo or kura. The socio-economic composition of most of the kōhanga reo and kura whānau in the study was low or low-mid income. A third of the 12 kōhanga reo for whom we have this information served mainly middle-class whānau, and none of the kura.

Table 6

Socio-economic background of kōhanga reo and kura whānau

Socio-economic background	Kōhanga reo n=13*	Kura n=9
Mainly middle class	3	0
Wide range	1	2
Low-middle income	4	3
Mainly low-income	4	4

* One kōhanga reo did not answer this question.

PHILOSOPHY AND GOALS

We asked the kōhanga reo kaiako matua and kura tumuaki about the philosophy of their kōhanga reo and kura. Some of the kaiako matua mentioned *Te Whāriki* or *Te Korowai* as the philosophical underpinning of their kōhanga reo. However, most said that the main philosophy of their kōhanga reo was to teach te reo Māori me ōna tikanga. This was done by creating a happy and safe learning environment:

> …that the children are happy and safe in their environment. It is through play that they learn. This is our learning approach. This is all done in te reo Māori. We don't measure their performance by how many Māori words they know. Kids move from one activity to the next based on what they want to do… 'organised chaos'. We operate total immersion under the guidelines *of Te Whāriki*.

Most of the tumuaki in this study noted that the main philosophy for the kura was *Te Aho Matua*. Underlying this, tumuaki reported focusing on nurturing children in te reo Māori me ōna tikanga and mātauranga Māori, and providing a real alternative to English-medium education so that the children can stand tall in both worlds.

> …kia pakari ai ngā tamariki ki roto i ngā ao e rua, kia kapohia e ngā tamariki ngā painga o ia ao, arā, te ao Pākehā, te ao Māori rānei hei oranga mō rātou.

There were similar responses when we asked the kaiako matua and tumuaki for their view of the purpose of kōhanga reo and kura kaupapa Māori. Kaiako matua responded that it was to teach and perpetuate te reo Māori me ōna tikanga or the "treasures" that were left by their elders.

> Ko te tikanga o te köhanga reo hei whakaoho i ngä taonga ä kui mä, ä koro mä,
> kia kitea, kia rongohia.

Most of the tumuaki stated that for them kura kaupapa Mäori was about the perpetuation of te reo Mäori me öna tikanga and mätauranga Mäori. One tumuaki said that she wanted to teach the tribal dialect of the area. However, there were no speakers left in the area.

> …ko te ako i te reo Mäori me öna tikanga ki roto i tënei kura. E hiahia ana kia
> whakaurutia te reo o tënei rohe ake. Ko tätou e ako ana i te reo na [taku] whänau
> ake… kia ako ai i te reo o ä rätou ake iwi. Ko te mate kë, käre kau rätou i te
> möhio ki ërä mea.

A few tumuaki stated that, for them, kura was about offering an alternative to mainstream education for Mäori children by "providing Mäori pedagogy" and a "culturally safe" environment.

Nearly all the köhanga reo kaiako felt that the main purpose of köhanga reo was to teach the children te reo Mäori me öna tikanga. They also said that it was about providing an environment of awhi, tautoko, and manaaki so the children could flourish.

Nearly all of the kaiako in kura said that for them the main purpose of kura kaupapa Mäori was to teach te reo Mäori me öna tikanga.

> …kia kore ai tö tätou reo e ngaro. Kia ü ki ngä tikanga i waihoatia mai e ö tätou
> tüpuna… kia pai hoki te whängai ki ä tätou tamariki (Kura kaiako)

Providing an environment where children felt safe and supported within a whänau environment so that they would "stand tall" was also mentioned.

> …kia tipu te tamaiti i raro i te maru o te whänau. Kia puawai te waiora, te
> mätauranga kia tü te tamaiti i roto i töna ao, ahakoa ki hea. (Kura kaiako)

Te reo Mäori me öna tikanga, not surprisingly, was what both tumuaki and kaiako most wanted the children to be confident in before they left kura. This included knowledge of karakia, waiata, and whakataukï. This was closely linked to developing a strong sense of pride and identity, and a sound grasp of Mäori values such as manaaki and ätawhai, so that these children will become leaders for their iwi in "Te Ao Hurihuri".

> Kei raro i te maru ö te whänau e tü ana rätou i roto i ö rätou mana Mäori. E ako
> ana i ngä painga o neherä, 'kia tü pakari, tü rangatira ia hei raukura mö töna
> iwi'. (Kaiako)

> …ko te whakapono, ko ngä akoranga ä kui mä, ä koro mä. Ko te reo Mäori me
> öna tikanga, ko te aroha, ko te manaaki, ko te ätawhai, ko te
> whakawhanaungatanga me te matemate-a-one, tëtahi ki tëtahi. (Tumuaki)

Other kaiako aimed to develop children who were keen to learn, had enquiring minds, were confident, and able to speak their minds.

> …to be independent, to be able to be free to speak their minds. To remember the life messages we've been able to teach them. Self confidence and pride. (Kaiako)

> …kia hikohiko atu ki te ako, kia hiahia tonu ki te ako, kia tüwhera töna ngäkau ki te ako. (Kaiako)

Some mentioned the sets of skills needed to face the challenge of walking confidently in both worlds, Mäori and Päkehä.

> …kia whakaaro nui ki ngä mahi ä ngä tïpuna. Me te whakaaro, ka taea e rätou te whai i ngä ao e rua. To fully understand that they have got both worlds to succeed in. (Kaiako)

Parent views of the purpose of köhanga reo and kura kaupapa Mäori

When we asked parents what they thought the purpose of köhanga reo and kura kaupapa Mäori were, they were clear that it was to maintain *te reo Mäori me öna tikanga* (tëina, 94 percent; taiohi, 76 percent, and tuäkana, 74 percent). As one parent said:

> …ki te whakahoki mai tö tätou reo me ngä tikanga katoa e pä ana ki a tätou, te iwi Mäori.

Some parents said that it was about "bringing children up in te ao Mäori" (tëina, 9 percent; taiohi, 8 percent; and tuäkana, 19 percent) and "increasing Mäori educational achievement" (tëina, 6 percent; taiohi, 3 percent; and tuäkana, 13 percent).

We asked tëina parents what they expected their child to be able to do before leaving köhanga reo. Most said that they expected their child to be able to speak fluent te reo Mäori. The next most important thing for these was to have some basic literacy skills, such as writing alphabet letters or the child's own name.

Table 7

Parents' expectations of what child should be able to do before leaving köhanga reo

Parental expectations for köhanga reo "graduates"	Tëi n=31 %
Speak te reo Mäori/be fluent (for age)	71
Write	39
Count	19
Be ready for kura	16
Socialise with other tamariki/not be shy	13

The main factor influencing parental choice of the köhanga reo or kura kaupapa Mäori their child attended was the maintenance and quality of *te reo Mäori me öna tikanga.*

Thirty-two percent said that it was a natural extension of köhanga reo and to do otherwise would have been a "waste". Some chose kura kaupapa Mäori because they had seen other children lose te reo Mäori language skills they had developed at köhanga reo after entering mainstream schools.

> …we didn't want her to lose te reo Mäori. We have seen a nephew lose te reo Mäori in mainstream quickly. It's a waste of time sending tamariki to köhanga reo and then off to a mainstream school. (Teina parent)

Ten percent chose kura kaupapa Mäori because it was "kaupapa Mäori", and 6 percent said that they had "no choice" because their whänau were involved.

Table 8

Factors that influenced parents' decision to send their child to köhanga reo and kura kaupapa Mäori

Factors that influenced parents' decision	Tëi % n=32	Tai % n=37	Tuä % n=38	Total % n=107
Te reo Mäori me öna tikanga (maintenance and quality at the köhanga reo/kura)	28	27	32	29
Continuation of köhanga reo education	6	38	26	24
Parents missed out on this education (do not speak Mäori)	3	22	8	16
Köhanga reo/kura whänau	34	0	11	14
Whänau and friends spoke highly of köhanga reo/kura	22	5	5	10
Close to home	9	11	5	8
Tamariki were not doing well at local mainstream school	n/a	5	13	7
Quality of the staff	13	0	0	4

Most of the parents (71 percent) said they had chosen the particular kura their child attended because it was the closest kura to where they lived, or the only one. Forty-two percent chose the kura because their child had siblings attending or whänau (aunties, uncles, grandparents) working there. Thirty-five percent of the parents were impressed with the quality of education or had heard good things about the kura from whänau members whose children were attending that kura. A few (6 percent) said that it was a natural progression from köhanga reo and one parent was not sure.

What parents liked about köhanga reo and kura kaupapa Mäori

We asked the parents what they most liked about their child's köhanga reo or kura. For over half the tëina parents, the "kaupapa" of köhanga reo and the whänau environment was what they liked.

> This köhanga reo is whänau orientated, it's not like going to a daycare. The whänau are encouraged to get involved. It is demanded! …the kaimahi are like whänau.

Nineteen percent mentioned their child's kaiako, the organisation of the köhanga reo, and the quality of its programme. Sixteen percent of the parents were pleased that their child was learning

te reo Mäori and doing well at it and the same proportion was pleased that their child enjoyed köhanga reo and was happy.

Thirty percent of the tëina parents said that there was nothing about their köhanga reo that they would like to change. Ten percent of the parents would like to see more resources made available for the köhanga reo and 10 percent would like to see the standard of te reo Mäori improved or the amount spoken by the whänau increased while at köhanga reo. Six percent would like to see a programme designed for the older children.

The things that parents most liked about kura were that it was whänau orientated (37 percent), it was a supporting and safe environment (36 percent), and they liked their child learning *te reo Mäori me öna tikanga* (13 percent). Most of the taiohi and tuäkana parents said that there was nothing about their child's kura that they would like to change. A few parents mentioned the lack of resources and issues with the kaiako's teaching style or class management.

Mäori cultural knowledge and values

We asked the kaiako matua and tumuaki what aspects of Mäori cultural knowledge and values they expected the children to have acquired before they left their köhanga reo or kura. Most of the items on the list below were included in their curriculum, but not all for every köhanga reo or kura.

Table 9

Mäori cultural knowledge and values that children are expected to have before graduating

Mäori cultural knowledge and values	Kaiako matua n=13	Tumuaki n=9
Karakia	10	7
Pepeha	10	6
Whakapapa	8	8
Manaakitanga	7	7
Waiata	7	7
Pakiwaitara	7	7
Whanaungatanga	7	7
Mihi	7	6

Pepeha are tribal proverbs about one's identity and as such are important for a child in köhanga reo to learn at an early stage of their development. These form a part of the köhanga reo curriculum. Children learn, sing, and recite karakia, pepeha, and waiata as a part of their ongoing learning in köhanga reo. We asked the kaiako matua and tumuaki how often karakia were recited and which particular pepeha the tëina children learnt at their köhanga reo.

All of the kaiako matua said that the children learn their own pepeha. Some of the kaiako matua said that they also teach the local pepeha. Most of the tumuaki said they taught a pepeha of the

rohe where the kura is situated. Some had a kura whakataukï that was used to characterise the value of that school, e.g. *Ko te reo te mauri o te mana Mäori.*

Karakia were recited daily in the study köhanga reo and kura, in the morning, at lunch time, and before children return home. In one kura they were also recited at special occasions, e.g. at a planting ceremony, or when manuhiri arrive. At another they were recited during more sombre occasions.

We asked the tuäkana children's kaiako what tikanga they have noticed the study child they were teaching, carrying out independently, that is without being told to do so. These tikanga represent practices which are highly valued in Mäori society. We wanted to find out to what degree these things had become a natural part of their school lives.

Table 10

Tikanga kaiako have observed children carrying out independently

Tikanga	Tai % n=36	Tuä % n=41
Manaaki tangata (incl. manuhiri, tauira hou)	78	68
Manaaki tauira	50	56
Manaaki tangata ki te kai, ki ngä rawa	6	7

Six mentioned manaaki tangata with both manuhiri and 4 with tauira höu (new students).

We asked the tumuaki about the roles that students took in a pöwhiri. One tumuaki said that it depended on the nature of the manuhiri as to whether a pöwhiri was organised and if so, the scale of the pöwhiri, i.e., whether just one class was involved, or the whole kura. One tumuaki said that "students are generally not pulled out of classroom to perform a pöwhiri". All of the tumuaki stated that the children participated in pöwhiri by singing waiata for the kaikörero, reciting a karakia, or doing the wero. At 2 of the kura some of the girls performed the karanga and the boys the whaikörero. One of the tumuaki noted that the girls were supported throughout this by an elder. Children also prepared the seating arrangements and room where a pöwhiri would take place.

We asked if the kura had a policy with regards to girls performing the karanga. Most of the tumuaki reported that neither boys nor girls were encouraged to karanga or whaikörero.

> He nui ngä tikanga mö te karanga. He ähua nui ngä körero mö tënei. He rerekë
> ngä ture o ia marae, o ia iwi. Käore anö i akohia ngä tamariki ki te karanga. He
> wä anö ka ako. (Tumuaki)

At a few kura, girls were taught the karanga, but only if their parents agreed. Most kura had kaumätua or pakeke to fulfil these duties, or sometimes kura staff.

Teaching tikanga and values

We asked the kaiako matua and tumuaki how they taught values such as tapu, kaitiaki, and mana. Most of the kaiako matua and some of the tumuaki said that these were not taught formally, but through modelling these tikanga and values through their actions, and discussions with children, especially if they had just returned from a hui.

> Ëtahi wä ka haere ki ngä tangihanga o te marae, ka hoki mai ki te kura, ka körero mö ënei ähuatanga. Ka whakamärama atu ki a rätou. (Tumuaki)

Some gave instructions about what not to do, e.g. "kaua e noho ki runga i te përa, mö te mahunga kë tënä".

> …käre kau i te ako [ngä tikanga]. He whakatüpato noa iho te mahi. Käre i whakaaro mö te ähua o te mana me te tapu. (Kaiako matua)

One kaiako matua said that these values and tikanga were taught through the recitation of the Papatüänuku, Ranginui, and Täwhirimätea pakiwaitara and traditions. At one köhanga reo, children were asked to place cards, which have words about parts of a wharenui, onto the correct part of the wharenui.

Unique aspects of köhanga reo and kura kaupapa Mäori children

We asked the kaiako matua, tumuaki, and kaiako what they thought was unique about the children who were taught in köhanga reo and kura. Pride and self-esteem, developing a belief that anything is achievable, knowledge of te reo Mäori me öna tikanga, manaakitanga, and whanaungatanga were the main features.

> …kia haere kaha ngä tümomo akonga mai te köhanga reo ki ngä kura kaupapa Mäori, [ki ngä] whare wänanga tae noa atu ki ngä huarahi katoa. Äkuanei pea, i tëtahi rä ka tü [tëtahi] hei pirimia mö Aotearoa! (Kaiako matua)

> …ko te tino mea, te tü pakari a te tamaiti i roto i tö rätou ao. Käre he whakamä. Käre e tino whakahïhï te nuinga o te wä. (Tumuaki)

> …the individuality and free acceptance of individuality by the children. It allows you to be who you are. This is the core of *Te Aho Matua*. To instil [in the children] the idea that the world is their oyster. The kids have very firm ideas about what they want. It is not our job to teach but to guide. We are not teachers in the mainstream sense. The whänau concept is instilled in the children. Ultimately the uniqueness falls back to te reo Mäori. But all of these other aspects are also very important features of these children. (Tumuaki)

One kaiako matua was told that her graduates were "too" enquiring.

> We have heard complaints from some of the kaiako at kura that the children from this köhanga reo ask lots of questions! (Kaiako)

Another was delighted that children returned years later, and still spoke te reo Mäori.

> I've seen so many children over the years. They come back as older students and
> they are still speaking te reo Mäori. (Kaiako matua)

KAIAKO EXPERIENCE, QUALIFICATIONS, AND FLUENCY IN TE REO

Köhanga reo and kura kaupapa Mäori kaiako have more complex work than teachers in English-medium education. They need to have sound competency in te reo Mäori, continually learn new vocabulary that is constantly being created for the expanding curriculum of kaupapa Mäori education, knowledge of te ao Mäori, and understanding of the particular needs of students in immersion education, using a language that they may not have had much exposure to at home. They continue to need to create particular resources for their students.

Kura kaupapa Mäori are currently exempt from the legal requirement that all teachers hold a practising certificate from the New Zealand Teachers Council, due to the shortage of qualified kaiako.

We asked the kaiako matua and tumuaki why they wanted to work in köhanga reo or kura. A number of the kaiako matua said simply that it was their "wawata" (desire) to work in köhanga reo. This was connected with a strong sense of belief in the goals of köhanga reo

> The kaupapa [of köhanga reo] holds me here, as well as the kids. The whänau
> are very supportive and involved in this köhanga reo. (Kaiako matua)

> He pümau au ki te kaupapa o te köhanga reo. He wähi tika mö te whänau katoa.
> Ahakoa he matua, he kaumatua, he pepi, he mahi mö rätou katoa. (Kaiako
> matua)

A few kaiako matua got "pushed into it" or encouraged by their whänau to become involved. And in a very Mäori way, one kaiako matua stated that he was told to by his kuia.

> I tonoa e ngä kuia kia hoki mai ki konei. I mauiui te kuia [o te köhanga reo]. No
> reira i tonoa ai kia huri hei kaiako. (Kaiako matua)

Most of the tumuaki mentioned the desire to be a part of efforts to revive te reo Mäori me öna tikanga and had a strong belief in the kaupapa of kura kaupapa Mäori. There were also a number of tumuaki who said that they wanted to be a "part of the solution" of Mäori educational underachievement rather than watching from the sidelines.

We interviewed a total of 12 köhanga reo kaiako,[12] 13 köhanga reo kaiako matua, 24 kura kaiako, and 9 kura tumuaki. Some of the kaiako in the köhanga reo and kura taught more than one child in this study. All but one of the tumuaki had teaching duties. Most staff were experienced and had teaching qualifications.

---

[12]   We did not interview one of the tëina child's kaiako as we could not organise an interview.

Teaching experience

Kaiako matua in köhanga reo in the study had a range from 1 to 20 years' teaching experience in köhanga reo, with a median number of 13 years. They had had no teaching experience other than köhanga reo.

Kaiako in the köhanga reo had a range from 1 to 16 years' teaching experience in their köhanga reo. The average number of years teaching in this köhanga reo was around 4 years. Three had taught at other köhanga reo, 2 in total immersion units, and 1 in an English-medium school.

Tumuaki in the kura kaupapa Mäori in the study had a range of 3 to 11 years' experience in kura kaupapa Mäori. Their total number of year's service in kura kaupapa Mäori ranged from 3–16 years, with an average of 8 years. Eight of the tumuaki also had experience teaching in other types of schools, including mainstream primary and secondary schools, total immersion units, and bilingual units.

Kaiako had taught from between 1 month to 8 years in their kura. Eleven of the kaiako had also taught in other schooling options. The total number of years' experience in the teaching profession ranged from 3 months to 27 years, with an average of 7 years.

Teaching qualifications

Almost all the teachers in the köhanga reo and kura kaupapa Mäori in the study had a qualification. Two köhanga reo kaiako, 3 kaiako matua, and 1 kura tumuaki did not have any teaching qualifications. All the kura kaiako had at least one qualification. Five of the köhanga reo kaiako, 14 of the kura kaiako, 4 of the kaiako matua, and 7 of the tumuaki had more than one qualification.

Table 11

Qualifications of staff in the study köhanga reo and kura kaupapa Mäori

Qualification held[13]	Köhanga reo kaiako n=12	Köhanga reo kaiako matua n=13	Kura kaiako n=24	Tumuaki n=9
Dip Teaching, TTC[14]	2	0	20	8
Dip Bilingual Teaching	1	0	2	3
BA, BEd	1	1	14	4
Postgraduate Degree (MA, MEd)	1	0	3	1
TKR Nat Trust Whakapakari and Attestation	7	9	4	0
Dip ECE	2	0	0	1
Tohu Mätauranga	0	0	0	1

---

[13]   Some staff had more than one of these qualifications.
[14]   Trained Teacher Certificate

TE REO MÄORI

Te reo Mäori is the language used in köhanga reo and kura kaupapa Mäori for all curriculum areas. English is not taught in te reo Mäori but often taught offsite or in a separate building by a teacher from outside the kura. To effectively teach children in köhanga reo and kura kaupapa Mäori, kaiako need fluency in Mäori, and an extensive Mäori vocabulary, particularly at kura kaupapa Mäori level, to cover the more technical aspects of the New Zealand curriculum, for example, pängarau or mathematics, and an ability to use complex structures to cover increasingly complex and abstract ideas. Current government Mäori-medium education objectives include improving Mäori immersion teaching quality through professional development and the supply and retention of kaiako (Ministry of Education, 2003, p. 60). Whakapiki Reo courses are designed to improve kaiako proficiency in te reo Mäori (Ministry of Education, 2003, p. 62). Kura reo, week-long intensive te reo Mäori programmes, are another initiative, run by Te Taura Whiri i Te Reo and aimed at enriching te reo Mäori proficiency of kaiako in Mäori-medium language educational institutions.

In the köhanga reo and kura in this study, just under half the kaiako, kaiako matua, and tumuaki were first language speakers of te reo Mäori. This is a much higher proportion than the general Mäori population.

Table 12

First language speakers of te reo Mäori

First language	Köhanga reo kaiako n=12	Köhanga reo kaiako matua n=13	Kura kaiako n=24	Kura tumuaki n=9	Total n=58
Te reo Mäori first language	6	7	11	4	28
Te reo Mäori not first language	6	6	13	5	30

Consistent with this high proportion of first language speakers, most rated themselves as fluent or confident speakers of te reo Mäori. There were more köhanga reo kaiako who felt they were not confident or fluent, though they could use different words and sentences.

Table 13

Teachers' self-rating of their ability to speak te reo Mäori

Ability to speak te reo Mäori	Köhanga reo kaiako	Köhanga reo kaiako matua	Kura kaiako	Kura tumuaki
	n=12 %	n=12* %	n=24 %	n=9 %
Can say a few words or short greetings in Mäori	0	0	0	0
Can speak a few basic sentences in Mäori using different words for short periods	0	0	0	0
Can speak Mäori using different words and sentences	25	33	9	0
Can confidently speak Mäori for long periods	25	25	35	56
Can confidently speak fluent Mäori	50	42	56	44

* One kaiako matua did not answer the questions on language proficiency.

The teachers' rating of their understanding of te reo Mäori was higher overall than their speaking ability.

Table 14

Teachers' self-rating of their ability to understand te reo Mäori

Ability to understand te reo Mäori	Köhanga reo kaiako	Köhanga reo kaiako matua	Kura kaiako	Kura Tumuaki
	n=12 %	n=12 %	n=24 %	n=9 %
Can understand a few words and/or short greetings in Mäori	0	0	0	0
Can understand a few basic sentences in Mäori using different word for short periods	8	15	8	0
Can understand many different words and sentences in Mäori in some situations	33	46	29	11
Can confidently understand Mäori in any situation	58	38	62	89

We also asked the kaiako and kura kaupapa Mäori tumuaki to rate their ability in writing te reo Mäori. Only one köhanga reo kaiako answered this question, so we have not included answers for this group. About two-thirds were confident writers in te reo Mäori.

Table 15

Teachers' self-rating of their ability to write te reo Mäori

Ability to write te reo Mäori	Kura kaiako n=24 %	Kura tumuaki n=9 %
Can write a few words and greetings in te reo Mäori	4	0
Can write a few basic sentences in te reo Mäori	25	33
Can write confidently in te reo Mäori	71	67

We also combined the teachers' responses to the 3 te reo Mäori proficiency questions – spoken, comprehension, and written (weighted to take account of the fact that we did not ask köhanga reo teachers about their written ability), so that we could develop an overall language proficiency scale rating for the kaiako matua, kaiako, and tumuaki. These were then classified into 5 language competency categories: little to no language proficiency, basic, moderate, medium, and highly proficiency. [15] Half were rated as having high proficiency in te reo Mäori, and a third, medium proficiency.

Table 16

Spoken, listening, and writing te reo Mäori language proficiency scales combined

Te reo Mäori proficiency	Köhanga reo kaiako n=12	Köhanga reo kaiako matua n=12	Kura kaiako n=24	Kura tumuaki n=9	Total n=58
Little to no proficiency	0	0	0	0	0
Basic proficiency	0	1	1	0	2
Moderate proficiency	2	3	2	0	7
Medium proficiency	4	4	8	3	19
High proficiency	6	4	13	6	29

We asked the kaiako matua, kaiako, and tumuaki how long they had been learning te reo Mäori. Both first and second language speakers answered this question.

---

[15] Those who obtained a total score between 3 to 4.9 were categorised as having little to no proficiency; 5 to 6.8, basic proficiency; 7 to 8.9, moderate proficiency; 9 to 10.9, medium proficiency; and 11 to 12, high proficiency.

Table 17

Number of years learning te reo Mäori

Number of years learning	Köhanga reo kaiako	Köhanga reo kaiako matua	Kura kaiako	Kura tumuaki
	n=9	n=12	n=19	n=9
<2 years	1	1	1	0
2–5 years	1	1	2	0
6–10 years	2	2	5	1
11+ years	5	8	11	8

WHÄNAU INVOLVEMENT

The Mäori Education Commission Report (1998, p. 11), states that the "cornerstones of the movement" are:

- total immersion in te reo Mäori in daily operations;
- whänau decision making, management and responsibility, accountability; and
- health and well-being of mokopuna and whänau.

McKinley (2000, p. 52) noted that "the whänau were both the governors and the managers [of their kura]" and draws attention to the fact that Section 3.8 of *Te Aho Matua* lays down guidelines for whänau involvement in kura. The involvement of the whänau gives validity to the kura and the children are strengthened because of this.

> Kia kite ngä tamariki ko te whänau tonu e whakahaere ana i te kura, ko te whänau hoki e mahi ngatahi ana me ngä pouako, ka tupu ia me te möhio ko te wairua me te mana Mäori motuhake e käkahu ana i a ia me töna kura.
>
> The children should see that the whänau works together with the teachers to run the kura. The children should grow up in the knowledge that wairua and mana Mäori motuhake embraces their school. (Translated by G. Cooper)

McKinley (2000, p. 63) found that Mäori parents of children in kura kaupapa Mäori were more likely to be actively involved in their child's kura than Mäori parents of children in both bilingual units and English-medium schools.

Governance

We asked the kaiako matua and tumuaki about the organisational structure of their köhanga reo and kura. The organisational structure in the köhanga reo in the study mainly consisted of a whänau, whänau ohu (work groups), and ngä kaimahi (workers). Whänau were involved in the day-to-day organisation of the köhanga reo, either through being involved in activities with the children, or doing administrative and maintenance work around the köhanga reo. A few kaiako matua reported that local kuia and koroua were actively involved in the day-to-day running of their köhanga reo.

Whänau are integral to köhanga reo and kura kaupapa Mäori, and are seen as part of the educational setting. Kura kaupapa Mäori have been somewhat ambivalent about the board of trustees model legally required of all schools, as it has effectively meant that the "mana whakahaere o te kura" (governing rights) are separated from kura whänau. All of the kura in this study had a board, but in most the "mana whakahaere" rest with the kura whänau. Some kura addressed this by ensuring decision making power was the same between the Board of Trustees and the kura whänau, or by making the kura whänau and the Board of Trustees one and the same.

> …kua whakakorengia te poari, ka whakahaere i raro i te whänau. Hei tutuki i
> ngä ture kei reira tëtahi ingoa mö te tiamana, kei a Mätou hoki te hekeretari me
> te kaitiaki pütea. Ko ngä mema ko ngä whänau. (Tumuaki)

> …ma te whänau e whakahaere te kura. Kua whakatüria he poari mä te Päkehä
> noa iho. (Tumuaki)

Most of the kura also have "ohu" or working parties which are made up of whänau members. These are given portfolios or specific tasks to carry out on behalf of the kura.

Reedy (1992, p. 13) in a review of kura kaupapa Mäori in 1992 reported that:

> A strong feature of the kura is the fact that parents and community members,
> especially kaumätua/pakeke, are heavily involved. They assist with the teaching
> of te reo Mäori and provide cultural input into the kura. They assist in tasks such
> as hearing children read, preparing classroom resources, helping with classroom
> activities including cleaning the kura.

High levels of parental involvement continue to occur. Eleven of the 13 köhanga reo we asked, and 7 of the 9 kura had volunteers doing work at köhanga reo or kura on a regular basis. At köhanga reo the number of volunteers ranged from 2 to 22, and at kura from 7 to 15 people. Parents were regular volunteers in 10 of the köhanga reo, and grandparents at 5. All kura had regular parent volunteers, and grandparents volunteered at 6.

Voluntary work ranged widely, as one köhanga reo kaiako matua said, "ngä momo mahi katoa" (all types of work). In köhanga reo they were kaikaranga, kaikörero, whängai te reo, whängai whakaaro, taught waiata and kapa haka, prepared kai, cleaned, carried out general maintenance, and generally helped look after the children. In kura they taught mau räkau, waiata, kapa haka, pakiwaitara, häkinakina, and sports to the children. They also fulfilled administration duties, worked in the library and resource room, and undertook other activities ranging from driving vehicles for kura outings to preparing kai and hangi.

Parents were asked about their current involvement in the köhanga reo or kura kaupapa Mäori that their child was attending. Only 3 percent of the parents or caregivers reported that they had no involvement in kura. All of these were taiohi parents.

Just under a third undertook voluntary classroom work, with more doing so in köhanga reo. Taiohi parents had the lowest level of involvement overall.

Table 18

Parental involvement in köhanga reo/kura kaupapa Mäori

Parental involvement in köhanga reo/kura	Tëi	Tai	Tuä	Total	Competent Children study, age 8 children
	n=32 %	n=37 %	n=38 %	n=107 %	n=521[16] %
Voluntary work at the köhanga reo/kura – classroom	41	24	24	29	42
Voluntary work at köhanga reo/kura – other	72	30	50	49	29
Regular talks with the kaiako – 3 times or more a year	56	49	55	53	n/a
Attends whänau functions	72	43	68	61	8[17]
Attends köhanga reo/kura whänau hui	81	41	53	57	13
Paid work at the köhanga reo/kura	13	14	26	18	4
Parent-kaiako interviews	28	57	71	53	n/a

The comparison with similar data from the longitudinal Competent Children data for when children were aged 8, with children attending English-medium schools, shows much higher involvement of parents in köhanga reo and kura, with the exception of voluntary classroom help. This may reflect parental levels of fluency in te reo Mäori.

We wanted to find out the regularity of parental involvement with their child's köhanga reo or kura, and the ways they were involved. Just under half the parents were involved at least once a week, and around a quarter on a daily basis.

Table 19

Regularity of parental involvement at köhanga reo and kura kaupapa Mäori

Parental involvement in activities at köhanga reo and kura kaupapa Mäori	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
Daily	31	14	26	23
Two or more times a week	9	3	0	4
1–2 times a week	31	19	8	19
Involved when asked to by köhanga reo or kura	22	30	45	33
Irregular contact/very little	3	16	16	12
No involvement	0	8	0	3

NB: Not all parents answered this question.

---

[16]   Wylie, Thompson, and Lythe. (1999). *Competent Children at 8-families, early education, and schools.* Wellington: New Zealand Council for Educational Research.

[17]   This figure is for both attendance at school functions and meetings.

Thirty-nine percent of tëina parents reported that their involvement in köhanga reo had a big impact on their whänau and has changed their direction as a whänau. For 32 percent of the parents it meant that they now spoke more te reo Mäori at home, or had begun te reo Mäori lessons. Thirteen percent were more involved in te ao Mäori, and 6 percent had pursued a teaching career. For 16 percent, their involvement meant no great changes, or it was a continuation of their existing level of involvement in te ao Mäori.

Since voluntary work is a part and parcel of most kaupapa Mäori settings, and te reo Mäori is the language of teaching and interaction, we asked the kaiako matua and tumuaki to give a rough estimate of the Mäori proficiency of their regular volunteers. The next table shows that some köhanga reo and kura in the study had volunteers who did not speak te reo Mäori, and that most had volunteers who were themselves learning te reo Mäori.

Table 20

Köhanga reo and kura and the proficiency in te reo Mäori of their regular volunteers

Te reo Mäori proficiency	Köhanga reo n=13 %	Kura n=9 %
Native/fluent speakers	24	13
Competent second language speakers	11	30
Learning te reo Mäori	45	38
Do not speak te reo Mäori	20	19

Most kura had low percentages of volunteers who were native speakers of te reo Mäori.

Te reo Mäori language ability of the köhanga reo and kura kaupapa Mäori whänau

We asked the kaiako matua and tumuaki to estimate the percentage of parents in their whänau who were native speakers of te reo Mäori, fluent second language speakers, learners of te reo Mäori, or non-speakers of te reo Mäori. The köhanga reo who gave us this estimate were more likely than the kura to have a somewhat higher proportion of native speakers of te reo Mäori among their whänau, and a somewhat lower proportion of non-speakers.

The total average proportion of parents in the 9 köhanga reo for whom we have this information was:

- native speakers of te reo Mäori: 12.8 percent (a range from 0 to 35);
- fluent second language speakers: 14.5 percent (a range from 0 to 60);
- learning te reo Mäori: 34.2 percent (a range from 0 to 90); and
- non-speakers of te reo Mäori: 38.8 percent (a range from 0 to 90).

The total average proportion of parents in the 8 kura for whom we have this information was:

- native speakers of te reo Mäori: 7.2 percent (a range from 0 to 20);

- fluent second language speakers: 15.3 percent (a range from 5 to 30);

- learning te reo Mäori: 30 percent (a range from 5 to 70); and

- non-speakers of te reo Mäori: 49.2 percent (a range from 10 to 85).

Kaiako were asked a series of questions about the children's parents' use of and proficiency in te reo Mäori. We asked the kaiako to identify the main language spoken by the parent that they most often saw at köhanga reo or kura, when they were at kura or köhanga reo. Just over a third of the parents spoke te reo Mäori when they were in their child's kaupapa Mäori education centre – though rather fewer of the taiohi parents did so.

Table 21

Parents' main spoken language at köhanga reo and kura according to kaiako

Main language	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Te reo Mäori	39	17	46	37
English	42	75	44	53
Uses as much te reo Mäori as they know	13	11	5	9
Other	6	6	5	6

NB: Some of the kaiako responses fit into more than 1 of the above categories.

We asked the kaiako to rate the children's parents' te reo Mäori proficiency. This rating was for the parent they most often saw or spoke to at köhanga reo and kura. The table below shows that the most confident speakers of te reo Mäori within the kaupapa Mäori setting were parents of tuäkana children; and that most parents who were speaking te reo Mäori were at a basic level.

Table 22

Parents' spoken te reo Mäori proficiency – according to kaiako

Spoken te reo Mäori rating	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Not speaking yet	0	0	0	0
Can say a few words or short greetings in Mäori	36	37	24	31
Can speak a few basic sentences in Mäori using different words for short periods	13	26	18	19
Can speak Mäori using different words and sentences	32	17	11	19
Can confidently speak Mäori for long periods	3	9	24	12
Can confidently speak fluent Mäori	16	11	24	17

There were no parents who had no understanding of Mäori at all. Taiohi parents, however, were rated at a more basic level than cohorts 1 and 3.

Table 23

Parents' comprehension of spoken te reo Mäori – according to kaiako

Comprehension of spoken Mäori	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Cannot understand any Mäori	0	0	0	0
Can understand a few words and/or short greetings in Mäori	30	40	25	31
Can understand a few basic sentences in Mäori using different words for short periods	3	34	20	20
Can understand many different words and sentences in Mäori in some situations	37	9	28	23
Can confidently understand Mäori in any situation	30	17	28	24

Five of the parents of tëina children were taking Te Köhanga reo classes in te reo, as was one tuäkana parent.

We asked kaiako about the types of things they did to encourage parents to speak te reo Mäori. The main tactic was to speak Mäori with them, particularly in köhanga reo. It is interesting that kaiako also saw helping parents help their children with homework as encouraging the parents to speak te reo Mäori.

Table 24

Kaiako efforts to encourage parents to speak te reo Mäori

Encouragement	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Speak Mäori to them	61	44	37	45
Encourage them to join classes	29	8	22	19
Assist them to help their children complete their homework	0	19	15	12

Eighty-three percent of the parents reported that their involvement in köhanga reo and kura had impacted on the use of te reo Mäori in the home. Most of the parents reported that it had led to an increased use of te reo Mäori in the home, including half of those for whom Mäori was their first language.

> …it [te reo Mäori] is now spoken in the home everyday…as much as we know.
> Prior to this we didn't. …because we use it as much as possible, our friends now
> use te reo Mäori as much as they know. (Teina parent)

> My husband never used to speak Mäori before, but now he uses the language he
> picks up from the kids and his parents. It has made me re-focus my whole life
> really. (Taiohi parent)

> ...more determined to learn te reo. It's made a big impact...the whole family are
> learning te reo. There are three tëina and two tuäkana here at kura. [Child's]
> father and I are both learning Mäori as well. (Tuakana parent)

Overall level of parental support for children's learning

We asked the kaiako matua and tumuaki to rate the overall level of parental support for their children's learning at their köhanga reo or kura using a scale of 1 to 5: 1 being no support and 5 being total support. Around half rated the level of parental support at either 4 or 5, with more köhanga reo kaiako matua feeling they had total support than in kura. It was limited in 2 köhanga reo.

Table 25

Level of parental support according to the kaiako matua and tumuaki

Level of parental support	Köhanga reo n=13[18]	Kura n=9[19]
1 – no support	0	0
2 –	2	0
3 –	3	4
4 –	2	4
5 – total support	5	1

We also asked the kaiako matua and tumuaki to rate the level of parental involvement in Mäori-centred activities outside their köhanga reo and kura. This indicated that whänau might not always be involved in other Mäori-centred organisations.

Table 26

Level of parental involvement in Mäori-centred activities according to the kaiako/tumuaki

Level of parental involvement	Köhanga reo n=13	Kura n=9
1– no involvement	1	0
2	3	2
3	3	3
4	3	3
5 – total involvement	2	1

ENGLISH AT KÖHANGA REO AND KURA KAUPAPA MÄORI

Köhanga reo and kura kaupapa Mäori endeavour to ensure that te reo Mäori is spoken all the time. This is not easy for children whose first language is not Mäori. We asked the kaiako matua and tumuaki if the children spoke te reo Mäori all the time while they were at their köhanga reo or

---

[18] One kaiako matua felt uncomfortable rating parental involvement in köhanga reo and Mäori-centred activities, but noted that "kaha ake ngä mätua ki te häpai i te kaupapa, ki te häpai tonu i ngä mahi e pä ana ki ö rätou tünga".

[19] One of the tumuaki rated parental involvement between 3 and 4. We categorised this as a 3.

kura. About two-thirds of the kaiako matua reported that the children at köhanga reo spoke te reo Mäori all of the time compared with one-third of the kura tumuaki.

Table 27

Köhanga reo and kura kaupapa Mäori where te reo Mäori is spoken all of the time by the children

Amount of te reo Mäori spoken	Köhanga reo n=13	Kura n=9
Te reo Mäori spoken all the time by the children	9	3
Te reo Mäori is not spoken all the time by the children	4	6

We also asked the kaiako matua and tumuaki when the children spoke English at köhanga reo or kura. It seems that if the children spoke English while at köhanga reo or kura, it was more likely that they would do so in the playground and/or at lunchtime, in other words, not in class.

Table 28

When children speak English at köhanga reo/kura kaupapa Mäori

When children speak English at köhanga reo and kura	köhanga reo n=13	kura n=9
Playtime/lunchtime	3	6
When köhanga reo/kura day is over	1	2
When there is no kaiako around	1	1
When they are excited	1	0
If they do not know the word	1	0

* Six kaiako matua did not answered this question.

The kaiako were able to provide more detail when we asked them about the individual children in the study. The main reason was if they did not know a Mäori word, or if they were frustrated. Only a few children spoke English often.

Table 29

Kaiako description of when study children speak English at köhanga reo/kura

Occasions	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
When the Mäori word is not known	26	31	29	28
When frustrated	13	25	15	17
Often	6	8	12	9
When other children/people speak English	0	22	2	8
During lunchtime	0	8	10	6
When angry/excited	0	8	12	7
When s/he does not understand	0	0	7	3
When there is no kaiako around	10	0	0	3
When speaking fast	0	6	0	2
After kura	0	6	0	2
After a holiday break	6	0	0	2

We also asked about particular topics that the children switched to English to talk about rather than speak te reo Mäori. What is interesting here is the proportion of children who did not speak English at all. Switching to English did not seem to be related to topic so much – though that would be relevant in relation to vocabulary knowledge – as to occasion and who the child is interacting with.

Table 30

Particular topics of conversation that children switch to English to talk about

Topics of conversation	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Does not speak English	39	22	22	27
If s/he does not know the word	6	17	5	9
During lunchtime/playtime	0	6	12	7
When angry/excited	0	11	10	6
About things s/he does at home/watching television	3	3	2	3
When parents are around	0	3	2	2
After school holidays/long breaks	0	3	2	2
Specific curriculum areas	0	3	2	2
Only if spoken to in English	3	0	0	1

English lessons

All the kura taught English. One of the kura started teaching English at Year 4, 2 started at Year six, 3 at Year seven, and 3 at Year nine. Seven of the kura used a separate room on-site for teaching English and 2 of the kura took the children off-site to teach them English.

RELATIONS WITH PARENTS

Most of the kaiako thought they had a very good relationship with the study children's parents, particularly at köhanga reo.

Table 31

Kaiako view of their relationship with study children's parents

Kaiako view	Tëi n=31 %	Tai n=36 %	Tuä n=41 %
Very good	84	53	61
Good	10	36	20
Satisfactory-poor	6	8	2
Other	0	3	17

Sharing information about children between kaiako and parents

We asked the kaiako matua and tumuaki what information was given to the parents about their child's progress at their köhanga reo.

The köhanga reo used a number of methods to inform the parents about their child's progress at köhanga reo. Some kaiako matua said that they discussed the children's activities and progress at a whänau hui (reported as a whole rather than individually), others sent home examples of the children's work, some prepared regular written reports about the children's progress, and others talked formally and informally about the children's progress. One kaiako matua said that parents were encouraged to come into the köhanga reo, participate, and talk to the kaiako.

> …kei te tuwhera ngä kuwaha ki ngä matua i ngä wä katoa ki te körero mö ä rätou tamariki me ërä atu tikanga e hiahia ana rätou ki te körero. (Kaiako matua)

We asked the kaiako what sorts of information they provided the study children's parents about the child's progress. Köhanga reo kaiako were more likely to use either written or oral feedback, but not both. Just under a third of the tuäkana parents received only written feedback about their child's progress.

Table 32

Form of information to parents about individual child's progress

Kaiako report	Tëi n=31 %	Tai n=36 %	Tuä n=41 %
Written feedback/reports/pänui	52	31	34
Oral feedback, incl. whänau hui	23	3	0
Both written and oral	26	53	46
Other	3	0	20

NB: Not all kaiako answered this question.

We also asked parents how they found out about their child's progress. The most common way that parents received information about their child's progress was through pürongo or reports. Parent teacher interviews occurred in kura, but not köhanga reo. Eight percent of the parents reported that they did not receive any information about their child's progress, more in taiohi than cohorts 1 and 3.

Table 33

Parental reports of their information about children's progress

How information obtained	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Pürongo (written)/report	47	49	66	54
Informal discussions	47	30	34	36
Parent teacher interviews	0	27	26	19
As an issue arises	3	0	11	5
None	6	14	5	8

We asked kaiako if parents provided kaiako with information about the study children without the kaiako asking. This provides an indication of an awareness that learning is a partnership between home and köhanga reo or kura. Around half the parents of the study children did so. Interestingly, this pattern was similar across all 3 cohorts.

Table 34

Parents sharing information about child with kaiako

Kaiako view	Tëi n=31 %	Tai n=36 %	Tuä n=41 %
Information is shared	45	50	46
Information is sometimes shared	6	8	7
Information is not shared	39	22	41

NB: Not all kaiako answered this question.

Nearly all the parents (93 percent) felt comfortable about talking with the kaiako about their child. One parent had not met the kaiako. We asked parents if there had been any issues for their child that they had taken to the kaiako to help resolve. This is not quite the mirror reflection of the question asked kaiako, since it focused on only one aspect of information, "issues" (rather than occasion for delight or discovery).

Around half the parents could not identify any issue which had arisen, with a higher proportion of tëina parents. A small number of parents did not take a problem to the kaiako.

Table 35

Working with kaiako to resolve child's problems

How problem resolved	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
No problems	69	43	37	48
Took problem to kaiako	31	54	58	48
Did not take problem to kaiako	0	3	5	3

Social-emotional and academic issues were the main problems that parents had worked on with their children's kaiako. Twenty-seven percent of the parents reported that they had worked through a social-emotional issue. None of the tëina parents reported that they had worked through a cognitive issue with the kaiako. Twenty-seven percent of taiohi and 21 percent of tuäkana parents had worked through a cognitive issue with the kaiako. Other issues discussed with the kaiako by a small percentage of the parents included child's health and te reo Mäori.

We asked how the köhanga reo was preparing the child and parent for the transition to kura. Thirty-two percent of the tëina parent/caregivers said their child was going to the kura a couple of days a week. Thirteen percent did not think the köhanga reo had a responsibility with transition to kura, and that it was the whänau's responsibility. This may relate to approaches which are whänau-based, with kura whänau taking responsibility for new whänau and their children.

Parents also found out about their child's experiences and progress by talking with their child. Nearly all of the taiohi and tuäkana parents[20] (98 percent) talked to their children about kura.

Parents said that their children mostly talked about their school work (39 percent) and how much they like the kura, kaiako, and the other children (24 percent). Some parents reported that their child told them everything (19 percent). A few parents (9 percent) said that their child talked about their concerns about kura, 8 percent of the children did not say much and would only talk about kura if asked.

---

[20] Tëina parents were not asked this question.

CHILDREN'S ENJOYMENT OF KÖHANGA REO AND KURA KAUPAPA MÄORI – PARENTAL PERSPECTIVES

We asked the tëina parents if their child enjoyed köhanga reo. All the parents said that their child enjoyed köhanga reo. Just under half the parents said that their child liked the kaiako and the lessons that were prepared for them.

Table 36

Things child enjoyed at köhanga reo - parents

Things children liked/enjoyed at köhanga reo	Tëi n=31 %
Kaiako	45
Köhanga reo lessons	45
Tamariki	42
Waiata/kapa haka	39
Whänau environment	16
Other	6

When asked about what the things were that their child did not enjoy at köhanga reo, discipline and staying inside or in one place for too long were the two main things.

Table 37

Things child did not enjoy at köhanga reo - parents

Things children did not like/enjoy at köhanga reo	Tëi n=31 %
Nothing/not sure/has not said anything	19
Being disciplined/punishment	13
Staying inside/kept in one place for too long	13
Being separated from friends (split classes)	6
Kapa haka/waiata	3
Other students behaviour e.g., being bullied or teased	3

Ninety-seven percent of all the parents thought that their children enjoyed kura. We asked the parents what they thought their child enjoyed about kura. The main aspects were curriculum, the practice of tikanga, and relations with others.

Table 38

Things children liked most about kura according to their parents

Things children liked	Taiohi n=37	Tuäkana n=38
School work/curriculum areas	59	47
Waiata/kapa haka	30	39
Tamariki	32	24
Kaiako	24	18
Whänau environment	5	16

We also asked the parents if there was anything about kura that they would like to change. Most would not change anything.

PARENTAL SATISFACTION WITH THEIR CHILD'S PROGRESS

We wanted to find out how satisfied the parents were with their child's progress at kura and if they were comfortable working through any issues they may have had with their child's kaiako. Most of the parents reported that they were happy with their children's learning.

Table 39

Parents' satisfaction with children's learning

Parents' satisfaction with children's learning	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
Satisfied	94	78	76	82
Qualified satisfaction	0	11	11	7
Dissatisfied	6	11	13	10

We did not ask the reasons for satisfaction in this phase; we will do so in phase 3. Reasons for being dissatisfied with a child's learning included that the student was bored, not making good progress, or lacked confidence, a concern with the size of the class, and the quality of the kaiako.

KAIAKO MATUA, TUMUAKI, AND KAIAKO VIEWS ON WHAT ALLOWS A CHILD TO DO WELL AT KÖHANGA REO AND KURA

We asked the kaiako matua, tumuaki, and kaiako what they thought were the things that allowed a child to make the most of their time at kura. The tumuaki and kura kaiako offered more suggestions than the kaiako matua and köhanga reo kaiako. The main themes among the köhanga reo kaiako were having an interesting programme, the child being well-rested and fed, and regular attendance. Tumuaki and kura kaiako thought that a programme that was interesting and varied allowed a child to make the most of their time at kura, followed by being well-fed and rested, and having good teachers. Interestingly, whether parents spoke te reo Mäori at home or not did not seem to be as much of an issue.

Table 40

*Things that allow a child to make the most of their time at köhanga reo
and kura kaupapa Mäori*

Things that allow a child to make the most of their time	Köhanga reo kaiako	Köhanga reo kaiako matua	Kura kaiako	Kura tumuaki
	n=12	n=13	n=24	n=9
Interesting programme/variety	1	3	7	4
Being well-rested and fed	2	3	5	1
Good teachers	1	0	5	2
Strong parental support at home	0	1	2	3
Strong parental involvement in kura	1	1	1	2
Regular attendance	2	1	1	1
Parents speak te reo Mäori at home	1	1	1	0
Children have appropriate stationery	0	0	1	0

NB: Not all children answered this question.

Conversely, the tumuaki and kaiako offered a variety of suggestions about the things that make it hard for a child to make the most of their time at kura. Most of these were related to the home,[21] and here the lack of te reo Mäori in the home is cited as a difficulty.

---

[21] Interestingly, a current study has found that teachers of Mäori students in English-medium schools attribute Mäori student achievement more to the child's characteristics and home background than to teacher-student relationships, which is what Mäori students and whänau emphasised (Bishop and Tiakiwai, 2003). Our questions in this study were somewhat different, and the kaupapa Mäori environment is different. These two factors may account for the kaiako matua, and tumuaki emphasising aspects of teaching in relation to enabling achievement, but home factors in relation to barriers to achievement.

Table 41

Things that make it hard for a child to make the most of their time at köhanga reo and kura kaupapa Mäori

Things that make it hard for a child to make the most of their time	Köhanga reo kaiako n=12	Köhanga reo kaiako matua n=13	Kura kaiako n=24	Kura tumuaki n=9
Child not well-rested and fed	2	4	5	4
Ngä ähuatanga i te käinga	2	2	5	5
Parents/whänau do not speak te reo Mäori	3	2	4	1
Parents do not help with homework	0	0	4	1
Irregular attendance	3	3	0	0
Mäori language ability low	1	0	3	1
Parents have little involvement in köhanga reo/kura	0	0	1	2
Children do not have appropriate stationery	0	0	1	1

NB: Not all kaiako answered this question.

SUMMARY

The kaupapa Mäori educational settings in this study tended to have small rolls, allowing all children and kaiako to know each other. They also tended to have regular volunteers, with more voluntary help outside the classroom than within it, probably reflecting volunteers' confidence in te reo Mäori. All but one of the settings served children from more than one iwi. At several, most of the children were first language speakers of te reo Mäori, but it was more usual for the proportion of students who were first language speakers to be less than 10 percent. Most köhanga reo and kura in the study served low-income or low to middle-income communities, and are embedded in their local communities.

Teaching te reo Mäori me öna tikanga in a safe environment, to develop a strong sense of pride and identity, was the main philosophy of the köhanga reo and kura, and the main reason why parents chose it for their children. It was also important to parents that it was whänau-oriented.

Particular cultural knowledge and values which were emphasised in most of the köhanga reo and kura were karakia, pepeha, whakapapa, manaakitanga, waiata, pakiwaitara, whanaungatanga, and mihi. Many of the tuäkana children carried out manaakitanga without being told to do so. Values such as tapu, kaitiaki, and mana were not usually taught formally at these ages, but through modelling and discussions at times when they were relevant, for example, after returning from a hui.

Mäori was the first language for just under half the kaiako matua, kaiako, and tumuaki of the köhanga reo and kura in the study. Around half rated themselves as fluent speakers, and somewhat more thought they could confidently understand Mäori in any situation. Two-thirds of the kura staff rated themselves as confident writers in te reo Mäori.

Most of them were experienced kaiako, and had teaching qualifications. They shared a strong belief in the importance of kaupapa Māori education. Kura staff were more likely than kōhanga reo staff to have had experience in English-medium education.

Whānau were involved in the organisation of the kōhanga reo and kura, and most had ohu, or working parties, and whānau providing regular voluntary help. Around half the kōhanga reo and kura gave high ratings to the overall level of parental support. Just under half the parents of the study children were involved in their child's kōhanga reo or kura at least once a week, and around a quarter on a daily basis. Involvement benefited whānau, leading to them speaking more te reo Māori, and pursuing te reo Māori lessons. Grandparents provided voluntary support in around half the kōhanga reo and kura.

The proportion of native and fluent second language speakers of te reo Māori was lower among the whānau and volunteers than among the teachers. Just under a third of the study children's parents spoke te reo Māori when they were at their child's kaupapa Māori education centre. Around 30 percent of the parents were thought by their child's kaiako to be limited to a few words or short greetings in Māori. Seventeen percent were regarded as fluent speakers, with more for tuākana whānau, and 24 percent as confidently able to understand Māori in any situation. Teachers encouraged whānau to speak te reo Māori by speaking Māori to them, encouraging them to join te reo Māori classes, or by assisting them to help their children complete their homework. Children spoke te reo Māori all the time in about two-thirds of the kōhanga reo, and one-third of the kura in the study. They were most likely to do so in the playground or at lunchtime, rather than in class, and to do so if they did not know a Māori word, if they were frustrated, or if they were speaking to someone who did not know te reo Māori.

All the kura taught English, most starting at Year 6 and above. It was usually taught in a separate room, or off-site.

The main source of information for parents about their child's progress was through written reports and informal discussions. Around half the parents also provided kaiako with information about the study children without being asked, which helps adults support children in their learning. Nearly all the parents were comfortable talking with their child's kaiako, and just under half had worked with them on a problem their child was experiencing, mainly social-emotional in kōhanga reo, and both socio-emotional and academic at kura.

All the parents of children at kōhanga reo and almost all the parents of children at kura thought their child enjoyed their education, and most were happy with their child's learning.

Teachers thought that having an interesting programme, being well-rested and fed, and having good teachers allowed children to make the most of their time at kōhanga reo and kura. They sourced the things that could make it hard for a child to make the most of this time in the home, particularly a lack of te reo Māori.

3. NGÄ TIROHANGA A NGÄ TAMARIKI MÖ Ä RÄTOU AKORANGA
CHILDREN'S VIEWS OF THEIR EDUCATIONAL EXPERIENCE

In this chapter, we focus on what the children in the study told us about their educational experience. Individual children are at the heart of köhanga reo and kura kaupapa Mäori philosophy, and listening to the views of students on their education is an important part of ensuring that teaching is supporting learning.

PARTICIPATION IN KAUPAPA MÄORI EDUCATION

Many of the study children had experienced their education in kaupapa Mäori with a core group of peers. Most of the children attending köhanga reo had been in the same köhanga reo for their whole early childhood education experience (66 percent), and most of the tuäkana children had attended the same kura (77 percent).

Forty-one percent of the tëina children had attended köhanga reo for more than 3 years, 38 percent attended köhanga reo for 1 to 3 years, and 22 percent for less than a year. Thirty-four percent of the children had attended another köhanga reo before the one that they were attending at the time of the study. Seven of the children had also attended other early childhood education options, all for a period of less than 6 months. In 2 of these cases te reo Mäori was the main medium of instruction.

Fifty-nine percent of the taiohi and tuäkana children attended köhanga reo for 3 or more years before entering kura kaupapa Mäori. Thirty-seven percent attended köhanga reo for between 1 and 3 years, and one child attended köhanga reo for less than a year. Two children from taiohi and tuäkana had not attended köhanga reo.

Most of the taiohi and tuäkana children (77 percent) had been at the same kura kaupapa Mäori since they were 5 years old. Eight percent had attended another kura kaupapa Mäori previously (5 percent tuäkana children, and 3 percent taiohi children). Fifteen percent had not attended another kura kaupapa Mäori. Eleven percent were tuäkana children and 4 percent were taiohi children.

CHILDREN'S UNDERSTANDING OF THE PURPOSE OF KURA KAUPAPA MÄORI

We asked the taiohi and tuäkana children why they thought their parents had chosen kura for them. Nearly all of the taiohi and tuäkana children said that it was because their parents wanted them to learn te reo Mäori.

> No te mea e pirangi ana rätou kia whakamana i töku reo Mäori. Ki te haere au ki tëtahi kura kë, ka ngaro. (Tuakana child)

Some of the children made a connection with learning tikanga Mäori and mätauranga Mäori. Four taiohi children said that they did not know why.

When asked what their thoughts about their parents' choice of kura for them, nearly all of the children made positive comments about kura, or they enjoyed learning te reo Māori.

> Ki ōku whakaaro, he mea pai. Kei te ako ia tamaiti i tōna ake reo. Kore rātou e
> takahi i te mana o ō rātou tīpuna.(Tuakana child)

We also asked the taiohi and tuākana children what they hoped to learn at kura. Again, most of the children talked about learning te reo Māori. They also talked of learning reading, writing, maths, and social studies (Tikanga-ā-iwi). Tikanga Māori, waiata, and kapa haka were also mentioned.

Most of the children thought that learning these things at school would be beneficial for them in terms of strengthening their own identity and knowledge in te reo Māori, "Kia tū rangatira au i roto i te ao Māori".

We asked the taiohi and tuākana children what were the things that they thought would be important for them when they grew up. The main themes were their whānau (21), followed by getting a good education and job (15), and learning te reo Māori (9).

CHILDREN'S LIKES AND DISLIKES

Tēina (kōhanga reo, 5-year-olds)

We asked the tēina children about the types of activities they did at kōhanga reo. Some of the children did not answer this question and others in the interview that were asking for their own views. The fieldworkers noted that some were shy, some did not seem to understand the questions, and some did not seem to know how to answer the questions.

Children talked about playing outside on the playground and hākinakina. Others mentioned that they did painting, colouring in, tuhituhi (letters), jigsaws, games, and waiata and karakia. When asked what were their favourite activities at kōhanga reo they provided a wide range of responses. Particular organised activities and games were mentioned. One simply said "playing" and another liked karakia and kai, another the kaiako. One child said that she did not really like kōhanga reo.

Twenty-four percent of tēina children said that there was something about kōhanga reo that they did not like. Only one child described what that was; "te kiki me te patu" (hitting).

We asked the tēina children what types of things they did at kōhanga reo to help out. Most of the children talked about "awhiawhi", another talked about looking after the toys and another said not playing around.

Taiohi and tuākana (kura kaupapa Māori, 8 and 11-year-olds)

Overall, pāngarau, friends, and playing outside top the list of what things children like at kura, when we asked them to identify the 3 things they liked most about kura.

Pāngarau was the only "school work" area rated in the top 6 things about school that children liked. There may be several reasons for this. First, it is not so language-dependent as other aspects of the curriculum. Second, te reo Māori in itself supports maths learning, for example, counting in place values. Third, partly because there are no maths textbooks for kura kaupapa Māori, maths

tends to be either learnt through short tasks, allowing students a greater feeling of accomplishment, or incorporated into other topics which are of interest to the students.

Table 42

Things children said they liked about kura

What children liked about kura	Tai n=37 %	Tuä n=41 %	Total n=78 %
Pängarau	38	44	40
Friends	30	49	40
Playing outside	41	37	39
Kapa haka	22	37	30
Going on trips	27	32	29
Kaiako	30	17	22
Pänui	27	12	18
Tuhituhi	11	22	17
Learning about Mäori things	16	15	14
Pütaiao	8	10	9
Learning	8	10	9

Tuäkana children tended to make more mention of their friends, pängarau, going on trips, tuhituhi, and kapa haka than the taiohi children. More taiohi children mentioned their teachers and pänui, than tuäkana children.

Forty-four percent of the children said that there was something that they did not like about kura. Teasing and bullying were the main things. A larger percentage of tuäkana children reported that there were things that they did not like about kura than the taiohi children.

Table 43

Things children did not like about kura

What children did not like about kura	Tai n=37 %	Tuä n=41 %	Total n=78 %
Children who tease	11	27	19
Children who bully	14	24	19
Punishment	5	7	6
Kaiako	0	5	3

We also asked the taiohi and tuäkana children to give us their views of their experiences at kura.[22] We asked them to say whether a given statement was true for them almost always, sometimes, or rarely/never. The set of statements covers relations with teachers, including fair treatment and support, enjoyment and engagement with school work, and relations with peers.

Most children were positive about their experience of kura. Taiohi children were more likely to say they liked their kaiako, that the rules were respected by everyone, and that they enjoyed themselves almost always. They were more likely to say they rarely or never got bored, restless, or upset.

Table 44

Children's view of kura

Children's views of kura	Taiohi			Tuäkana		
	Tata ki te wä katoa n=37 %	I ëtahi wä	Tata kore/ kore rawa	Tata ki te wä katoa n=41 %	I ëtahi wä	Tata kore/ kore rawa
I can learn things useful for my future	54	43	3	46	54	0
I get lonely	6	46	46	5	45	45*
The kaiako treat me fairly	49	49	3	54	44	0
We do interesting work	54	32	14	56	44	0
I like my kaiako	78	22	0	54	39	5
I keep out of trouble	14	38	46	12	44	44
I feel sad	0	54	46	5	51	42
My kaiako tells me when I do good work	50	50	0	54	44	2
I learn about Mäori things that are interesting	54	46	0	59	41	0
I get bored	8	49	41	5	71	24
The rules are respected by everyone	47	44	6*	29	59	12
I have good friends	62	30	8	78	20	2
I enjoy myself	70	30	0	44	54	2
I get upset	8	44	44*	10	56	34
I get all the help I need	51	43	5	45	52	2
I could do better work if I tried	49	46	3	61	37	2
I get restless	3	42	50*	2	74	24
I get bullied	8	40	51	10	40	50

* Not all children answered this question.

---

[22] Most of these questions are drawn from a set used in the longitudinal Competent Children project, which was developed from the *Quality of school life* inventory with some additions. This inventory was originally developed by ACER to use in their longitudinal studies of Australian youth, with items used in IEA studies and in the New Zealand Progress at School study.

Girls were more likely to say they almost always got all the help they needed (61 percent compared with 32 percent of the boys), but this was the only significant gender difference in terms of both this set of questions and their likes and dislikes of kura. Anecdotally, this may reflect boys' greater unwillingness to ask for help in the classroom.

We asked the taiohi and tuākana children what kind of help they gave at kura. Just under half of the children (49 percent) said that they helped out their mates or the tëina. Forty-seven percent said they helped out their kaiako. A few others said that they helped clean the classroom (5 percent).

HOMEWORK

All of the tumuaki said that children at their kura were given homework. Two of the tumuaki said that the kōhungahunga (new entrants) were not given homework. One kura had a policy of setting homework for 4 nights a week. About 20 minutes homework for the junior classes and between 1.5–2 hours homework for the wharekura children was the norm at this particular kura.

We asked the tuākana children how often they were given homework. Around half said they got homework between 2–5 days a week. A small proportion said they were not given homework, or only occasionally.

Table 45

Regularity of homework – child view

Regularity	Tai n=37 %	Tuä n=41 %	Total n=78 %
Never	5	7	6
4–5 days a week	24	29	27
2–3 days a week	24	22	23
1 day a week	32	41	37
Some days	14	0	6

Eighty-one percent of the taiohi children spent less than 1.5 hours a week on homework, compared to 50 percent of the tuākana children.

Table 46

Hours per week spent doing homework – child

Hours	Tai n=37 %	Tuä n=41 %
<1 hour	25	21
1–1.5 hours	56	29
1.6–2.4 hours	3	26
2.5–6 hours	16	24

Most of the taiohi and tuäkana children thought it was either very important (47 percent) or important (34 percent) to do homework. Nine percent thought that it was not important.

Forty-two percent of the children did not find it hard to complete their homework. Twenty-three percent reported that they had trouble doing their homework and 35 percent that it was sometimes hard to complete their homework. Taiohi children were less likely to report that it was hard to complete their homework at home.

There was a wide range of reasons as to why the children found it difficult to complete their homework. Siblings were one of the 2 main reasons. This may reflect tuakana-teina responsibility for younger siblings. The difficulty of homework was the other main reason, particularly for tuäkana students. A larger percentage of tuäkana students simply did not want to do the homework, and were somewhat more inclined to forget to take it home.

Table 47

Things that make doing homework difficult – child

Things that make doing homework difficult	Tai n=36 %	Tuä n=42 %	Total n=78 %
Siblings	27	29	28
Difficult homework	19	32	26
Forgetting to take homework home	16	22	19
Do not want to do it	11	22	17
Sports	19	12	15
Tiredness	11	17	14
Noise	11	5	8
Household tasks	8	7	8
Job	8	5	6
Friends	5	5	5
Going to other parent's house	5	5	5
Music/performing arts	5	0	3
Things I do with my family	5	0	3
Other	0	12	6

Seventy percent of the taiohi and 84 percent of the tuäkana parents said their children had regular homework to do. Almost all of them helped their children with this homework, and over half provided supervision, resources, and help with maths and literacy. Help with te reo Mäori in itself was much higher for tuäkana parents, perhaps suggesting greater complexity in what children were tackling, as well as the higher proportion of fluent speakers among the tuäkana parents.

Table 48

Parental help with kura homework

Form of help	Tai n=37 %	Tuä n=38 %
Help when needed	92	87
Supervise	73	58
Maths	59	55
Reading	54	42
Spelling	49	39
Provide resources	41	55
Projects	24	42
Te reo	22	50
Science	14	34

We also asked taiohi parents what kinds of homework they thought their child got the most benefit from. Reading and practice in mathematics headed the list. Tuäkana children appeared to be getting more project work, and more work in social studies, pütaiao, and English.

Table 49

Parental view of the homework child benefits most from

Type of homework	Tai n=37 %	Tuä n=38 %
Pänui pukapuka/reading	70	66
Pängarau/maths problems	59	58
Spelling	41	53
Times tables	41	50
Other maths	38	39
Projects/research	22	50
Social studies	16	34
Pütaiao/science	14	42
English	5	21

SUMMARY

Around half the children had had more than 3 years' experience in köhanga reo. They had stable peers, with most staying in the same köhanga reo or kura. The tuäkana children understood the main purpose of their attendance at kura was to learn te reo Mäori. They were positive about their experiences, and enjoyed learning te reo Mäori. They also spoke of curriculum areas and tikanga Mäori. Pängarau was particularly popular.

They saw the benefits of their education in terms of strengthening their own identity and knowledge in te reo Mäori. The values underlying kura kaupapa Mäori came through when we asked them what would be important for them when they grew up: whänau, getting a good education and job, and learning in te reo Mäori.

Teasing and bullying were the main things the study children did not like about their kura.

Most children in taiohi and tuäkana had some homework each week, and thought it important to do it. The average amount of time spent on homework by taiohi children was around one to 1.5 hours a week, and for tuäkana children, around 1.5 to 2 hours. Forty-two percent of the children did not have trouble completing their homework; the main obstacles were its difficulty, and siblings.

4. TE REO MÄORI I TE KAINGA ME NGÄ RAUEMI TAUTOKO A NGÄ MÄTUA
TE REO MÄORI IN THE HOME AND PARENTAL RESOURCES

Children's language development and their response to the learning opportunities in educational settings is influenced by their opportunities to hear words and use them (both in terms of quantity and range), by the language that their parents speak at home, the media and contact with the wider community (McNaughton. 2002; Snow, Barnes, Chandler, Goodman, and Hemphill, 1991). Hohepa (1999) identifies as key to the regeneration of te reo Mäori the way parents "can work to support language and educational agendas for their children as well as give Mäori language status is by learning and speaking it." (p. 57).

In this chapter, we look at parental and caregiver knowledge of te reo Mäori, and their use of it with the study children. We also look at parental membership of Mäori organisations other than köhanga reo or kura, and at the socio-economic resources in the home.

PARENTAL AND CAREGIVER MÄORI LANGUAGE ABILITY

A majority of the parents interviewed said that Mäori was their second language (78 percent). Twenty-one percent stated that Mäori was their first language. Tuäkana parents and caregivers were twice as likely to state that Mäori was their first language (34 percent) compared with tëina (13 percent) and taiohi (16 percent) caregivers. Native speakers of Mäori are more likely to be in the older age group,[23] and in this study, a larger percentage of tuäkana children were being cared for by their grandparents than taiohi and tuäkana children. Just under half the tuäkana children's caregivers (46 percent) who reported that Mäori was their first language were grandparents.

Overall, parents in this study rated their Mäori speaking ability higher than Mäori adults in the *Te Hoe Nuku Roa* study (Te Pütahi-ä-Toi, Massey University, 1999). Only 13 percent could speak only a few words in Mäori, or no Mäori, compared with 58 percent of the Mäori adults in the *Te Hoe Nuku Roa* study, and the 58 percent in the *Survey of the Health of the Mäori Language* 2001 who could speak only a few words or phrases of Mäori (Te Puni Kökiri, 2002). Twenty-nine percent of the children were living in households where at least one adult was a confident or fluent speaker of Mäori.

---

[23] A recent study, *The Health of the Mäori Language 2001* (Te Puni Kökiri, 2002, p. 21), has found that a larger proportion of the 55+ age group are "proficient" speakers of Mäori than any other age group, and that "speaking and listening proficiency generally increased with age".

Table 50

Spoken Mäori proficiency of parents/caregivers

Spoken Mäori level	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %	Te Hoe Nuku Roa n=1912 %
Not speaking yet	0	3	0	1	15
Can say a few words or short greetings in Mäori	16	14	8	12	43
Can speak a few basic sentences in Mäori using different words for short periods	47	38	24	35	24
Can speak Mäori using different words and sentences	6	30	29	22	9
Can confidently speak Mäori for long periods	13	8	11	10	3
Can confidently speak fluent Mäori	19	8	29	19	7

The highest proportion of fluent speakers was, not surprisingly, in tuäkana. Furthermore, parents of tuäkana children are more likely to have been involved in kura kaupapa Mäori and köhanga reo for a longer period and therefore more likely to have been using and/or learning Mäori longer than tëina and taiohi parents. Taiohi parents and caregivers were less likely to rate themselves as either fluent or confident.

A similar pattern was evident in relation to the parents' comprehension of spoken Mäori. Only 10 percent could understand a few words or nothing, compared with 47 percent of those in the Te Hoe Nuku Roa study, and 42 percent of the adults in the *Survey of the Health of the Mäori Language*. A quarter of the children were in households where at least one adult could confidently understand Mäori in any situation.

Table 51

Parents/caregivers comprehension of spoken Mäori

Comprehension of spoken Mäori	Tëi	Tai	Tuä	Total	Te Hoe Nuku Roa
	n=32 %	n=37 %	n=38 %	n=107 %	n=1912 %
Cannot understand any Mäori	0	3	0	1	9
Can understand a few words and/or short greetings in Mäori	6	14	8	9	38
Can understand a few basic sentences in Mäori using different words for short periods	28	16	13	19	23
Can understand many different words and sentences in Mäori in some situations	44	49	45	46	14[24]
Can confidently understand Mäori in any situation	22	19	34	25	9

There was greater confidence about understanding te reo Mäori among tuäkana parents/caregivers than among tëina or taiohi parents/caregivers.

There was a higher level of comprehension of spoken Mäori than the level of spoken Mäori. This is consistent with the conclusion of the recent *Health of the Mäori Language in 2001* report, that "the passive language skill of listening was generally stronger than the active skill of speaking among Mäori adults" (Te Puni Kökiri, 2002, p. 7).

A third of the children were living in households where at least one adult was a confident writer in Mäori, with particularly high levels for tuäkana. This is higher than the 11 percent of adults in the *Survey of the Health of the Mäori Language* survey who could write very well or well.

Table 52

Parents/caregivers ability to write in Mäori

Parental ability to write in Mäori	Tëi n=32	Tai n=37	Tuä n=38	Total n=107
Cannot write any Mäori	13	5	3	7
Can write a few words and/or short greetings in Mäori	19	22	5	15
Can write a few basic sentences in Mäori using different words	44	57	37	46
Can write confidently in Mäori	25	16	55	33

---

[24] The Te Hoe Nuku Roa project used another scale item between 'Can understand many different words and sentences in Mäori in some situations' and 'Can confidently understand Mäori in any situation'.

Frequency of household members writing and reading at home

We asked parents how often their child would see someone at home reading and writing in te reo Mäori and English. Just under two-fifths of the study children would see someone read and write daily in Mäori, underlining Mäori literacy as an everyday practice. Some children saw little adult reading in their home, and at least a quarter saw little writing done by adults, whether in Mäori or in English.

Table 53

Other household members reading and writing at home (n=106, cohorts combined)

Reading regularity	Mäori	English
Every day	39	78
1–2 times a week	20	11
Rarely	34	9
Never	9	0
Writing regularity	**Mäori**	**English**
Every day	40	60
1–2 times a week	19	13
Rarely	29	24
Never	10	1

The main kinds of Mäori reading material that the study children saw others reading at home were mostly in the form of short pieces, for example, pänui and magazines, or religious.

Table 54

Reading material of others in study children's home

Types of reading material	Tëi n=32 %	Tai n=37 %	Tuä n=38 %
Pänui from köhanga reo/kura	68	65	68
Waiata/songs	39	38	66
Mäori magazines	29	41	63
Mäori newspapers	13	22	39
Paipera Mäori/Mäori bible	10	3	29
Prayer books	3	5	13
Other	52	32	26

Other reading material included books, history books, dictionaries, whakapapa/whakataukï, newsletters, and school journals.

English reading material was also dominated by short pieces – newspapers (85 percent) and magazines (48 percent), although 33 percent also mentioned novels.

Parents were also asked if they were formally learning Mäori or intended to. Sixty-one percent of those who said that Mäori was their second language were learning Mäori and 11 percent said that they intended to. Lessons in spoken Mäori were around twice as frequent as those involving grammar or written work.

Half were learning formally, e.g., through tertiary level te reo Mäori classes. Half were learning by being involved in köhanga reo, or just by "being amongst it". A few were learning from a whänau member, or from a book.

Child's exposure to te reo Mäori at home

We asked the parents/caregivers what proportion of their conversations with their child were in Mäori. Just over a quarter said that "most" or "all" of their conversations with their child were in Mäori. Around a fifth said that none or very little of their conversations were in Mäori.[25]

Table 55

Proportion of child's conversations with parents in Mäori

Proportion of conversations in te reo Mäori	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
None	0	3	3	2
Very little	16	27	13	19
Some	66	51	45	53
Most	19	16	32	22
All	0	3	8	4

Tuäkana parents/caregivers were more likely to speak to their children in Mäori "most" or "all of the time" than tëina and taiohi parents/caregivers. Taiohi parents/caregivers were more likely to speak no or very little te reo Mäori with their child than tëina and tuäkana parents/caregivers.

A parent/caregiver's ability in the language has a bearing on the amount of Mäori they speak with their child. There was a correlation of 0.77 between their ability to speak and understand Mäori and the amount of conversation in Mäori that a parent/caregiver has with their child.[26] This is consistent with the much higher levels of conversation in Mäori between proficient Mäori speakers and their children compared to others found in the *Survey of the Health of the Mäori Language*.

The child's day at köhanga reo or kura and general conversation were the main topics of the conversations in Mäori between parents/caregivers and the study children. Sport and whakapapa were more likely with tuäkana children.

---

[25] The *Survey of the Health of the Mäori Language* asked adults for the proportion of time they used their Mäori language skills and asked separately for how often children spoke to adults in Mäori. Our question did not distinguish between the two, and did not ask respondents to give an estimate in percentage terms. We therefore make no comparison with the survey here.

[26] Using Kendall's Tau-b correlation coefficient = 0.77 (p<0.0001).

Table 56

Topics of Mäori conversation between parents/caregivers and study children

Topics	Tëi n=32 %	Tai n=37 %	Tuä n=38 %
Köhanga reo/kura day	74	59	53
General conversation	65	76	68
Sports	19	27	42
Whakapapa	19	22	34
Other	42	39	11

Most taiohi and tuäkana children spoke Mäori with someone else in their household other than the parent/caregiver we interviewed (88 percent).[27] Over half of taiohi and tuäkana children spoke te reo Mäori with their siblings at home.

Table 57

People at home child speaks Mäori with other than parent/caregiver interviewed

Other people at home	Tai n=37 %	Tuä n=38 %	Total n=75 %
Siblings	59	55	57
Father	22	24	23
Grandparents	24	18	21
Mother	16	21	19
Aunties/uncles/cousins in same household	8	16	12

Mäori was the main language spoken in 15 percent of the taiohi and tuäkana children's homes.

Table 58

Main language spoken in taiohi and tuäkana study children's homes (parent report)

Main language spoken	Tai n=37 %	Tuä n=38 %
Mäori	8	21
Either Mäori or English	22	26
English	70	53

---

[27] Tëina parents were not asked this question.

64

Exposure to te reo Mäori outside kura and home

We asked taiohi and tuäkana parents/caregivers about the occasions other than kura and home that the study children would hear or speak Mäori. Fifty-seven percent of taiohi children and 74 percent of tuäkana children would hear or speak Mäori at marae hui, or tangihanga. Times with grandparents living outside the home provided opportunities for children to hear or speak Mäori (35 percent of taiohi children, and 16 percent for tuäkana children, who were more likely to have grandparents living with them). Hui which were not held on marae were the other main opportunity to hear or speak Mäori (11 percent of taiohi children, and 16 percent of tuäkana children).

Whänau were the main people whom children talked to in Mäori outside the kura and home: grandparents for 57 percent of taiohi children, and 66 percent of tuäkana children, followed by aunties or uncles (43 percent of taiohi children, and 45 percent of tuäkana children). A few children talked with their parents' friends, or other children from the kura.

Parental involvement in Mäori organisations

We asked the parents about their involvement with Mäori organisations other than köhanga reo and kura kaupapa Mäori.

Table 59

Parental involvement with Mäori organisations

Parental involvement with Mäori organisations	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
Tribal organisation	22	22	18	20
Pan-tribal/urban Mäori organisation	3	16	13	11
Marae	6	19	13	13
Mäori tertiary education organisation	9	3	3	5

A larger percentage of taiohi and tuäkana parents are involved in marae or pan-tribal organisations than tëina parents.

Marae are one of the last domains where te reo Mäori is spoken at least some of the time and where tikanga Mäori is practised. We wanted to find out how often the children in this study go to marae and are therefore exposed to this environment. We also asked about the frequency with which they would attend hui Mäori. Just under a third of the study children got to their own marae, and three-fifths got to a marae, and to a hui Mäori at least once a month.

Table 60

Frequency of study children visits to marae and hui (parent report, n=106)

How often child goes to marae and hui	His/her marae %	A marae %	Hui %
Once a week	16	8	21
Once or twice a month	24	52	46
Once or twice a year	45	24	16
Never	12	0	2

NB: Not all parents answered these questions.

FAMILY INCOME, PARENTAL EMPLOYMENT, AND QUALIFICATIONS

In this section we look at the resources and experiences parents may be contributing to their children's own experiences, through the level of family income, kind of employment, and their own qualifications.

Family income

Almost half the households were low-income, with an income less than $30,000. Seventy-eight percent of the households had incomes of less than $50,000, compared with 64 percent of all Mäori households in 2001, and 52 percent of all households in 2001.

Table 61

Household incomes

Household income per annum	Total n=107 %	National Mäori Census 2001 n=350,457[28] %	National Census 2001 n= 2,768,679 %
<$30,000	46	39	30
$30,001–$50,000	32	25	22
$50,001–$70,000	14	18	19
<$70,001	8	20	29

We cross-tabulated the total household incomes by location to find out if there were differences by location. More urban families in this study had household incomes in the lowest income bracket, but no rural families earnt more than $50,000 per annum.

---

[28] A Mäori household was defined as one where a Mäori adult was residing.

Table 62

Household incomes by location

Household income per annum	Rural	Town/ provincial city	Urban
	%	%	%
<$30,000	38	47	54
$30,001–$50,000	63	24	29
$50,001–$70,000	0	16	14
>$70,001	0	13	4

Parental employment

The low levels of household income are related to low levels of employment among the study parents/caregivers. Forty percent of the parents/caregivers interviewed were in full-time paid work, 15 percent were in part-time work,[29] and 7 percent had 2 or more regular part-time jobs. Nine percent were involved in casual or short-term employment and 32 percent of the parents were not in any form of paid work.

Forty-four percent of the interviewed parents'/caregivers' partners were in full-time work and 12 percent were in paid work other than full-time (regular job less than 30 hours per week, 2 regular jobs and/or casual or short-term employment). Twenty percent of the interviewed parents' partners were not in any form of paid work.

Though the parents in this study had a lower income overall, those who were employed were more likely to be in professional occupations than either the Mäori or the general population.

---

[29] Part-time work here is 30 hours or less a week.

Table 63

Parental occupations

Parental occupations[30]	Respondent	Partner	Parents combined n=131	National Mäori Census 2001	National Census 2001
	%[31]	%[32]	%	%	%
Legislators, administrators and managers	10	9	9	7	13
Professionals	32	15	24	9	14
Teachers	(22)	(3)		(3)	(2)
Tkr/kkm kaiako	(12)	(0)		n/a[33]	n/a[34]
Technicians and associate professionals	8	7	8	9	11
Clerks	14	5	11	11	13
Service and sales workers	14	5	10	15	14
Agriculture and fishery workers	3	24	8	8	8
Trades workers	0	9	4	7	8
Plant and machine operators, and assemblers	7	24	15	15	8
Elementary occupations (incl. residuals)	11	12	11	10	6
Not specified	0	0	0	8	5

NB: Numbers do not sum to 100 because some partners were reported as being employed in more than 1 kind of occupation.

There was a high proportion of professionals among the study children's parents/caregivers who were employed. Many of these were teachers.

Hours of employment

Forty-two percent of the children lived in homes where both their parents were in paid employment for more than 30 hours per week. Thirty-nine percent lived in homes where one parent was in paid employment and 19 percent of the children lived in homes where neither parent or their one parent was in paid employment.

The mean number of hours that mothers were in paid employment was 25 hours per week. The mean number of hours that fathers were in paid employment was 36 hours per week.

Sixty-nine percent of the employed parents were working more than 30 hours a week, with fathers more likely to work more than 45 hours a week, and mothers more likely to be working less than 30 hours a week.

---

[30] These categories are the same as those used by Department of Statistics for the 2001 Census.
[31] Percentages are based on those respondents who reported that they were in some form of paid employment.
[32] Percentages are based on those respondents who reported that their partners were in some form of paid employment.
[33] Data is available for köhanga reo kaiako in the 2001 Census, however it is not available for kura kaupapa Mäori kaiako.
[34] Data is available for köhanga reo kaiako in the 2001 Census, however it is not available for kura kaupapa Mäori kaiako.

Table 64

Hours of employment

Hours of employment	Mother n=54 %	Father n=49 %
Up to 29 hours	30	10
30–45 hours	56	48
46 hours +	15	40

Parental qualifications

Fifty-one percent of the parents/caregivers interviewed had attained a school qualification. For most this was School Certificate.

Table 65

Parental school qualifications

Parental school qualifications	Tëi n=22 %	Tai n=34 %	Tuä n=34 %	Total n=90 %	National Mäori Census 2001 n=329,805 %
Sixth Form Certificate/UE	23	24	12	19	20
School Certificate	54	32	35	39	20
No school qualifications	32	41	47	41	49

NB This is for the parents for whom we have qualification information only.

Most of the parents/caregivers of the study children had undertaken some post-school education, particularly through short courses and trade courses. Tëina parents were more likely to have undertaken further education.

Table 66

Parental/caregiver post-school qualifications

Type of pat-school qualification	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
Short courses (Certificates) and trade courses	53	38	29	39
Diploma of Teaching	9	5	16	10
Degree/Diploma (other than Teaching)	6	14	13	11
Mäori language course/Whakapakari package	0	5	8	5
No qualifications (post-school)	13	32	29	25

Nearly half the parents interviewed (43 percent) were involved in some form of formal studies at the time of the interviews. Most of the parents who were involved in formal studies were studying

te reo Māori (16) or a Diploma of Teaching or Bachelor of Education (10). Other courses were in computing, business, or social work. Three percent were not currently engaged in formal study, but were intending to do so.

PARENTAL EDUCATIONAL ASPIRATIONS FOR THEIR CHILD

We asked the parents what their educational aspirations for their child were, how much education they wanted their child to receive, and if there was anything they thought could stop their child from receiving this education.

Most of the parents talked about wanting their child to be strong in their knowledge of te reo Māori me ōna tikanga, have a strong identity, or to be confident in walking in both worlds.

> Kia tū ia hei tauira mō ngā nohinohi, kia tū pakari ia i roto i tōna Māoritanga (Tuakana parent)

Other parents talked about ensuring that their child is given opportunities to pursue further education and supporting children to "go as far as they can" and "do their best".

> I want him to achieve educationally. I always tell my kids 'I just want you to do the best you can'. (Taiohi parent)

A few parents were more oriented toward paid employment.

> …[child] won't be forced to stay at school. If he finds a good job we won't push him through school if he has something to go to [a job]. I would like him to learn to get a living from being good at mahi kai and providing for his whānau…as long as he has good values. (Tuakana parent)

There are high educational aspirations among the study children's parents. Forty-five percent of the parents/caregivers identified university or tertiary education as their preference for their child. This was particularly marked among the taiohi parents.

Table 67

Amount of education parents would like their child to receive[35]

Amount of education	Tai n=37 %	Tuä n=38 %	Total n=75 %
As far as s/he wants to go, completely up to the child	59	45	52
University/tertiary	57	34	45
A lot/"the best of everything"	16	39	28
Education in the widest sense	22	24	23
Reluctance to push student	8	3	5
Enough to be worthwhile	0	8	4
End of secondary school	3	3	3
School Certificate/Year 11 minimum	3	0	1

Twenty-eight percent of the parents/caregivers could see no obstacle to their child getting the kind of education the parents/caregivers wanted for them. Money and government policy changes were the 2 main barriers identified. Lack of Mäori immersion options was identified by 17 percent of the parents/caregivers.

Table 68

Things that might stop children from getting the kind of education that parents would like for their child

Barriers	Tai n=37	Tuä n=38	Total n=75
Money	30	26	28
Government policy changes	27	29	28
Nothing	24	29	27
Child's desire/direction/choice	22	16	19
Lack of Mäori immersion options	19	16	17
Teachers/curriculum not responsive	16	16	16
Peer pressure	14	18	16
Choice of school/course available	16	11	13
Other	16	11	13
Child's temperament/attitude/motivation	11	8	9
Family problems	11	5	8
Health-related problems	5	3	4
Limited skills or ability	3	3	3
Lack of partner's support	3	3	3

---

[35] Tëina parents were not asked this question.

We asked the taiohi and tuākana parents what would they like to be different for their child's education compared to their own. Some wanted their children to go to school in a whānau environment that supported them, or a place where they felt secure. Some wanted to make sure that their child got good qualifications or that they "go somewhere" in life. Some wanted their children pursue what they wanted to learn, and gain more satisfaction from learning.

> …she's free to choose what she wants to learn and not having it forced on her. I had to learn stuff I knew I wouldn't use and couldn't learn stuff I wanted to learn. (Taiohi parent)

Others wanted to make sure their child had a strong sense of Mäori identity through te reo Mäori or mätauranga Mäori. A few wanted their child to have fun or to enjoy learning.

Other parents simply said that their child already had in education what their parents did not.

> Where [child] is going now is the difference from what I had. For 10 years I've been looking for it [te reo Mäori] and upskilling myself. If I had te reo at his age I could have spent 10 years upskilling in other areas. (Taiohi parent)

We also asked parents about their feelings about their own educational experiences. Fifty-nine percent recalled negative schooling experiences. Fifteen percent felt that their own education in terms of things Mäori was "lacking" both at home and at school.

> Mine [education/schooling] was lacking and the focus for my mother was Päkehä things and this was reflected in school. It was not until my later years that I have been in study [about Mäori things].

> I feel I was neglected at school. I wish they had kura kaupapa Mäori before… I wouldn't be struggling to get my reo [Mäori] back and my identity as a Mäori. My parents were brainwashed to speak English.

Twenty-one percent had enjoyed their own schooling.

SUMMARY

Mäori was the second language for 78 percent of the parents/caregivers of the study children whom we interviewed. Tuākana children had a higher proportion of native speakers, partially reflecting the fact we spoke to grandparents for around a quarter of these children. Overall, parents rated their Mäori speaking ability, comprehension, and writing, higher than national survey data for Mäori adults. Twenty-nine percent of the children were living in households where at least one adult was a confident or fluent speaker of Mäori, a quarter in households where at least one adult could confidently understand Mäori in any situation, and a third in households where at least one adult was a confident writer in Mäori. Mäori was the main language in around 15 percent of taiohi and tuākana children's homes; and either Mäori or English, for around a quarter.

A quarter of the parents/caregivers said that most or all of their conversations with their child in the study were in Mäori. Around a fifth said that none or very little of their conversations were in Mäori. That means that most of the children were having at least some conversational experience

in Mäori in their homes. Besides general conversation, the child's day at köhanga reo or kura afforded a topic for these conversations; sports and whakapapa were other main topics in Mäori. Most of the taiohi and tuäkana children also spoke in Mäori with others in their household, particularly other siblings.

Around half the taiohi and tuäkana children also had opportunities to hear Mäori on marae and with whänau living outside their home, particularly grandparents and aunties and uncles. Just under a third of the study children got to their own marae, and three-fifths to another marae, at least once a month.

Just under two-fifths of the children would see someone read and write daily in Mäori, though some would see little reading or writing occurring in their home, whether in Mäori or in English. Most of the Mäori reading material adults read was in the form of short pieces.

Most of those for whom Mäori was a second language were learning Mäori, or intending to. Lessons in spoken Mäori were twice as frequent as those involving grammar or written work.

Almost half the households were low-income, and there were fewer households earning more than $70,000 than the total Mäori population. Income levels were related to low levels of employment among the study parents/caregivers (who included 10 grandparents). However, there was a higher proportion of parents/caregivers employed in professional occupations than for Mäori or the general population nationally, reflecting a high proportion of teachers amongst the study parents/caregivers.

There was a lower proportion of parents/caregivers with no school qualifications than the Mäori adult population, though fewer with Sixth Form Certificate or UE. Most of the parents/caregivers had gained post-school qualifications, mainly through trade and short courses. Nearly half were involved in some formal study.

Their educational aspirations for their children were high, with 45 percent identifying university or tertiary education as their preference. Most wanted their child to be strong in their knowledge of te reo Mäori me öna tikanga, have a strong identity, or be confident in walking in both worlds – and to experience a better education than they themselves had.

5. TE WHAKAMAHINGA A NGÄ TAMARIKI I TE REO MÄORI ME Ä RÄTOU MAHI I TE KAINGA CHILDREN'S USE OF TE REO AND THEIR ACTIVITIES

We turn now to the study children's own reports of their use of te reo Mäori in the main everyday settings of their lives and in some key activities linked with learning: reading, writing, and use of number. Parent reports about their children's use of te reo Mäori are also included. We look at the study children's knowledge of their identity and tikanga, their exposure to media, and the languages they hear through the media, their use of computers, and the languages they use for different activities on the computer, and the activities they enjoy.

CHILDREN'S USE OF TE REO MÄORI

We asked the taiohi and tuäkana children how often they spoke te reo Mäori in 4 main contexts of everyday life: at home, in their kura, with friends, and at the shops.

Around three-quarters used Mäori at least sometimes at home and with their friends, and around a third when they visited shops.

Table 69

Frequency of te reo Mäori spoken at kura, home, friends, and at the shops – according to the children

Frequency of te reo in four contexts	Tai n=37 %	Tuä n=41 %	Total n=78 %
At home			
All the time	11	12	12
Sometimes	62	61	61
Never	27	27	27
At kura			
All the time	38	22	30
Sometimes	62	78	70
Never	0	0	0
With friends			
All the time	24	17	21
Sometimes	57	56	56
Never	19	27	23
At the shops			
All the time	8	3	5
Sometimes	32	34	34
Never	60	63	61

Around a third of the children said they used Mäori all the time at kura. However, when we compared the answers they gave for how often they spoke Mäori and English, which we asked somewhat later in the interview, we found that not all children who said they always spoke Mäori actually did so – at least in the sense that they spoke *only* Mäori. Half of the 14 children in taiohi who said they spoke Mäori all the time at the kura also said they sometimes spoke English in the kura when asked when they spoke English.

We found similar patterns in relation to the speaking of Mäori at home, and with friends.

For taiohi:

- all 4 children who said they spoke Mäori all the time at home also said they spoke English sometimes at home; and

- 5 of the 9 children who said they spoke Mäori all the time with their friends also said they spoke English all the time, or sometimes, with them.

For tuäkana:

- 6 of the 9 children who said they spoke Mäori all the time at kura also said they spoke English sometimes there;

- 3 of the 5 children who said they spoke Mäori all the time at home also said they spoke English sometimes there; and

- 4 of the 7 children who said they spoke Mäori all the time with friends also said they spoke English sometimes, or all the time, with them.

Enjoyment of speaking Mäori

Most of the study children enjoyed speaking Mäori. The proportion of those who were unsure or whose enjoyment varied, increased from tëina to tuäkana.

Table 70

Child's enjoyment of speaking te reo Mäori

Response	Tëi n=33 %	Tai n=36 %	Tuä n=41 %	Total n=110 %
No	9	8	0	5
Yes	88	81	80	82
Varies/not sure	3	11	20	12

The tëina children could not really say why they liked to speak te reo Mäori when we asked them. Some simply said, "he pai te körero Mäori" or "te take, he pai".

Taiohi and tuäkana children provided the following types of answers: "koirä te reo a ö tätou tïpuna"; because they had 2 languages or were bilingual; and because it was "choice". A few children liked speaking te reo Mäori because it was their first language.

Children's use of English

Kōhanga reo and kura were the places where children were most likely to not use English, with a higher proportion of tëina children saying they never used English in their educational setting than their older peers. Around a quarter said they always used English at home or with friends, but, as with reports of how much they spoke Mäori, some of these also said they used Mäori at home or with friends.[36]

Table 71

Amount of English spoken at kōhanga reo, kura, home, with friends, and at the shops – according to the children

Amount of English spoken	Tëi n=33 %	Tai n=37 %	Tuä n=41 %	Total n=111 %
At home				
All the time	27	27	29	28
Sometimes	39	73	57	56
Never	30	0	15	15
At kōhanga reo/kura				
All the time	3	0	5	3
Sometimes	27	78	85	64
Never	64	22	10	32
With friends				
All the time	21	27	20	22
Sometimes	45	54	63	54
Never	27	16	17	20
At the shops				
All the time	21	65	59	48
Sometimes	42	24	27	31
Never	30	8	15	17

We asked the children why it was that they spoke English. The main reason was because the person that they were speaking to did not know how to speak Mäori.

---

[36] Four of the 10 taiohi children who said they spoke English all the time at home also said they sometimes spoke Mäori there, and 6 of the 10 taiohi children who said they spoke English all the time with friends also spoke Mäori with them: 3 all the time, and 3 sometimes. Five of those who said they spoke English all the time at the shops also spoke Mäori there: 3 sometimes, and 2 all the time.

Both of the tuäkana children who said they spoke English all the time at kura also said they sometimes spoke Mäori there. Five of the 12 tuäkana children who said they spoke English all the time at home also said they spoke Mäori there sometimes, and 2, all the time. Three of the 8 tuäkana children who said they spoke English all the time with friends also said they spoke Mäori to them sometimes, and 1, all the time. Two tuäkana children who said they spoke English all the time at the shops also said they sometimes spoke Mäori there, and 1, all the time.

Table 72

Reasons for speaking English – child

Reasons	Tëi n=33	Tai n=37	Tuä n=41	Total n=111
Person I am speaking to does not speak Mäori	18	70	66	53
I want to	9	8	17	12
Other	27	16	7	16

We asked all of the children what they do when they are speaking with someone who does not know how to speak Mäori. Almost all the children said that they spoke in English. Ten of the children said that they would try to help them to speak Mäori, or encourage them to learn. Three said that they continued to speak in Mäori.

When asked what they did when some of their friends at köhanga reo spoke English to them, 8 of the tëina children said that they told them to speak Mäori, or just kept talking Mäori. Three children said that the children at their köhanga reo do not speak English.

Parent perspectives on their children's use of Mäori

We asked the parents to describe their child's attitude towards te reo Mäori. Just over half the parents (52 percent) said that te reo Mäori was a normal part of life, 39 percent said that their child "loved te reo Mäori" or they had a "choice" attitude towards te reo Mäori and were eager to learn.

> She likes it…she is kind of proud that she can speak Mäori...for her Mäori is kind of special. She is proud when her older brothers stand up and do the haka. At köhanga reo I think she has been encouraged when she speaks Mäori and the whänau [parents] get enthusiastic when she speaks Mäori. (Teina parent)

A few parents said that their child was a little apprehensive because their child's knowledge of te reo Mäori was being stretched. A few others also said that their child became a little shy when they learnt that not everyone speaks te reo Mäori.

> She is starting to realise that not everybody speaks te reo Mäori and is conscious that not everybody speaks te reo Mäori…she becomes a bit shy sometimes (Teina parent)

Parents reported that their children spoke Mäori spontaneously when with other Mäori speakers (86 percent), kaumätua (67 percent), and siblings or family members (45 percent).

Around a quarter of the children spoke Mäori when they woke up in the morning (tëina, 19 percent; taiohi, 24 percent; and tuäkana, 29 percent.

Children's language preferences

We asked the parents what they thought their child's language preferences were when they were at home and amongst their friends. Two-thirds of the children were thought by their parents to

prefer to speak English most of the time at home. The proportion of those who prefer to speak Mäori at home was highest in tuäkana. This could reflect older students' greater mastery of Mäori; the higher proportion of first language speakers in tuäkana students' homes is also likely to be a factor. However, there was a much higher reported preference for speaking Mäori with the children's friends reported by tëina parents.

Table 73

Children's preferred language according to their parents

Children's preferred language	Tëi n=32 %	Tai n=37 %	Tuä n=38 %
At home			
Mäori	6	8	16
English	68	68	71
Either	26	24	13
Amongst their friends			
Mäori	32	11	11
English	52	73	68
Either	16	16	21

Half the children who were reported by their parents as preferring to speak Mäori at home also preferred to speak Mäori amongst their friends, and 80 percent of the children who were reported to prefer speaking English at home preferred to speak English with their friends.

Of the children who had no preference for Mäori or English, 22 percent preferred to speak Mäori with their friends, 48 percent preferred to speak English, and 30 percent had no preference. There is a statistically significant relationship between the children's preferred language at home and their preferred language amongst their friends.

The main reasons suggested by parents for children preferring to speak English at home were that it was the predominant language (40 percent), Mäori was not spoken frequently at home (29 percent), and that their child got "höhä" speaking Mäori or found it easier to express themselves in English (21 percent). Parents thought that children preferred to speak English with their friends because it was the predominant language outside of kura or köhanga reo (26 percent) and they find it easier to express themselves in English (19 percent). Twenty-four percent of the children did not speak Mäori with their friends because their friends did not speak Mäori.

When we asked about their child's attitude to English, 76 percent of parents said that their child accepted English as a normal part of their lives. One parent said that their child did not make a distinction between the two languages. A few parents said that their child was fascinated with the English language and wanted to learn more about it.

> Good! He realises that he needs it. He uses English fluently although I haven't paid much attention to his English. As soon as he started to learn Mäori he started to learn English. (Taiohi parent)

> …he understands that the majority of people speak English and that it's the dominant language. …he likes to pronounce different English words and learn the meaning of them. (Teina parent)

Three parents were unsure of their child's attitude towards English.

Thirty-five percent of taiohi and tuākana parents reported that their children spoke Mäori most of the time before they started kura and 48 percent said they spoke English most of the time before they started kura.

Switching between Mäori and English

Bilingual speakers have 2 languages to choose from. They can choose one language rather than another, they can borrow words from one language while they are using another ("codemixing"), and they can codeswitch, "calling upon the full communicative resources of both languages" (Harding and Riley, 1986, p. 57). Baker (2001, p. 101) notes that "Very few bilinguals keep their two languages completely separate, and the ways in which they mix them are complex and varied." Baker notes 12 different kinds of codeswitching (ibid, pp. 102–104), including language choice based on "who is in the conversation, what is the topic, and in what kind of context the conversation occurs." (pp. 101–102). These reasons for language choice were prominent in the patterns of codeswitching reported by the study children's parents.

Most of the switching from Mäori to English for the taiohi and tuākana children occurred as a matter of choice, to suit those who did not speak Mäori. Three-quarters of the taiohi and tuākana children switched from Mäori to English while they were speaking Mäori, and vice versa. Most parents (75 percent) said that their child would switch to English straight away if they were confronted with a non-Mäori speaking person. A few parents said that their child tended to listen more to people who spoke in te reo Mäori.

Parents said their child switched from Mäori to English when people who they were with did not speak in te reo Mäori to them or did not know te reo Mäori (39 percent). The second main reason was that their child did not have an adequate vocabulary or knowledge of sentence structure to say what they wanted to say in Mäori (23 percent). Ten percent of the parents said their child switched between languages mainly when they were with their friends outside kura, or when playing. A few said it was while they were watching television. Most parents said that there was no particular topic that their child switched from Mäori to English to talk about.

Switching between English and Mäori

The main factor for switching from English to Mäori to talk for tëina children was who the child was with at the time (48 percent). Sixteen percent of the parents said when their child did not know the English word for something, they would switch to te reo Mäori. For some parents (16 percent) there did not seem to be any particular time when their child switched to te reo Mäori. Most parents said that there was no particular occasion or topic of conversation that their child would switch to te reo Mäori from English to talk about. Some parents said however that when their child became excited or growling, they would switch to te reo Mäori. And one parent said

that when her child was explaining what she did at köhanga reo during the day she would switch to te reo Mäori.

The most common reason that taiohi and tuäkana parents gave for their child switching from English to Mäori to speak was if someone spoke to them in Mäori or if they were around speakers of Mäori (29 percent). Some parents (12 percent) said that their children switched to Mäori when they did not want someone to know what they were talking about. Seven percent of the children switched if they did not know the right word or words in English, or it was easier for them to express themselves in te reo Mäori.

When asked if there were any particular topics of conversation that their child switched from English to Mäori to talk about, the most common topic of conversation was their child's day at köhanga reo and kura (23 percent). The study children also switched from English to Mäori when they discussed waiata, karakia, and whakapapa (19 percent), and whänau and whänau issues (6 percent). A couple of parents mentioned sports or "ngä mea o te hunga taiohi".

Most of the taiohi and tuäkana parents said that their children would use an English word in a Mäori sentence if they did not know the Mäori word for it. Some of the parents said that their child never used an English word in a Mäori sentence, or if they did, could not think of any at the time of the interview.

The next table gives the most common Mäori words used in English sentences by tëina children.

Table 74

Mäori words used in English sentences

Mäori words used in English sentences	Tëi n=31 %
"Kähore" / "käo" / "ehara" / "äe"	32
"Kai" / "Inu"	32
"Wharepaku"	16
"Töku"/ "täku"/ "nöku" / "näku" / "äku" / "öku"	13
"Karakia"	10
Names of different parts of the body	6
Numbers	6
Animal names	3
"Mamae"	3
Pukapuka	3
"Horoi" / "kauhoe"	3
Anything	3
Days of the week	3
Colours	3
Items of clothing	2
Not sure	10

Taiohi and tuäkana parents reported a wider range of Mäori words that their child used in an English sentence. Nine percent of the parents reported that their child used "kai" or "inu", 5 percent used "wharepaku", 4 percent used "kia ora", and 4 percent used "äe", "käo", "ehara", or "kähore" in an English sentence. Five percent of the parents also said that their child used commands such as "Haere mai!", or "Kia horo!" in an English sentence.

Thirty-nine percent of the tëina parents identified English words that their child used in a Mäori sentence. There was a wide range of English words reported, as compared with the high frequency count for Mäori words used in English sentences.

Sixty-nine percent of the children were reported by their parents to speak English when they wanted to express themselves better or if they were frustrated.

Because some parents are concerned that immersion education in Mäori could limit their child's ability in English, we asked taiohi and tuäkana parents whether they were doing anything to develop their child's English language. Thirty-two percent were not. Around a third were reading books in English. Parents were also correcting spoken English, spelling, and helping when requested (around 7 percent each). Eight percent of taiohi and 5 percent of tuäkana children were receiving formal lessons in English.

READING AT HOME

Hohepa (1999) makes a cogent case for the value of printed material in te reo Mäori as "a tool in the retrieval and reassertion of Mäori language" (p. 72), for both parents and children alike. She observes that:

> …contexts providing opportunities to experience Mäori language are still relatively few compared to English. Similarly, a child could also expect comparatively limited reading texts appropriate for early reading instruction and a very limited set of recreational reading material to facilitate reading for enjoyment. (p. 79)

Hohepa and Smith (1996) documented the shortage of Mäori-medium reading material in both kura and for taking home from kura, with particular absences in relation to kaupapa Mäori storylines, maths and science, non-fiction, and topics which connected with children's experiences. Hohepa (1999) underlines the importance of original material, which regenerates the language as well as drawing from the present.

Reading in Mäori at home – tëina

Nearly all tëina parents (90 percent) reported that at least one member of the household read to their child in Mäori. Fifty-one percent of the tëina parents said that someone in the household read a book to their child daily. Thirteen percent said someone read to their child on most nights, 10 percent, once a week, and 10 percent, less than weekly.

Seventy-five percent of the parents said that their children knew that certain sounds go with certain letters. Nearly all (97 percent) could recognise their own name and 68 percent could recognise other words. These were mostly family names (45 percent). Some reported animal names (6 percent). Eighty-eight percent of tëina parents said that their child attempted to read in Mäori.

We asked the tëina parents where they got books from for their child. Köhanga reo was a major source of books in Mäori for the tëina children, indicating the continued importance of government-funded Mäori-medium material aimed at school, for recreational reading at home, and the opportunity for parents to read with their children.

Table 75

Where parents got books from for their child

Books sourced from	Tëi n=31 %
Köhanga reo/kura	61
Library	35
Buy/present	32
Whänau/friends	26
Duffy books	10
Home	6
Church	3
Internet	3

Reading in English at home – tëina

Nearly all the tëina parents (90 percent) also said that a member of the household read to their child in English at home. Forty-two percent of the parents said that a member of the household would read in English to their child daily, 29 percent said 2 to 3 times a week, 3 percent once a week, and 6 percent less than once a week.

Tëina children's perspective on being read to at home

The tëina children give a somewhat lower estimate of their experience of adults reading to them at home. Sixty-four percent of tëina children said that someone reads books to them at home. Te reo Mäori was the main language of the literature that was read to tëina children (42 percent).

Table 76

Language books read to tëina children at home – child

Language	Tëi n=33 %
Te reo Mäori	42
English	12
Both	12

NB: Not all children answered this question.

Reading in Mäori at home – taiohi and tuäkana

Ninety-five percent of the taiohi and tuäkana children read in Mäori at home. Their reading material reflects what the parents/caregivers said they would also see others in the house reading, with the exception of school journals and the like. Again, there is a heavy reliance on material from the kura, which may mean some repetition for the children.

Table 77

Reading material of taiohi and tuäkana children

Reading material	Tai n=37 %	Tuä n=38 %
School journals/He Körero/He Purapura	95	82
Pänui from kura	51	63
Waiata/songs	46	63
Mäori magazines	30	47
Mäori newspapers	22	34
Paipera Mäori/Mäori bible	5	29
Prayer books	5	13
Other	22	18

Around a fifth of the parents said they did nothing in particular to develop their child's ability to read in Mäori. The main way parents helped was to read with their child when asked, and to encourage them to read. Around 7 percent read with their child.

Ninety-seven percent of the taiohi students and 86 percent of the tuäkana students were said to enjoy reading in Mäori.

The kura was the key source of Mäori books for most of the taiohi and tuäkana children. Compared with the books for tëina children, books for the older children were less likely to be purchased, or received from whänau and friends. This points to the continuing shortage of recreational print material in Mäori which Hohepa and Smith raised as a concern in 1996.

Table 78

Where children got books from – parent

Books sourced from	Tai & Tuä n=75 %
Kura	77
Library	37
Home	15
Whänau/friends	11
Buy/present	9
Church	4
Duffy books	1

Reading in English at home – taiohi and tuäkana

Fifty-four percent of the taiohi children and 72 percent of the tuäkana children also read in English at home. The girls in this study are more likely to read in English at home than the boys in this study. Sixty percent of taiohi girls and 78 percent of tuäkana girls read in English at home compared to 40 percent of taiohi and 22 percent of tuäkana boys.

Taiohi and tüakana parents were asked what kinds of English reading material their child read at home. The most popular reading materials were books (39 percent), newspapers (24 percent), magazines or comics (11 percent), signs (7 percent), pamphlets, noticeboards, or pänui (7 percent), placenames (1 percent), and the Internet (1 percent).

Most parents were not concerned about their child's reading in English (73 percent of taiohi, and 82 percent of tuäkana). The main concern was that the child could not read in English, and was not at the "right" reading age. A few parents qualified their concerns by saying that they thought their child's reading ability in English would develop with time.

Reading at home – taiohi and tuäkana children's perspectives

Nearly all the taiohi and tuäkana children said they did some reading at home and over half read in both languages at home. The proportion who read in both languages increased with age, which is likely to reflect the paucity of print material available in Mäori. Only 8 percent read only in English, more at tuäkana than taiohi. Just 3 percent of the children, all from taiohi, said that they did not do any reading at home.

Table 79

Language child reads in at home – child

Language	Tai n=36 %	Tuä n=42 %	Total n=78 %
Te reo Mäori	44	29	36
English	3	12	8
Both	47	60	54
Do not read	6	0	3

We asked all the study children to tell us about a book that they liked. Nine of the 14 tëina children who answered this question gave the name of a book that they liked and 3 gave the names of 2 books that they liked. When the tëina children were asked what it was about that book that they liked, 9 of the 10 children who responded described the story line.

Most of the taiohi and tuäkana children provided the name of at least one book that they liked. Five taiohi and 2 tuäkana children did not name a book. When asked why they liked the book that they had named, most (31) said that it was the story line and körero. Fourteen liked the illustrations, and a couple said "No te mea, he mämä noa iho ngä pänui o roto".

We asked the taiohi and tuäkana children what books in English they enjoyed reading. Half of taiohi children and a quarter of the tuäkana children said that they did not read in English or could

not name a book. When asked why they liked the books they named, most were unsure. Those that gave a reason focused on a particular genre, for example, one child said he liked the scary books, or mentioned illustrations.

CHILDREN'S WRITING AT HOME

Mäori

Ninety-one percent of tëina parents said that their children could write their own name and 41 percent said that they could write other words in Mäori. Thirteen percent mentioned copying words, and another 13 percent, a whänau member's name. Ten percent mentioned letters of the alphabet. Seventy-one percent of the tëina children had someone at home doing writing activities with them in Mäori.

Nearly all the tuäkana children (97 percent) did some form of writing in Mäori at home, and 89 percent of the parents reported that their children enjoyed writing in Mäori at home. Homework and stories were the main writing activities for the taiohi and tuäkana children. Tuäkana children were more likely to also be using writing to correspond with others. There were no gender differences.

Table 80

Children's writing activities at home

Writing activity	Tai n=37 %	Tuä n=38 %	Total n=75 %
Homework	41	61	51
Stories/pakiwaitara/püräkau	51	42	47
Letters	16	26	21
Messages	3	3	3

English

Sixty-two percent of the study children were said by their parents to do some form of writing activities in English at home. A much higher proportion of girls wrote in English at home than the boys in this study.

Table 81

English writing at home

Response	Girls n=42 %	Boys n=33 %	Tai n=37 %	Tuä n=38 %	Total n=75 %
Yes	74	45	59	65	62
No	21	52	41	30	35
Not sure	2	3	0	5	3

NB: One parent did not answer this question.

We asked the taiohi and tuäkana parents what kind of writing activities in English their child did at home. The main types of writing in English at home were: letters or notes (20 percent), story writing or captions for pictures (9 percent), English lesson homework (9 percent), copying out stories from books or newspapers (4 percent), and personal names (3 percent).

Children who read English books at home were more likely to also write in English (80 percent compared with 35 percent of those who did not read English books).

Seventy-one percent of tëina parents reported that they did writing activities in English with their children at home.

Children's perspectives on writing

All of the taiohi and tuäkana children said they did some form of writing at home. Just under half wrote only in Mäori and just under half of the children wrote in Mäori and English. Tuäkana children were much less likely than tëina children to write only in Mäori.

Table 82

Language child writes in at home – child

Language	Tai n=36 %	Tuä n=42 %	Total n=78 %
Te reo Mäori	58	29	42
English	11	7	9
Both	31	64	49

Mahi käinga was the main type of writing activity that the children reported doing at home. About one-third of the children were also involved in creative writing (pakiwaitara and püräkau). There were no gender differences in the children's reports of their writing activity.

Table 83

Child's writing activities at home – child

Writing activities	Tai n=36 %	Tuä n=42 %	Total n=78 %
Mahi käinga	53	69	62
Pakiwaitara/püräkau	33	31	32
Reta	36	19	27
Other	3	12	8

TIKANGA AND IDENTITY

We asked the parents how they thought their child would respond if asked who they were and where they were from. All the tuākana parents and nearly all the taiohi parents said that their child would respond by saying his or her pepeha and türangawaewae. A few taiohi parents were not sure if their child knew their pepeha. A few parents also said that it would depend who was asking, and which language they used to ask the question.

Nearly all the taiohi and tuākana parents said that they or members of the child's whānau had taught their child about their pepeha and where they were from, by telling them about it and the children being on the marae among their iwi. Twelve percent said that it was through köhanga reo and kura that their child had learnt about their pepeha and where they were from.

We asked the parents what were some of the things relating to tikanga Mäori that they practised in the home, for example, not putting your hat on the table where food is eaten. Parents gave a wide range of responses. Thirty-eight percent of the parents said not sitting on a pillow or table. Others were: separating clothing articles and tea-towels when washing (24 percent), reciting karakia (23 percent), taking shoes off before going inside (22 percent), separating items that touch the head with those that are associated with food (18 percent), not cutting hair at night (11 percent), burying their child's pito or whenua (5 percent), and manaaki tangata (3 percent). A few parents (9 percent) said "all of them". One parent said that they did not practise these things in the home.

All the parents said that they learnt about these things during their upbringing amongst their whänau. A few parents (5 percent) also said that they learnt through their involvement in köhanga reo and tertiary studies. Nearly all of the parents said that their child was learning about these things during their upbringing, at home, köhanga reo, and kura. Two parents were not sure that their child was actually learning about them. One parent preferred that her child not know about such tikanga.

The concepts of tapu and noa are integral to tikanga. We asked parents if their child had ever asked them about tapu and noa. About a third had, usually triggered by a particular incident. The older the child, the more likely it was that they would ask about tapu and noa. Parents' responses to their children were divided between giving a reason for what the child had observed and asked about, and simply restating the importance of what was done. Giving a reason was more likely as children grew older.

Table 84

Children's query about tapu and noa, and parent's response

Query and response	Tëi n=31 %	Tai n=37 %	Tuä n=38 %	Total n=106 %
Children's query about tapu and noa	26	32	37	32
Parent offered reason	6	11	21	13
Parent reiterated course of action – no reason offered	13	19	11	15
Could not explain/no response recorded	6	3	5	5

We asked parents what sorts of things in particular they did to maintain their child's cultural identity. Thirty-seven percent said that being involved in köhanga reo and kura kaupapa Mäori was one way for them. Others took their children to hui (16 percent), went back to their marae or got involved with the Mäori community (22 percent), and some reinforced their identity by talking to their child about their whakapapa, history, and making sure they are proud in their history (20 percent). Nineteen percent said they did nothing in particular, they just lived it every day.

Manaakitanga

We asked the taiohi and tuäkana parents how their child practises manaaki tangata when they have friends over. Nearly all the parents said that they would whängai manuhiri (provide refreshments) and whakamanuhiri i a rätou (make them welcome). A few parents also mentioned the children giving their friend toys to play with, or sharing things with them.

Nearly all the children when asked how they manaaki manuhiri said they would whängai kai. A few talked about organising a bed for them and asking them if they needed anything. One or two mentioned letting them play on their Playstation or watch television.

Children's knowledge of pepeha

We asked all the children about their pepeha. We also asked the tëina children the name of their köhanga reo. Over half of the tëina children knew the name of their köhanga reo. Not many children could tell us the name of their maunga, awa, iwi, and marae.

Table 85

Knowledge of pepeha – tëina

Pepeha	Tëi Correct n=33 %	Incorrect/ Did not know/ No response n=33 %
Köhanga reo	61	40
Iwi	12	88
Maunga	9	91
Awa	15	85
Marae	3	97

Not surprisingly, a larger proportion of taiohi, and a larger again proportion of tuäkana children knew their pepeha. Just under three-quarters of the taiohi children told us where they are from and their pepeha and just over a half of these children could name their marae. Almost all tuäkana children had this knowledge.

Table 86

Knowledge of pepeha – child taiohi and tuäkana

	Tai Response provided n=36 %	No response/ Did not know	Tuä Response provided n=42 %	No response/ Did not know
Knowledge of where child is from	69	22	93	2
Pepeha	72	22	90	5
Marae name	56	36	83	10

Seventy percent of the tëina children said they liked being on their marae. The rest were either unsure, or did not enjoy it. We asked the taiohi and tuäkana children what they did when they went to their marae. A third said they went outside to play with their relations. Twenty-three percent said that they helped out around the marae doing a range of chores: cleaning, serving kai, and preparing beds. Seventeen percent said they sat next to the kaumätua or helped look after them.

We asked the tuäkana children what they liked about going to their marae. Twenty-eight percent said playing outside, or going to the creek to go eeling or swimming. Twenty-two percent of the children liked "catching up" with their whanaunga or friends. Others liked karakia or kapa haka (waiata etc.) at the marae. A few mentioned the kai, helping out, and listening to the kaumätua. There was a similar pattern when we asked what they liked about going to other marae.

Many parents/caregivers reported that the children sang waiata, said karakia, or did kapa haka they had learnt at köhanga reo or kura at home. Parents/caregivers of the tuäkana children found it harder to identify specific activities, perhaps because they had by then been practising for them for some years.

Table 87

Home activities learnt at kura (parent report)

Activities	Tëi n=31 %	Tai n=37 %	Tuä n=38 %
Waiata/karakia/kapa haka	61	51	39
Körero Mäori/corrects parents	32	16	16
Tuhituhi	19	27	11
Reading/pänui	19	16	16
Pängarau	6	11	8
Domestic, e.g., cooking	6	8	8
Äwhina tëina	3	0	13
Rorohiko	0	5	8

PÄNGARAU ACTIVITY

Home experience with number is as vital to children's development of solid foundations in mathematics, as reading is for literacy. Two-thirds or more of the tëina children were reported by their parents to be undertaking 6 of the 10 pängarau activities we asked about, and all 10 were undertaken by most taiohi and almost all tuäkana children.

Table 88

Pängarau activities in the home

Pängarau activity	Tëi n=31	Tai n=37	Tuä n=38	Total n=106
Adds money correctly	10	84	95	66
Plays board games	68	87	90	73
Plays card games	87	97	100	95
Plays games on the computer	74	75	82	67
Uses numbers	67	97	98	90
Can tell the time	38	81	100	74
Can use the telephone	81	97	97	92
Measures things	29	62	95	64
Counts things	100	100	100	100
Can work out halves and quarters	19	75	92	64

We asked the parents what language the children used for each of the 10 activities. The detailed picture for each activity is given below. Proportions are give for the cohort as a whole, and the proportions for those who do not do the activity have been omitted from this table. Comparisons between the cohorts need to be interpreted with caution. We cannot tell from this whether those in tëina who used Mäori for everyday pängarau activities at home are more likely to keep using it as they grow older – we hope to be able to explore that through the next phases of this project by looking at individuals over time. We looked at this data to see what it might suggest in terms of the pängarau practices in which the use of Mäori was retained, or grew, and in which pängarau practices there appeared to be less opportunity to also use and develop fluency and ease in Mäori. The highest use of Mäori in tuäkana was for mathematics activities which did not necessarily involve social interaction, such as the use of numbers, or counting, compared with playing card or board games. Most computer games are unavailable in Mäori.

Table 89

Pängarau activities by language used, and cohort

Activities	Tëi n=31 %	Tai n=37 %	Tuä n=38 %
Adds money correctly			
Mäori	0	16	11
English	0	24	37
Either language	10	43	47
Plays board games			
Mäori	16	8	11
English	32	51	11
Either language	19	27	45
Plays card games			
Mäori	6	3	16
English	48	51	45
Either language	32	43	45
Computer games			
Mäori	3	8	8
English	52	53	45
Either language	19	14	29
Uses numbers			
Mäori	19	30	37
English	19	11	13
Either language	39	57	45
Tells the time			
Mäori	13	22	29
English	3	19	29
Either language	23	39	42
Uses the telephone			
Mäori	10	16	18
English	32	38	16
Either language	39	43	63
Measures things			
Mäori	3	24	24
English	26	24	37
Either language	0	14	34
Counts things			
Mäori	39	32	32
English	3	8	16
Either language	58	59	53
Can work out halves & quarters			
Mäori	3	17	26
English	10	28	32
Either language	6	31	34

Māori language media in the home

Different media, and especially television, have the power to influence behaviours and attitudes (Benton, 1985). Attitudes towards culture and language are influenced by how cultures and languages are, or are not, represented on television and radio. The decline in the use of te reo Mäori after World War Two has been attributed in part to the introduction of television into Mäori rural communities where te reo Mäori was the main mode of communication (Te Puni Kökiri, 2002, p. 13). Ensuring that Mäori culture and language are represented and broadcast on radio and television was the focus of efforts by those who forwarded a successful claim taken to the Waitangi Tribunal in 1985.

We asked the parents a series of questions about the media that the children listened to or watched at home to find out the amount of television and radio they were exposed to, and how much of this was in Mäori. Almost all the study children watched Mäori TV programmes. Around a third listened to Mäori radio programmes. Tuäkana children were most likely to listen to Mäori radio programmes.

Table 90

Mäori media in the home

Mäori media watched/listened to	Tëi n=32	Tai n=37	Tuä n=38	Total n=107
Mäori radio	58	60	84	67
Mäori TV programmes	94	94	95	94

Television

Nearly all the study children watched *Pükana*. Indeed, *Pükana* was the second most popular television programme overall reported by the children. Many of the kura in this study have appeared in *Pükana* programmes and the strong interest shown by the children in *Pükana* would in part reflect this participation.

Table 91

Mäori television programmes children watched (children's account)

Programme	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
Pükana	91	95	95	93
Mai Time	47	65	76	63
Marae	44	49	53	48
Tikitiki	66	32	50	48
Te Karere	41	32	66	46
Waka Huia	34	38	53	42

Four of the 6 programmes are entirely in te reo Mäori. *Mai Time* and *Marae* are not. Tuäkana children were more likely than the younger children to watch *Mai Time*, *Te Karere,* and *Waka*

Huia. All these programmes, except *Mai Time* which targets a teenage audience, are aimed at adult audiences, and it would follow that a larger percentage of the older children in this study would watch these programmes. *Tikitiki*, which targets a preschool to new entrants audience, is most popular for the tëina children. Perhaps surprisingly a larger percentage of tuäkana children watch *Tikitiki* than the taiohi children. They may be watching it with younger siblings.

What taiohi and tuäkana children liked about Mäori television were waiata (24 percent), te mahi kapa haka (18 percent), hearing te reo Mäori on television (15 percent), ngä mahi whakangahau, whakakatakata (12 percent), and seeing Mäori things on television or rangatahi Mäori (6 percent).

We asked the tëina children what programmes they liked to watch on television. Fifteen tëina children answered this question. Eight named a kid's cartoon programme, 7 a children's show, and 2 a Mäori language programme (both children's programmes). Nine children said they watched Mäori language programmes at home.

We asked what Mäori language programmes the tëina children watched. Nine children answered this question. Six watched *Pükana*, 4 *Tikitiki*, and another, *Te Karere*. When asked what it was that they liked about the Mäori language programmes, a few said waiata, kapa haka, and kanikani (breakdancing).

We asked the taiohi and tuäkana children what their 3 favourite television programmes were. The top 6 programmes are given below. They consist of 4 cartoons, including a cartoon programme that is targeted at an older group, (*The Simpsons*), one regular soap opera series, and a Mäori language programme (*Pükana*). The soap opera series, *Shortland Street*, and the cartoon series, *The Simpsons*, were a lot more popular among tuäkana children.

Table 92

Children's favourite television programmes

Programmes	Girls n=44 %	Boys n=33 %	Tai n=37 %	Tuä n=40 %	Total n=77 %
Dragon Ball Z	45	88	65	61	64
Pükana	57	45	57	57	52
Simpsons	51	33	38	49	44
Pokemon	16	55	35	29	32
Shortland Street	43	12	16	41	30
Digimon	11	6	11	7	9

There are marked gender differences in television programme preferences. Girls preferred to watch the soap opera series (*Shortland Street*) and the cartoon that is targeted at an older group (*The Simpsons*). Boys preferred to watch 2 action cartoons (*Dragon Ball Z* and *Pokemon*).

New Zealand on Air commissioned a study investigating children's television programme preferences (Colmar Brunton, 2000). The study also found gender differences among the 6–8-year-old age group and the 9–12-year-old age groups. Girls tended to be more interested than boys

in programmes characterised by people interacting, and programmes that show people singing and dancing. Girls were "generally happy watching action and fighting as long as the fighting does not go too long" (Colmar Brunton, 2000). Boys tended to be more interested in action.

Just under half of the children said that they watched television for less than 2 hours a day on average.[37] Taiohi children watched more television on a daily basis than tuakana children in this study. This is consistent with the later bed-time reported by parents for tuäkana children.

Table 93

Number of hours watching television daily – child

Hours	Tai n=37 %	Tuä n=41 %	Total n=78 %
0–1.9	65	31	47
2.0–3.9	22	37	28
4.0–5.9	11	20	15
6.0+	3	12	8

Radio

There are 21 Mäori radio stations nationally funded by the government through Te Mängai Päho. Twenty of these radio stations are situated in the North Island and one in the South Island. All Te Mängai Päho-funded radio stations are required to broadcast in te reo Mäori only for at least 4 hours a day. A Te Mängai Päho objective is to increase the amount of Mäori radio station programming aimed at the under-25-year-old age group.[38]

Over half the tëina and taiohi children listened to a Mäori radio station (57 and 59 percent respectively), with an average of half an hour a week for tëina children, but 4 hours a week for taiohi children. Most tuäkana children (84 percent) listened to a Mäori radio station for an average of 4 hours a week.

COMPUTER USE aT HOME

We asked the taiohi and tuäkana children about access to a computer at home, what types of activities they did with the computer and which language they used. Sixty-four percent of the taiohi and tuäkana children said that they had access to a computer at home. The most common use of the computer was for games, wordprocessing, and doing homework. Tuäkana were more likely to use the computer for doing homework or a project in te reo Mäori than taiohi.

Overall, English was the main language while the children used a computer. However, for wordprocessing, doing homework projects, and using CD Roms te reo Mäori was the main

---

[37] The average time spent watching television was estimated at 2.62 hours, somewhat higher than the average of 2.20 hours found at age 10 for the Competent Children sample. There is a higher proportion of children in this study who watch more than 4 hours television on average – 23 percent. That may be of concern, given the Competent Children project finding that heavy television use appears to have negative associations with children's literacy (Wylie, 2002).

[38] http://www.tmp.govt.nz/radio/3AOutsideBroadcastApp.pdf

language used. When using the computer for the Internet and games, English was the main language used.

Table 94

Activities on the computer at home – child

Activities on the computer	Mäori n=37 %	Tai English	Mäori n=41 %	Tuä English
Play games	3	47	10	46
Word processing	28	8	37	20
Graphics	3	14	10	7
CD Roms	11	3	12	7
E-mail	14	8	7	15
Write programmes	6	0	5	10
Homework/project	8	8	34	10
Desktop publishing	0	0	2	0
Educational games	0	11	10	20
Internet	6	22	15	27
Fax	3	0	5	0
Digital camera/scanner	0	0	0	0
Other	0	0	0	0

A few children said they used either language, particularly for wordprocessing and e-mail. We have included these children in both the categories, i.e. for Mäori and English.

The average time spent on the computer outside kura was between 1 to 2 hours for both cohorts.

We asked the tuäkana children about their access to the Internet at home. Fifty-eight percent could access the Internet at home. The main use was for games, and to seek information for homework or projects (58 percent).[39] When playing games and seeking information for homework projects on the Internet te reo Mäori was the main language used. This would indicate that they are playing games with other Mäori speakers, and that they are seeking information on Mäori language websites, rather than seeking information on English language websites which they would then translate. English was the main language used when downloading games or music, and surfing.

---

[39] Tëina and taiohi children were not asked this question.

Table 95

Tuäkana Internet activities

| Internet activities | Tuä | | |
	Mäori n=41 %	**English** n=41 %	**Either** n=41 %
Download games/music	2	22	7
Chat on-line	2	5	2
Games	24	0	2
Surfing	2	15	7
News groups	2	2	0
E-mail	0	5	2
Seeking information for homework/projects	12	0	5
Design/make web-page	2	0	0

ACTIVITIES OUTSIDE HOME AND KURA

Over half the taiohi and tuäkana children (61 percent) were involved in a club or group outside of kura. Sports clubs were the most popular, followed by kapa haka groups and church.

Kapa haka and church provided the children in this study with other environments besides home and kura to speak Mäori: it was the main language used to communicate in kapa haka and church for most children involved in those activities. English was the main language to communicate for those involved in a sports club or youth activity groups.

Table 96

Involvement in activities and main language used to communicate

| Activity | Total % of children involved | Taiohi & Tuäkana n=75 % | | |
		Mäori	**English**	**Either**
Sports club	53	7	30	16
Kapa haka	24	20	1	3
Church	22	15	0	7
Youth activity groups	4	0	4	0

CHILDREN'S SPARE TIME ACTIVITIES

We wanted to find out what the children did during their spare time. We asked the taiohi and tuäkana children to indicate how often they did the following activities in their spare time.

Overall, the taiohi and tuākana children's main activities that they did most days were watching television, hanging out with their friends, and playing sports in their spare time. Taiohi children were more likely to say they read Māori books most days, and to mention art, music, or dance classes. Tuākana children were more likely to mention watching television, hanging out with friends, playing sport, and kapa haka.

The number of children who said they never read a Māori book other than for kura, or read Māori newspapers or magazines was quite high. This is of course an issue for children's overall literacy development.

Table 97

Child's activities after school, during the weekend, and school holidays

Activities	Tai Most days n=37 %	1–2 days a week	Some-times	Never	Tuā Most days n=41 %	1–2 days a week	Some-times	Never
Watch television	33	11	46	11*	51	12	32	5
Go to church	8	24	24	43	5	22	24	49*
Read Māori books (not for school)	27	16	30	27	12	7	49	32*
Read Māori newspapers/magazines	11	8	46	35	12	5	34	49*
Play computer games	27	11	30	32*	37	7	29	27*
Hang out with friends	38	14	35	14	41	10	29	20
Play sport	24	30	32	14	51	22	15	12*
Kapa haka	8	30	16	46*	17	24	32	27
Art, music, or dance classes	16	11	22	51	5	20	39	37

* We have included non-response to an item in the "never" category.

When we asked the children to rate their favourite activities outside kura, playing computer games, sports, kapa haka, hanging out with friends, and watching television were the main activities. The proportion of children who liked reading Māori books for recreation halved between taiohi and tūakana, pointing again to the lack of recreational print material in te reo Māori, However, tuākana children were more likely to be reading Māori through the media used by their parents – newspapers or magazines.

Table 98

Most enjoyed after school, weekend, and holiday activities

Activities most enjoyed	Tai n=37 %	Tuä n=41 %	Total n=78 %
Play computer games	57	44	50
Play sports	51	46	49
Kapa haka	51	46	49
Hang out with friends	54	39	46
Watch television	49	41	45
Read Mäori books (not for school)	35	17	26
Art, music, or dance classes	27	29	28
Read Mäori newspapers/magazines	14	20	17

We asked the taiohi and tuäkana children to rate some aspects of their home life. Most children said that they felt close to their whänau, fairly treated, their whänau showed interest in their school-life, and they had lots of interesting things to do. Tuäkana children were more likely to help out, and to get help if they needed it. There was a reasonably low level of discussion of Mäori issues.

Table 99

Child's view of their home

At home	Tai Tata ki te wä katoa n=37 %	I ëtahi wä	Tata kore/kore rawa	Tuä Tata ki te wä katoa n=41 %	I ëtahi wä	Tata kore / kore rawa
I have lots of interesting things to do	51	41	8	39	41	20
People listen to me	27	46	27	34	46	20
I get bored	11	65	24	27	51	22
I am fairly treated	68	24	8	74	21	5
I get lonely	8	51	41	12	32	56
I help out	43	54	3	61	39	0
I get help if I need it	51	35	14	61	34	5
We discuss Mäori issues	27	41	32	37	46	17
I am close to my whänau	65	32	3	69	26	5
Things get explained to me if I don't know them	32	54	14	44	46	10
My relations visit	24	54	22	41	49	10
I get told off	14	51	35	15	66	19
My whänau knows I've done my homework	62	30	8	56	39	5
My whänau asks me about kura	54	38	8	61	32	7

CHILDREN'S CHORES AND RESPONSIBILITIES AT HOME

We asked the parents what kinds of chores and responsibilities their child had at home. Nearly all said that their child did some chores at home. These included general household duties like dishes and vacuuming (50 percent), keeping their room tidy (48 percent), feeding pets (15 percent), outside chores (14 percent), blessing kai (12 percent), getting themselves breakfast and getting ready for kura (10 percent), helping out with siblings (9 percent), and keeping themselves clean (8 percent).

We also asked them about the structure of children's lives, in terms of rules and limits around some behaviour and activity. Most had rules for the aspects we asked about, including speaking Mäori. The lower proportions for using the computer for games and video games may reflect the absence of these in the home. Rules about meeting friends, spending time with them, homework, and doing housework were more frequent for tuäkana children.

Table 100

Rules or limits

Rules or limits	Tëi n=31 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
TV watching	81	81	76	78
Homework	65	97	90	85
Spending time with their friends	55	73	79	70
Where a child can meet his/her friends	36	89	82	69
Using the computer for games	65	60	63	62
Playing video games	52	62	55	57
Doing housework	77	92	90	86
Dress	81	73	74	75
Language (speaking Mäori)	81	78	68	74
Bedtime on school days	94	92	90	91

The kaiako, kaiako matua, and tumuaki in this study thought that children having adequate rest was an important factor in their progress at köhanga reo and kura (*see* Chapter 2). We asked the parents when their child's bedtime was during the week. Few of the study children stayed up beyond 9pm on a week-night.

Table 101

Children's bed-time

Time	Tëi n=32 %	Tai n=37 %	Tuä n=38 %	Total n=107 %
Before 8 pm	53	44	32	43
Between 8–9 pm	44	56	59	52
Between 9–10 pm	3	0	8	4

CHILDREN'S ASPIRATIONS AND HEROES

Finally, we asked the tuäkana children what kind of career they would like, and who their heroes were. The responses indicate the impression kura kaupapa Mäori has made, with a sizeable minority wanting to become teachers, particularly within kura kaupapa Mäori. And their heroes are not distant figures, but, for many, their own whänau.

Education (16) was the most popular choice of career for the taiohi and tuäkana children. This was mostly in kaupapa Mäori education. The other careers they mentioned included: being a sportsperson (8), a professional (lawyer, doctor etc.) (7), trades (6), soldier or police officer (5), and artist (5).

Whänau members were the heroes for around two-fifths of the taiohi and tuäkana children, typically a parent. Tuäkana children were more likely to mention a sportsperson, or child senior to them in the kura, and taiohi children, a singer or actor.

Table 102

Children's heroes – child

Heroes	Tai n=37	Tuä n=41	Total n=78
Whänau member/papa/mama	38	44	41
Singer/actor	30	22	26
Sportsperson	16	37	27
Senior child in the kura	0	7	4
Other	11	12	12

SUMMARY

Most of the study children enjoyed speaking te reo Mäori. However, around a fifth of the tuäkana children said their enjoyment varied, or that they were unsure if they enjoyed it. Around three-quarters used te reo Mäori at least sometimes in their homes and with their friends, and around a third when they visited shops. Köhanga reo and kura gave them their best opportunity to use only te reo Mäori. The main reason for speaking English was the other person's lack of te reo Mäori. Only a few spoke English because they wanted to, although tuäkana children were twice as likely to give this as a reason than their younger peers.

However, parents/caregivers reported that English was the preferred language at home and with friends for about two-thirds of the study children, largely because English was the main language at home. A fifth thought their child found it easier to express themselves in English. The study children were reported to accept English as a normal part of their lives.

Most of the children switched from te reo Mäori to English while they were speaking te reo Mäori, and vice versa. The main reasons were again because the people they were with did not know te reo Mäori, or because they did not have an adequate vocabulary or knowledge of sentence structure.

Half the tëina children were read to in te reo Mäori on a daily basis, and somewhat less, in English, and most knew that certain sounds go with certain letters, a good indicator of good emergent reading skills. Köhanga reo was a major source for parents getting reading material in te reo Mäori for their children. The children remembered being read to in te reo Mäori more than they did in English.

Almost all the tuäkana children read in te reo Mäori at home, and with the exception of school journals and other material from the kura, much the same kinds of things as the adults in the household. Most of the children were said to enjoy reading. The kura was important as the main source of home reading in te reo Mäori, though the library was also a useful source.

Around half the taiohi and around three-quarters of the tuākana children were also reading in English at home.

Almost all the tëina children could write their own name, and many had someone at home who did writing activities in te reo Māori with them, as well as in English.

The tuākana children almost all wrote something at home, primarily homework and stories, with some tuākana children using te reo Māori to correspond with others. Around three-fifths also wrote in English. Children's reports of writing indicated less activity than their parents' reports.

While kōhanga reo and kura teachers aimed to teach children their pepeha, whānau members also saw this as their responsibility. Most taiohi and almost all tuākana children knew their pepeha. Marae names were also most likely to be known by tuākana children.

Kōhanga reo and kura were seen by the parents as key experiences in the maintenance of their child's identity. Whānau activities, attendance at the marae and at hui, and talking about whakapapa and history were also important.

Two-thirds of the tëina children were undertaking at least 6 of the 10 pāngarau activities we asked about, at home. The highest use of te reo Māori for these activities in tuākana was for mathematics activities which did not necessarily involve social interaction.

About a third of the children listened to Māori radio programmes, tuākana students more than their younger peers. Almost all watched some Māori television programmes, particularly *Pükana*, which appears in the 6 favourite programmes for the study children.

Sixty-four percent of the tuākana children had access to a computer at home. The most common use of the computer was for games, wordprocessing, and doing homework. Overall, English was the main language with which the computer was used. However, for wordprocessing, doing homework projects, and using CD Roms, Māori was the main language. Tuākana children were more likely to use the computer for doing homework or a project in te reo Māori than taiohi children.

Three-fifths of the tuākana children belonged to a club or group, mainly sports clubs, kapa haka, or church. Kapa haka and church provided the best opportunities to use te reo Māori.

Favourite spare time activities of the tuākana children included watching television, hanging out with friends, and playing sport. The proportions of those who never read a Māori book, other than for kura, or read Māori magazines or newspapers is quite high. This reflects the continuing paucity of print material in te reo Māori, which must be a concern.

Most tuākana children felt close to their whānau, felt fairly treated at home, had lots of interesting things to do, and their whānau showed interest in their school life. Whānau are highly valued: when we asked who their heroes were, they were likely to be cited by two-fifths of the tuākana children.

6. NGÄ TIROHANGA A NGÄ KAIAKO MÖ NGÄ TAMARIKI I ROTO I TE RANGAHAU NEI
KAIAKO PERSPECTIVES ON THE STUDY CHILDREN

In each of the köhanga reo and kura kaupapa Mäori, we interviewed the kaiako who worked most closely with the study children. We asked them to rate the study children's proficiency in te reo Mäori, to describe their strengths, in line with the holistic approach of kaupapa Mäori education, and their current aims for them.

CHILDREN'S ATTITUDES AND PROFICIENCY IN TE REO MÄORI AT KÖHANGA REO AND KURA KAUPAPA MÄORI

Just over a third of the tuäkana children enjoyed speaking te reo Mäori or were seen to be competent to strong speakers. However, just under half were seen as having more competency in te reo Mäori than they used.

Table 103

Kaiako description of children's attitudes towards te reo Mäori

Attitude	Tai n=36 %	Tuä n=41 %	Total n=77 %
Competent speaker but does not speak much/too shy or lazy	44	46	46
Competent to strong speaker of te reo Mäori	22	32	28
Enjoys speaking te reo Mäori	11	7	9
Speaks mostly English	8	5	5

Forty percent of the children were rated as fluent speakers of te reo Mäori, or able to speak it confidently for long periods. Tuäkana children were less likely to be reported as speaking only basic sentences. However, tëina children were twice as likely to be rated as being able to confidently speak fluent Mäori. This may reflect differences in expectations related to different stages, which may become apparent when we look at kaiako ratings of the tëina children's proficiency in the next phase of *Te Rerenga ä te Pïrere*.

Table 104

Table 104

Spoken te reo Mäori proficiency of the children – according to the kaiako

Spoken te reo Mäori rating	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Not speaking yet	0	0	0	0
Can say a few words or short greetings in Mäori	7	0	0	2
Can speak a few basic sentences in Mäori using different words for short periods	13	19	7	13
Can speak Mäori using different words and sentences	36	47	49	43
Can confidently speak Mäori for long periods	29	31	37	32
Can confidently speak fluent Mäori	16	3	7	8

In the comprehension of spoken Mäori there was a gradual increase in the proportion of study children who were rated as being able to understand spoken Mäori with confidence, in any situation, from tëina to tuäkana.

Table 105

Comprehension of spoken te reo Mäori – according to the kaiako

Comprehension of spoken Mäori	Tëi n=31	Tai n=36	Tuä n=41	Total n=108
Cannot understand any Mäori	0	0	0	0
Can understand a few words and/or short greetings in Mäori	3	0	2	2
Can understand a few basic sentences in Mäori using different words for short periods	13	25	17	18
Can understand many different words and sentences in Mäori in some situations	71	58	59	61
Can confidently understand Mäori in any situation	13	17	22	17

In judging writing proficiency, we used a different scale from the one used for the adults in the study, and asked the kaiako to focus on the children in relation to their age group. The proportion of those who were confident writers was somewhat higher using this yardstick than it was for confident comprehension and fluent speaking. The proportion of those who were judged confident writers in Mäori increased with each cohort.

Table 106

Ability to write in Mäori – according to the kaiako

Ability to write in Mäori	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Can only write own name – learning	64	11	7	21
Can write a few basic sentences in te reo Mäori	32	69	63	59
Can write confidently in te reo Mäori	5	19	29	20

As one sign of the children's feeling "at home" in using Mäori, we asked the kaiako which language the children used when they were frustrated in the köhanga reo or kura. Te reo Mäori was the language used by just over half the children, in all cohorts.

Table 107

Language child speaks when frustrated – according to the kaiako

Language	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Te reo Mäori	58	53	46	52
English	32	41	39	38
Either	10	6	15	10

DISPOSITIONS AND SOCIAL SKILLS

We asked the kaiako to rate the children on some of the dimensions of *Te Ira Tangata* which could not be easily assessed through a single task, by people who were not familiar with the children. In relation to the dimension of Whatumanawa/Ngäkau, we asked about social skills and receptive language. In relation to the dimension of Hinengaro, we asked about perseverance and curiosity. [40]

Social skills

Most of the study children had good relations with their peers. Tuäkana children were less likely to intervene to try to resolve conflict between other children. However, the proportion of children who were always or often left out of a group was lowest for tuäkana children. The proportion of children left out of groups seems reasonably high, given the emphasis in kaupapa Mäori education on whanaunatanga.

---

[40] These items were drawn from those used in the longitudinal Competent Children study.

Table 108

Kaiako rating of study children's social skills with peers

Social skills	Tëi n=31 %	Tai n=36 %	Tuä n=41 %
Good at making & keeping friendships			
Always	58	60	49
Often	23	23	22
Sometimes	19	11	24
Never	0	6	5
Left out of a group by other children			
Always	15	11	2
Often	19	25	15
Sometimes	27	33	39
Never	39	31	44
Would intervene and try to resolve conflict between other children			
Always	37	33	17
Often	10	19	24
Sometimes	37	33	41
Never	17	14	17

The average score for these 4 items (with a maximum of 4: always=4, never=1) was:

	Mean	s.d.	Range
Tëina	2.20	0.71	min 1, max 3.50
Taiohi	2.26	0.62	min 1, max 3.33
Tuäkana	2.57	0.47	min 1, max 3.67

The average score for these items related to social skills with peers increased somewhat from tëina to tuäkana.

Receptive language

Around two-thirds of the study children could often or always remember and carry out instructions after they had heard them once, and realise they did not understand something they had heard, and ask for further explanation. Kaiako ratings for tëina and taiohi were at a similar high level for the other 3 items in this set. But tuäkana children had quite high proportions of children who (only) sometimes followed conversations, understood information given to their class, and were good listeners.

Table 109

Kaiako rating of study children's receptive language

Receptive language skills	Tëi n=31 %	Tai n=36 %	Tuä n=41 %
Able to remember & carry out instructions heard once			
Always	39	39	29
Often	29	25	37
Sometimes	32	33	27
Never	0	3	7
Follows conversation & stays on same topic			
Always	47	36	33
Often	27	33	20
Sometimes	27	25	48
Never	0	6	0
Usually understands information give to class			
Always	58	31	37
Often	23	33	22
Sometimes	19	31	41
Never	0	6	0
Is a good listener			
Always	36	47	17
Often	19	22	24
Sometimes	36	28	49
Never	10	3	10
Asks for repetition/new explanation if does not understand			
Always	47	44	49
Often	17	19	10
Sometimes	27	28	32
Never	10	8	10

The average score for these 5 items (with a maximum of 4: always=4, never=1) was:

	Mean	s.d.	Range
Tëina	1.89	0.57	min 1, max 3
Taiohi	2.01	0.71	min 1, max 3.4
Tuäkana	2.20	0.70	min 1, max 3.2

The average score for these items related to receptive language increased somewhat from tëina to tuäkana, despite the higher proportion of children at tuäkana receiving ratings of "sometimes".

Perseverance

Kaiako of tëina children gave higher ratings to their ability to persevere than those of taiohi and tuäkana children, perhaps reflecting some differences in the tasks and activities given children in köhanga reo and kura. Forty-one percent of tuäkana children were said to only sometimes complete tasks.

Table 110

Kaiako rating of study children's perseverance

Perserverance	Tëi n=31 %	Tai n=36 %	Tuä n=41 %
Persists with solving a problem even when things go wrong for a while			
Always	58	28	15
Often	19	14	34
Sometimes	19	50	39
Never	3	8	12
Has a good concentration span			
Always	58	42	40
Often	19	28	25
Sometimes	19	31	35
Never	3	0	0
Makes an effort to do something even if s/he doesn't want to			
Always	42	44	20
Often	23	14	32
Sometimes	32	42	41
Never	3	0	7
Completes tasks			
Always	61	42	32
Often	23	36	24
Sometimes	16	14	41
Never	0	8	2

The average score for these 4 items (with a maximum of 4: always=4, never=1) was:

	Mean	s.d.	Range
Tëina	1.82	0.71	min 1, max 3.25
Taiohi	2.03	0.73	min 1, max 3.50
Tuäkana	2.26	0.70	min 1, max 3.75

The average score for these items related to perseverance increased somewhat from tëina to tuäkana.

Curiosity

The kaiako of the tëina children also gave them higher ratings for curiosity. Around two-fifths of the tuäkana children only sometimes showed curiosity, interest in new experiences and challenges, and new ways of looking at things.

Table 111

Kaiako rating of study children's curiosity

Curiosity	Tëi n=31 %	Tai n=36 %	Tuä n=41 %
A curious student			
Always	61	36	41
Often	13	36	17
Sometimes	13	22	39
Never	13	6	2
Enjoys new experiences and challenges			
Always	65	50	37
Often	16	28	20
Sometimes	19	22	34
Never	0	0	10
Comes up with new & interesting ways of looking at things			
Always	53	28	32
Often	20	36	24
Sometimes	23	28	41
Never	3	8	2

The average score for these 3 items related to curiosity (with a maximum of 4: always=4, never=1) was:

	Mean	s.d.	Range
Tëina	1.80	1.13	min 1, max 4
Taiohi	2.00	0.91	min 1, max 4
Tuäkana	1.92	0.91	min 1, max 3

Unlike the other 3 aspects of children's learning rated by kaiako, the average score for curiosity did not increase from tëina to tuäkana.

STUDY CHILDREN'S STRENGTHS

We asked the kaiako about any particular strengths and interests that the students had shown in their kaupapa Mäori educational setting. Te reo Mäori was the most frequently identified strength, followed closely by mathematics (which the study children identified as one of the aspects of kura they liked most). Around half the children were identified as having strengths in at least all curriculum areas other than science. Around a third were seen as showing leadership. Tëina children were more likely to be seen as showing leadership, but less likely to be showing strengths in mathematics, technology, or science. Tuäkana children were more likely to be seen to be showing strengths in reading and mätauranga Mäori.

Table 112

Particular strengths and interests shown by children

Strengths and interests	Tëi n=31 %	Tai n=36 %	Tuä n=41 %	Total n=108 %
Te reo Mäori	74	56	63	65
Enjoys maths	39	61	78	62
Enjoys playing	68	42	63	57
Enjoys reading	45	47	76	57
Enjoys singing	68	47	56	56
Helpful	48	33	56	56
Enjoys writing	52	50	61	55
Manaakitanga	52	39	61	52
Tikanga Mäori	52	39	59	51
Enjoys technology	32	50	61	49
Whanaungatanga	45	36	54	46
Aroha ki te tangata	48	33	51	45
Good motor skills	39	36	54	43
Enjoys science	29	44	49	42
Mätauranga Mäori	32	28	61	42
Shows leadership	42	28	29	33
Mahi toi	10	17	12	13
Häkinakina/sports/whakapakari tinana	3	11	17	11
Everything/wide range	0	8	7	6
Quick to grasp new concepts	0	14	0	5
Karakia	13	0	0	4
Kapa haka/mau räkau	3	8	0	4
Computer	0	0	2	1

There were no significant gender differences in the kaiako assessments of the study children's strengths.

Thirty-nine percent of tëina children, 81 percent of taiohi, and 66 percent of tuäkana children were reported by their kaiako to have experienced some difficulty or another in their learning. The most significant issue for tëina children was their interaction with other children.

Table 113

Particular difficulties children have experienced at köhanga reo according to their kaiako

Particular difficulties	Tëina n=31 %
Interaction with other children	6
Does not listen to the kaiako	3
Mäori language skills/irregular attendance	3
"Plays-up" when parents/siblings at köhanga reo	3

At kura kaupapa Mäori, specific subject areas were noted as well as children's behaviour. Both aspects were more pronounced for tuäkana children. Taiohi children were more likely to be seen as needing to develop social skills or Mäori language ability.

Table 114

Particular difficulties children have experienced at kura according to their kaiako

Particular difficulties	Tai n=36	Tuä n=41	Total n=77
Subject areas (specified)	17	24	21
Social behaviour/attitude concerns	11	15	12
Social skills, e.g., low self-esteem/shy etc.	14	2	8
Does not listen to instructions	3	12	8
Mäori language ability/not spoken at home	11	2	7
Health issues	6	5	5
Easily distracted by other children	3	0	1

KAIAKO EXPECTATIONS FOR THEIR STUDENTS

We asked the kaiako about the expectations they had for the study children in reading, maths, and te reo Mäori, the areas in which we assessed the study children.

Improving the quality of their te reo Mäori, and their confidence in using it, were the main expectations that the kaiako had for their students in both cohorts. Great confidence in using te reo Mäori was expected from tuäkana students.

Table 115

Kaiako expectations for te reo Mäori ability

Expectations	Tai n=36 %	Tuä n=41 %	Total n=76 %
Improve te reo Mäori	28	44	36
Increase confidence in using te reo Mäori	56	49	53
Increase vocabulary	6	2	4
To speak Mäori more often	6	0	3

NB: Not all kaiako answered this question.

Expectations in reading were similar for both cohorts, and focused on improvement of existing skills and knowledge. The aim for around a fifth of the students of "reaching his/her reading age" suggests that some kaiako were using reading age to assess children's performance in reading te reo Mäori. This is different from the "kete" based approach developed by Cath Rau and associates, which provides comparisons based on time in immersion education, and on their instructional reading level, using *Ngä Kete Körero* framework levels (Rau et al. undated).

Table 116

Kaiako expectations for tuäkana study children's reading

Expectations	Tai n=37	Tuä n=38	Total n=76
To improve generally	33	37	36
Improve reading comprehension	22	20	20
Reach her/his reading age	25	17	21
To read above her/his reading age	8	12	11
To read more often/develop a desire to read	14	5	9

NB: Not all kaiako answered this question.

Age level was also used to identify students' performance levels in mathematics, more so for taiohi than tüakana.

Table 117

Kaiako expectations for tuäkana study children's mathematics

Expectations	Tai n=37 %	Tuä n=38 %	Total n=76 %
To increase confidence and skills in pängarau	56	76	66
To be working at their appropriate age level	31	7	18
To be working at their age level and above	8	15	12

NB: Not all kaiako anwered this question.

SUMMARY

Around 40 percent of the study children were seen as confident or fluent speakers in te reo Mäori, and most of the children understood at least many different words and sentences in Mäori in some situations. Twenty-nine percent of the tuäkana children were writing confidently in Mäori.

Taken as a whole, the kaiako ratings of the study children's te reo Mäori, social skills, receptive language, perseverance, and curiosity, and their view of their attitudes to te reo Mäori underline the work in mastering te reo Mäori that needs to occur for children who come from a range of backgrounds in terms of their exposure to, and use of, te reo Mäori. As a group, the 11-year-olds in tuäkana were generally more confident in their speaking, understanding, and writing Mäori than their younger peers. But the slippage in their ratings for listening, perseverance, and curiosity, and the higher proportion of those identified as having some difficulty in their learning, raise the question of whether this is due to the additional work required of them in using te reo Mäori, as the level of their work in it grows more complex, or whether it is simply a reflection of an older age-group with growing outside interests, or the nature of the particular students in this study.

It is interesting that "confidence" was a key word used by kaiako in terms of barriers that were holding back children's use of te reo Mäori and performance in pängarau.

7. NGÄ WHAKATUTUKITANGA I NGÄ AROMATAWAI PERFORMANCE ON ASSESSMENT TASKS

DEVELOPMENT OF ASSESSMENT TASKS

Kura kaupapa Mäori and köhanga reo are still young educational institutions. This means that there has been until recently a dearth of assessment tasks created for Mäori immersion education, which are in accordance with the aims of this education (Bishop, Berryman, Glynn, and Richardson, 2000).

The assessments for this research have been developed specifically for this project, and not for diagnostic use in classroom learning. They had to fit 3 main criteria.

- They are appropriate for students in a kaupapa Mäori education environment, learning in different contexts.

- Where possible, the same tasks are used for different age-groups, to chart progress over time.

- They are suitable for research purposes, that is, they are reasonably quick to administer, they cover a range of performance levels, and they can be scored to allow analysis.

Issues around the appropriateness of assessments for kaupapa Mäori education students

The issues around the appropriateness of assessments for kaupapa Mäori education students are well-known to those working in köhanga reo and kura kaupapa Mäori. They are not so familiar to others, and thus it is worthwhile to describe some of them here.

There are fundamental differences between the understanding of what is involved and important in Mäori student development in kaupapa Mäori education, and in mainstream education. This is clear in looking at *Te Ira Tangata* framework (*see* Introduction). In the advisory group discussions and development of the assessment tasks there was a strong emphasis on the importance of local and particular knowledge and language in framing tasks, and a desire to frame questions in terms of that knowledge wherever possible.

This emphasis on particular knowledge would itself make it difficult to use common standardised assessment instruments such as the Progressive Achievement Tests (PATs) and ARBs. But there are additional reasons why they were not usable in this project. They have been designed in relation to existing student performance at particular ages or curriculum stages, in English-medium education. The real and deep differences in expectations and patterns of development between kaupapa Mäori education and English-medium education means that these tests would not easily fit, and that analysing the results in the same way that they are analysed for students in English-medium education would be misleading. Pereira (2001), in her analysis of the difficulties encountered in translating and using NEMP tasks for students in Mäori-medium education, notes the inherent bias that occurs with translated tasks, to the disadvantage of those using the translated assessment task.

Cummins notes consistent findings in overseas research of a period of 7–9 years for immigrants (learning in a new language) to catch up with their peers (Cummins, 2000, p. 16). Berryman, Rau, and Glynn (2001) found in their development of *Ngä Kete Körero* that, while there were overall similarities in the patterns of developing fluency in reading Mäori, kura kaupapa Mäori students needed a longer pre-reading stage.

> This research has further highlighted the implications of the lack of continuing opportunities from birth to listen and participate in Mäori language contexts for most readers. For these readers, the oral Mäori language base upon which they can begin to process texts successfully is not in place before they come to school. It is crucial that they have opportunities for their oral Mäori language base to develop at school. For many reasons, including the much greater exposure of children to English language rather than Mäori language, parents and teachers must not necessarily expect that their Mäori-medium pupils will be at the same stage of preparedness for reading as their English medium counterparts, because this pre-reading has not taken place. (p. 12)

Bishop, Berryman, Glynn, and Richardson (2001) found among students entering Mäori-medium schools "a far wider range of language backgrounds than their English speaking peers" (p. 20). They note at least 4 different groups of students, each "bringing with them their own unique set of language and communication requirements" (p. 21). These groups were:

- preschoolers who are communicated with mainly in Mäori;

- preschoolers who are communicated with mainly in English with some Mäori;

- preschoolers who are communicated with only in English; and

- preschoolers who communicated with mainly poor English or Mäori structures or vocabulary. (p. 22)

It is also difficult to use existing tests in English as a basis for tests in te reo Mäori (Rau et al. undated). The structure of te reo Mäori is different from English. Thus some Mäori equivalents of common English tests do not work well in terms of differentiating between students. For example, the phonemic regularity of te reo Mäori makes it easier for students to reach a ceiling (or maximum score), at an earlier age in vocabulary tests equivalent to the Burt word reading test. The phonemic regularity of te reo Mäori also results in students achieving either very high or low scores in dictation tasks, such as the ones used in the commonly used *Concepts about Print*. The commonly used record of oral language in English suits English syntax only.

Development of the tasks

We used the *Te Ira Tangata* framework to identify the aspects which would ideally be assessed in charting the progress of students through kaupapa Mäori education. The NZCER research team developed an initial set of possible tasks which were discussed at the advisory group hui of March 2000. These included aspects of knowledge (for example, for mana atua – wairua, knowledge of karakia for a variety of purposes, and knowledge of waiata; for mana whenua, knowledge of türangawaewae and kaitiakitanga (standing place and guardianship of resources) in relation to the whenua, their iwi, or hapü, or where they are living; and for mana reo, oracy, listening, reading, and writing). The difficulties of scoring these consistently was an issue, since different kura

kaupapa Mäori introduced some concepts at different times. Difficulties were also seen in asking children to provide knowledge which was out of context, and abstract.

We moved on to think of how we could provide the children with more specific starting points, which allowed them to feel confident about being assessed. This led to the development of 2 tasks using children's own choice among a selection of pictures of common settings. A group task used by Cathy Dewes in her own kura formed the basis for another task, to be done by all the sample children from a particular site, so that we could gauge children's performance in group settings, in particular in relation to roles of leadership, tuakana-teina relationships, creativity, and working together to a common goal.

In all, 6 tasks were created and modified after the trialling. We found in the trialling that administering the tasks after the interviews with children allowed them to have become more comfortable with the person administering the tasks. We found in the pängarau task that different words were used for mathematical terms in different settings such as 3 different words to mean "multiply" or "times". In the fieldwork for the first phase, we checked the pängarau terms used in each setting with the kaiako before we did the tasks with the children. Some terms were new to the sample children, such as *tau ine waenga* (average score), pakitau (equation), and *taake hoko* (GST). The average time for the tasks took about an hour in the trialling, and we sought to reduce this time in our modifications before we embarked on fieldwork. We also found that the tasks were best administered in the morning, when the children had more energy to concentrate on them.

The 6 tasks are detailed in the researcher instruction manual in Appendix 1.

A brief outline of each one is given below, with the results for each cohort. It is important to note that the tasks were expected to cover a wide range, and had high ceilings to allow for the children's progress over the next 3 years. Thus we did not expect the children to perform at the top end of these tasks. The group task did not work as well as expected. We explained to them that the purpose of the exercise was that they worked together – "mahi tahi", and this tended to be interpreted as working together in pairs, with some children working by themselves.

ASSESSMENT TASKS

Ngä Tikanga

The aim of this task was to find out what children knew about the values and practices associated with marae. Marae were chosen as a focus because they are key to Mäori identity and culture. The children were shown a model picture of a marae, with lots of activity occurring. The main activity was a pöwhiri.

Then they were asked to select 2 red cards and 1 yellow card from ones which were face down and fanned out like a deck of cards. The red cards had terms referring to specific practices; the yellow cards had more abstract or conceptual terms.

The red card terms were:

Waewae tapu — *Visitor who has not been to the particular marae*
Pöwhiri — *Welcoming*
Poroporoaki — *Farewell*
Harirü — *Handshake*
Tangata whenua — *People of the land/home people*
Manuhiri — *Visitor*
Kaikaranga — *Person who does the welcoming call*
Tari o te ora — *Hall for providing hospitality*
Koha — *Gift*

The yellow card terms were:

Tapu — *Sacred*
Noa — *Free of ritual prohibition*
Tikanga — *Custom*
Manaakitanga — *Hospitality*
Kawa — *Etiquette*

Each card had a word on it, which the kairangahau read out before asking the child to define or explain the word. They were then asked to look at the marae picture again and give examples of things one should be careful of, and correct practice in the pöwhiri context. They were then asked to elaborate on their examples, or one example if they gave more than one.

The children's responses were taped, and have been stored safely to allow the possibility of using this for future analysis of language change over time.

Scoring was done by one NZCER kairangahau listening to the tapes at the end of the fieldwork. The scoring was on a scale of 0–5:

0= no response/answer unknown

1= attempts explanation, but answer incorrect

2= able to provide a simple definition

3= able to provide a simple definition and relate it to the context

4= able to provide a complex definition and relate to the context by providing specific examples

Here are the results for each cohort. We have only included the first example given, since many children gave only one example. [41]

Tëina children, at the age of near-5, found this task difficult. Most were not able to offer an answer, or one which made sense. They were more comfortable using the picture to identify

---

[41] With the *Tüpatotanga* task, for tëina, 5 children gave 2 examples, and 2 gave 3 examples. For taiohi, 13 gave 2 examples, and 2 gave 3 examples. For tuäkana, 22 children gave two examples, and 8 gave 3 examples. With the *Ngä mahi e tika ana* task, for tëina, 5 children gave 2 examples, and none gave 3 examples. For taiohi, 9 children gave 2 examples, and 2 gave 3 examples. For tuäkana, 13 children gave 2 examples, and 4 gave 3 examples.

practice on the marae in terms of expectations and safety than with using words as the starting point for describing practices or concepts.

Table 118

Tëina – Ngä Tikanga (n=33)

| Score ® | 0 | 1 | 2 | 3 | 4 |
Activity ⁻	%	%	%	%	%
Red card 1	77	12	6	6	0
Red card 2	70	18	6	6	0
Yellow card	67	23	10	0	0
Tüpatotanga	48	23	26	3	0
Ngä mahi e tika ana	47	34	19	0	0

Note: percentages may not add up to 100% due to rounding.

Age-8 children, from taiohi, were more comfortable using words as triggers to describe practices and concepts. They were unlikely to offer complex definitions. They were more likely to be able to relate practices than concepts to the marae context.

Table 119

Taiohi – Ngä Tikanga (n=36)

| Score ® | 0 | 1 | 2 | 3 | 4 |
Activity ⁻	%	%	%	%	%
Red card 1	25	22	25	25	3
Red card 2	33	17	28	17	6
Yellow card	31	40	14	14	0
Tüpatotanga	7	10	62	17	3
Ngä mahi e tika ana	9	19	44	28	0

Note: percentages may not add up to 100% due to rounding.

Tuäkana children, then aged around 11 years old, were more comfortable in describing concepts, and just over a tenth were offering complex definitions and relating them to the marae context. Around a fifth still had difficulty providing a definition in response to words related to practices and concepts.

Table 120

Tuäkana – Ngä Tikanga (n=41)

Score ⑧ Activity ⁻	0 %	1 %	2 %	3 %	4 %
Red card 1	22	22	27	17	12
Red card 2	20	22	15	32	12
Yellow card	18	3	38	28	13
Tüpatotanga	3	6	39	42	11
Ngä mahi e tika ana	3	3	32	50	13

Note: percentages may not add up to 100% due to rounding.

Total scores for Ngä Tikanga task

The total scores for Ngä Tikanga were taken by adding up the scores for each of the 5 sub-tasks in the tables above, giving a maximum score of 20. The tasks did give a wide range of scores in each cohort, and gave different ranges for each cohort. This is shown in the figures below.

	Mean	s.d.	Range
Tëina:	2.79	2.76	2–12
Taiohi:	7.22	3.90	0–18
Tuäkana:	10.46	4.10	4–19

The same information is next shown in Figure 2 below. The distribution of the scores is shown in 2 ways as each way gives slightly different, but complementary, information. The *stripchart*, on the left, shows all of the actual scores obtained by each child in each cohort. The scores have been "jittered" or scattered vertically, so that equal scores can all be seen.

The *box plot*, on the right, gives a visual and numerical summary of the data. Half the students achieved scores in the range defined by the box in the middle. The other half got higher or lower scores. Most of the boxes have a vertical subdivision approximately in their middle. This marks the value of the median (half the students got a higher score; half a lower score).

The two "tails" from the box, of dotted horizontal lines ending in solid vertical lines, mark the upper and lower extremes of the scores; very extreme scores ("outliers") are marked by open dots.

Figure 2

Total Tikanga scores for each cohort
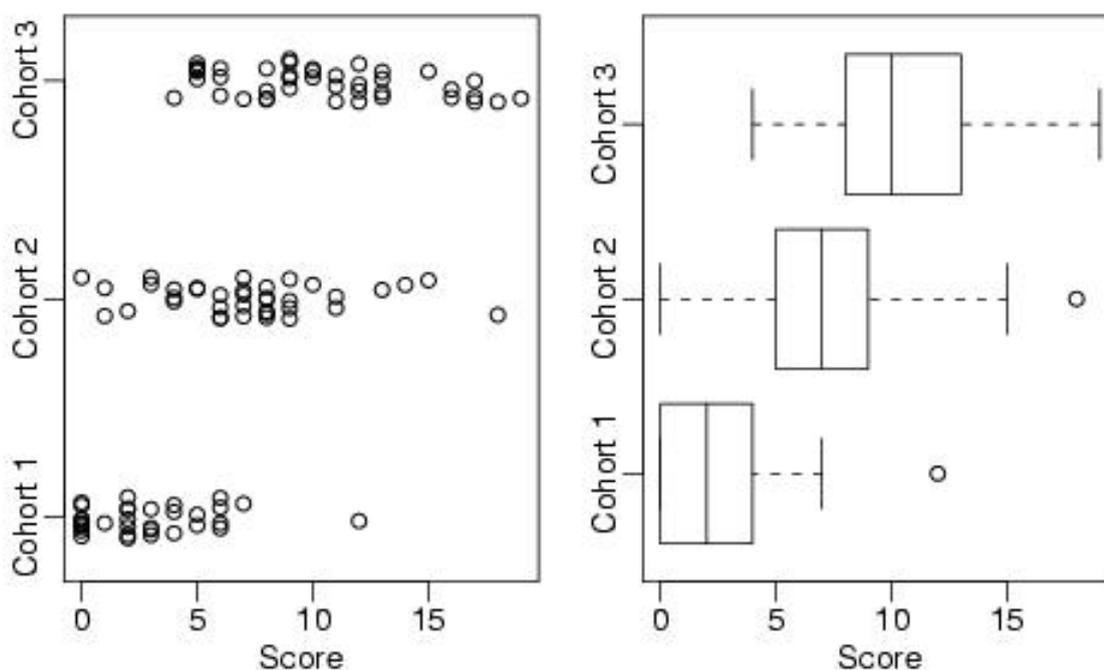
Te Körero

This task focused on children's oral language, and their ability to synthesise and present information. The children were offered 6 pictures, 3 related to the marae, 2 related to the moana (the beach), and 1 to Te Wao-nui-a-Täne (forest). They were asked to describe what they saw there, and given 2 minutes to do so, with the instructions rising in complexity with each cohort.

Tëina children were asked to talk about the things that they could see in the picture, taiohi children were asked to talk about a time they had been in that situation or had seen it, and tuäkana children were to pretend that they were looking after an overseas visitor and were asked what the things were that they would need to make clear to their visitor to be careful of. Their answers were taped for marking. A kaiako who had taught in a kura kaupapa Mäori rated each child's response on 4 aspects, for a total mark out of 12. The 4 aspects were:

Rere o te körero = flow
Märama = clarity
Whakahua kupu = pronunciation
Tangi o te reo = cadence

The results for each cohort are given below.

Table 121

Tëina – Te Körero (n=30)

Score ®	0	1	2	3
Aspect ⁻	%	%	%	%
Rere o te körero	13	3	19	61
Märama	6	3	29	58
Whakahua kupu		3	29	65
Tangi o te reo	6	3	32	55

Note: percentages may not add up to 100% due to rounding.

Between 55–65 percent of the tëina children were given the top level rating for their oral language, on all 4 aspects. Only a few children found this task difficult. Thus it seemed that most tëina children could provide a clear description in te reo Mäori of what they saw in the beach picture.

Table 122

Taiohi – Te Körero (n=36)

Score ®	0	1	2	3
Aspect ⁻	%	%	%	%
Rere o te körero	3	3	14	81
Märama	3	0	28	69
Whakahua kupu	3	0	28	69
Tangi o te reo	3	0	31	67

Note: percentages may not add up to 100% due to rounding.

Just over two-thirds of the taiohi children were given the top level rating for 3 aspects of their körero, with an even higher proportion getting the top level for the quality of their rere ö te körero. Again, only 1 or 2 children found this task difficult. Thus most taiohi children seemed to be able to provide a good description in te reo Mäori of a situation they had experienced.

Table 123

Tuäkana – Te Körero (n=42)

Score ®	0	1	2	3
Aspect ⁻	%	%	%	%
Rere o te körero	2	0	7	90
Märama	10	0	5	86
Whakahua kupu	2	0	14	83
Tangi o te reo	2	0	26	71

Note: percentages may not add up to 100% due to rounding.

Almost all the tuäkana children were rated at the top level for the quality of their oral language, with somewhat lower ratings for tangi i te reo. Thus most tuäkana children seemed able to give comprehensible guidance on aspects of safety at the beach in te reo Mäori.

Total scores for Te Körero

This task turned out to have a lower than desirable ceiling, and did not produce a wide range in performance. For the next phase, we will revisit the criteria for marking of this task, and use 2 markers. We will also return to these first phase results and use the same process, so that we can establish a firmer basis for tracking individual children's progress over time.

	Mean	s.d.	Range	
Tëina:	9.8	2.47	0–12	(40% at highest possible score)
Taiohi:	10.6	2.31	0–12	(53% at highest possible score)
Tuäkana:	11.24	1.02	8–12	(54% at highest possible score)

The students were scored relative to their same age peers. So, unlike the other tasks, there is little evidence of "improvement" across the cohorts.

The only difference between cohorts that is evident is that the spread of scores decreased between cohorts. This could be a result of the fact that some students began köhanga reo with relatively good fluency in te reo Mäori, while others had very limited prior exposure to the language. Thus the tëina children show a wide range in ability. However, children who have been in an kaupapa Mäori environment for some years are all more nearly equally fluent, resulting in the very narrow spread of scores in tuäkana.

Figure 3

Te Körero scores for each cohort
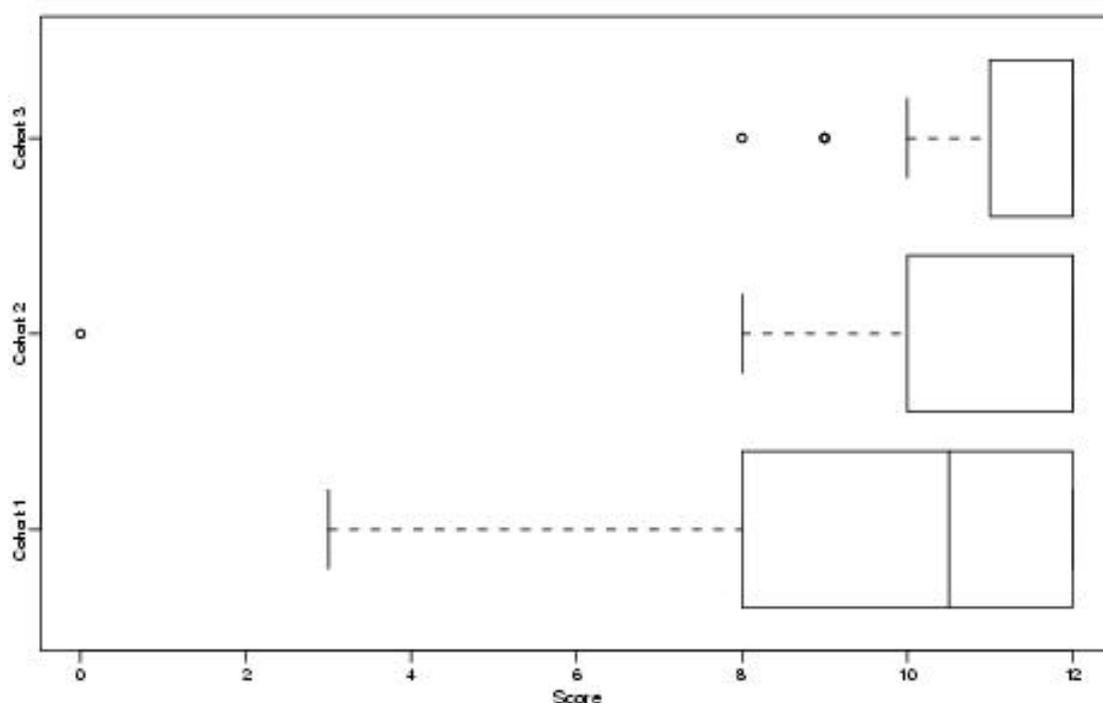
Papa Kupu Hono

This task was designed to establish the words or phrases that children associate with a particular context, as a means of revealing cultural understandings; it also provides some information on vocabulary, and on writing skills. Children used the same picture as they had used for Te Kōrero, unless they wanted to choose another picture. Most children continued to use the same picture.

The kairangahau modelled the activity of a concept map (based on a key word in a central oval, with spokes radiating out, with spokes used for the naming of different categories, with links possible between them), for up to 3 spokes, or until the child clearly understood the process. The child was then given a model, and either wrote words in, or dictated them to the kairangahau.

The total time given for this task on the researcher instruction manual was 5 minutes, but it was not clear that that covered the modelling time. Thus some kairangahau used a 5-minute time-limit, and some, a 3-minute time-limit. We analysed the responses in terms of the time each child had had for the task. The additional time did not significantly increase the number of words produced.

The Papa Kupu Honos were scored on a scale of 4 for each word, with no limit for the highest possible score.

Papa Kupu Hono marking
We marked this to get two sub-total scores:

Words & headings
Dictated word/category heading   1 point
Recognisable, self-written word/phrase   2 points
Correct, self-written word/phrase   3 points

Linkages
Dictated link   1 point
Recognisable link   2 points
Correct self-written link   3 points

There was a high correlation between the sub-total scores for words and headings, and the scores for links (r= 0.78).

We added the 2 scores together to get a total score. The figure below uses the same graphical forms as we used to show the spread of scores for the Tikanga task. The 2 graphs show the range for each cohort, and also show marked differences between each cohort.

Figure 4

Total Papa Kupu Hono scores for each cohort
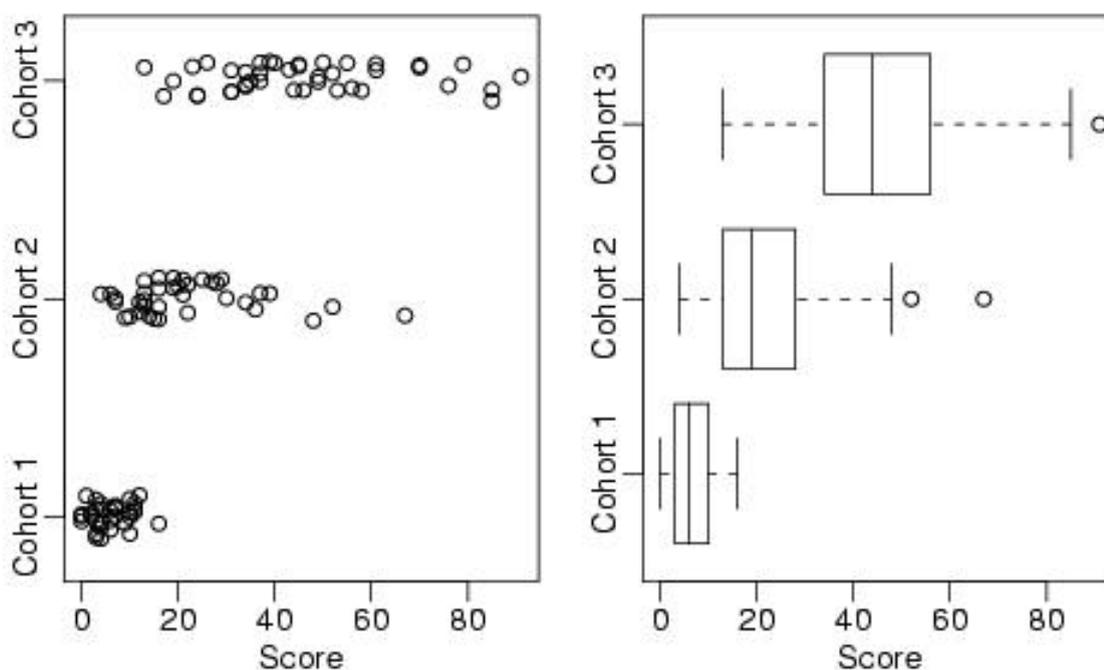
The average total score for each cohort is given below, for each time period. The age-11 children were producing on average twice the number of words and linkages as the age-8 children, who in turn were producing on average around 3 times the number of words and linkages as the age-5 children.

Cohort	Time at most 3 min	Time over 3 min
1	5.94 (n=18)	6.34 (n=14)
2	21.81 (n=16)	21.10 (n=20)
3	45.95 (n=21)	46.20 (n=18)

Tuhituhi

This was designed to assess children's writing, and was a task given only to taiohi and tuākana. The children were asked to write a story about the picture they had chosen, and given their Papa Kupu Honos from the previous task so that they could use those words. They had 10 minutes to write a story in pencil. They were then given another 5 minutes to make improvements, using a pen. The kairangahau took notes of resources in the room that children may have used, such as posters on the wall with words, but these were not used in the analysis.

A kura kaiako with 10 years' teaching experience marked the writing, with separate marking of:

- Total number of words in the story.

- Number of different words used.

- Total number of spelling mistakes in the different words used.

- Punctuation: full stops, macrons, and capitals (on a scale of 1–5: 1= none, 2= little correct, 3=some correct, 4= mostly correct, 5= all correct: a total of 15 possible marks for punctuation).

- Total number of simple sentences (verb+subject+object).

- Total number of complex sentences (verb+subject+object+relative clause/additional phrase/ verb-subject-object).

- Narrative sequence (marked out of 5: 1= narrative not easily understood, 2= a few unrelated story lines, 3= one story line note well linked to rest of text, 4= one story line with a few related ideas/concepts, 5= one story line with most/all ideas/concepts related).

The next table shows the mean scores and range for each cohort. The age-11 children were producing on average twice as many words and different words as the age-8 children. Both cohorts were more likely to write simple rather than complex sentences, with a higher rate of complex sentences from the older children. Punctuation and narrative sequence also had higher scores for the age-11 children.

	Taiohi			Tuäkana		
	Mean	s.d.	Range	Mean	s.d.	Range
Total no. words	59.65	29.78	0–133	122.90	50.18	34–314
No. different words	26.90	9.77	9–49	47.30	11.18	17–75
No. spelling errors	9.60	5.33	0–26	12.85	5.35	3–25
No. correct simple sentences	1.89	2.25	0–12	2.39	2.38	0–9
No. correct complex sentences	0.38	0.68	0–3	0.83	1.22	0–5
Punctuation	5.89	2.99	3–14	9.44	3.34	4–14
Narrative sequence	3.49	1.52	1–5	4.46	1.12	1–5

Scores in these aspects were not closely related, in that a child getting a high score for one aspect may have got a high or low score for other aspects. To arrive at a meaningful overall score, we could not simply combine the totals for each aspect. When we looked at the correlations or linear relationships between each aspect (the extent to which the level of performance on one aspect is similar to the level of performance on another aspect), we found that the levels of correlation were not high. Also the patterns found were different for each cohort, as the next 2 sets of figures show. The larger the correlation, the larger it is printed. Correlations for taiohi were highest between the number of different words and the correct spelling rate, and between narrative sequence and correct spelling rate, and between narrative sequence and number of correct complex sentences. For tuäkana, the correlations were highest between the narrative sequence and the punctuation, between the number of different words and correct complex sentences, and between correct spelling rate and correct complex sentences.

EXPLANATION OF THE SCATTER PLOTS

The correlation plots consist of 3 parts.

1. On the diagonal are the names of the tasks and a frequency histogram showing the distribution of the scores for that task.

2. Below the diagonal are the scatter plots for each possible pair of tasks (the pair members are defined by the tasks on the diagonal that are in the same row and column as the scatter plot, so that the top most scatter plot in the second row, first column, is showing the relationship between narrative sequence and the number of different words).

   The wiggly line shows how linear (straight line) the relationship between the tasks may be. The correlation coefficient (in the third part of the plot) assumes the relationship *is* linear, and the wiggly line shows where this may not be true (for instance, in tuäkana, between the correct spelling rate and correct complex sentence rate).

   The wiggly line also shows whether the relationship is positive (the line goes "up" from the lower left corner to the upper right corner of the plot) or negative (the line goes "down" from upper left to lower right corners).

3. Above the diagonal are the correlation coefficients (Pearson's product moment), measuring the strength of the linear relationship between the pairs of tasks. The size of the font is proportional to the strength of the relationship. A correlation close to 0 indicates little or no relationship, around 0.5 indicates a moderate relationship, and close to 1 (the maximum possible value) a strong relationship.

   In these diagrams the direction (positive or negative) of the relationship must be read from the line across the scatter plot.

Figure 5

Correlations between Tuhituhi tasks for taiohi

Cohort 2
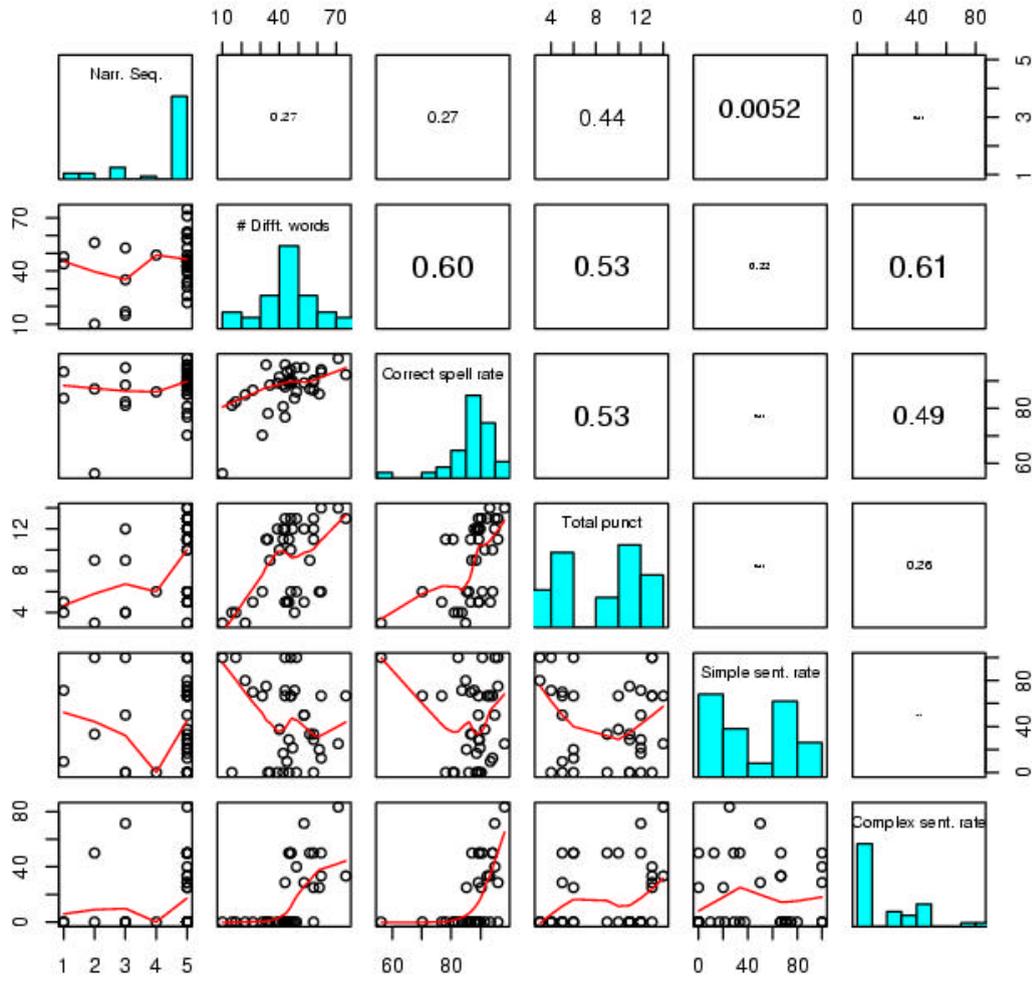
Figure 6

Correlations between Tuhituhi tasks for tuäkana
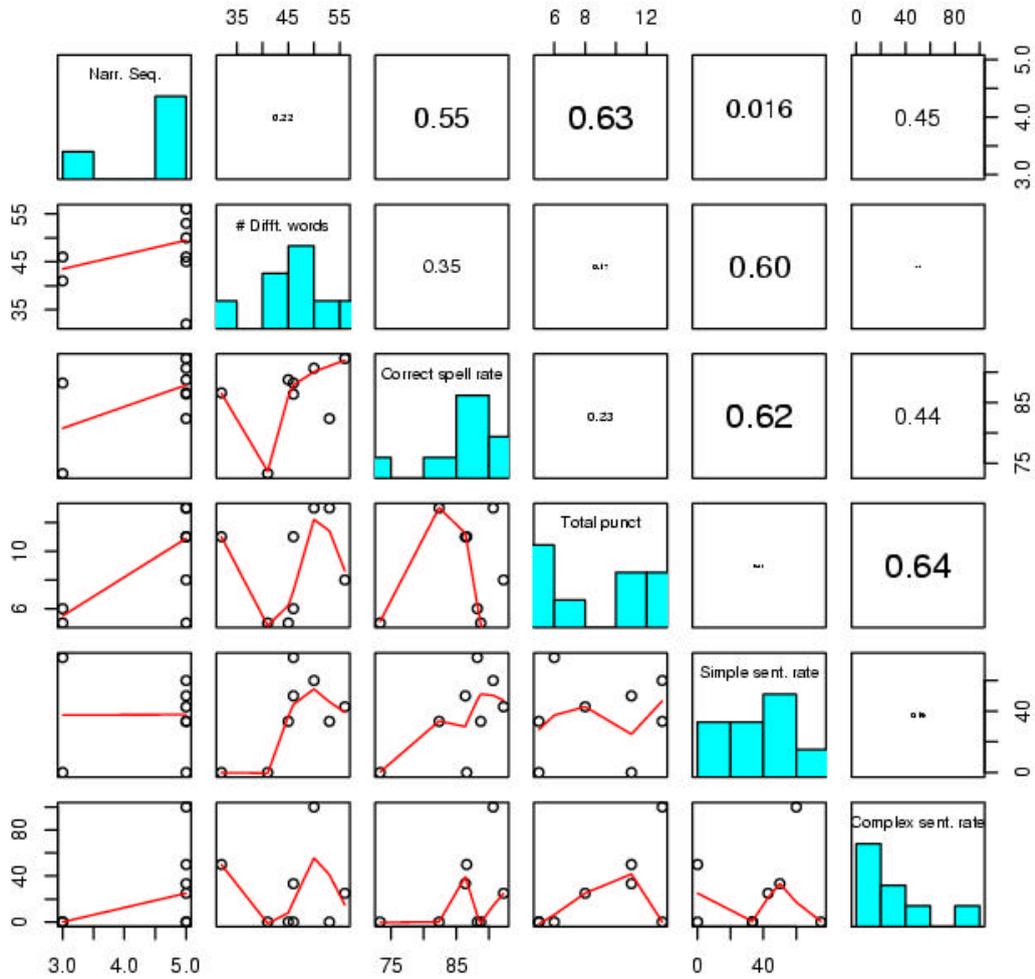
Cohort 3

We combined the data for the 2 cohorts, standardised the scores (as the possible values for the tasks were very different), and used Cronbach's alpha coefficient to get a measure of the reliability of the scores for the different tasks, to see to what extent they were measuring the same thing. The task scores, other than the simple sentence rate, were all reasonably correlated with the total score, and resulted in an alpha value of 0.75, which is sufficiently close to 1 to support a mean Tuhituhi score based on the other 5 tasks. We therefore excluded the simple sentence rate in arriving at an aggregate score for this task, with a total possible score of 40. The narrative sequence was taken as the score out of 5, the punctuation score out of 15 was scaled to a score of 10, the correction rate (proportion of words spelt correctly) scaled to be out of 10, as was the number of different words, and the complex sentences score was scaled to be out of 5.

The next figure shows the spread of total scores for the Tuhituhi task for each cohort.

Figure 7

Total Tuhituhi score for taiohi and tuäkana
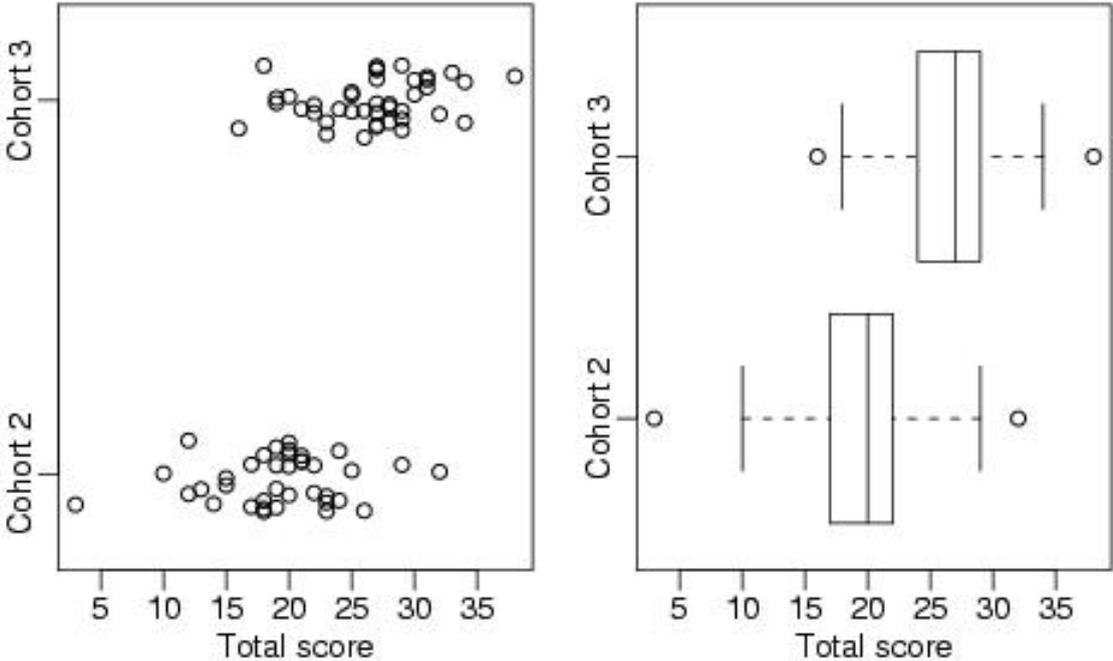
The mean scores were:

	Mean	s.d.
Taiohi:	19.24	5.33
Tuäkana:	26.68	4.69

Pängarau

The aim of these tasks was to provide information about children's pängarau skills and ability to use mathematical skills to solve problems. There were 3 separate sets of tasks for each cohort. Tëina children started on the first set, taiohi on the second, and tuäkana on the third. Each tuäkana child who got the first 2 tasks wrong for their cohort set started at the set for the cohort behind them. Each child continued as far as they could go until they got 2 consecutive questions wrong. It was therefore possible for a teina child to start the taiohi set after completing the tëina set. A fourth set of tasks was developed for tuäkana children who had all tuäkana questions correct. However, all the children stayed within their cohort sets.

Tëina questions were out of a total of 13 marks. The range was from 0 (15 percent of the children, to 12 (6 percent), with a mean mark of 6.63 (s.d. 3.99).

Below is what the tëina children were asked to do. A series of cut-outs of 16 people (7 females, 4 males, and 5 children) were spread out on the table. The children were asked to organise the cut-outs into the groups.

1. Wehea mai ko ngä täne me ngä koroua ki tëtahi röpü.
   (Separate the men and the male elders into one group.)

2. Wehea mai ko ngä wahine me ngä kuia ki tëtahi röpü.
   (Separate the women and the female elders into one group.)

3. Kei te röpü tuatoru ko ngä tamariki.
   (The children are to be in the third group.)

The children were then asked to count how many people were in each group (questions 4–6). Then they were asked to identify the numerals for the number they gave from a series of number cards that were placed on the table (questions 7–9). Over half of the numerals on these cards were distractors, i.e., they were not values that represented the total number of people in any of the groups.

We then asked the children how many people in total there were in the male and children's group.

10. Tokohia ngä tängata ki ngä röpü e rua nei?
    (How many people are there in these 2 groups?)

With a series of number cards (as well as addition, subtraction, and equals cards) or with paper and pencil they were asked to show how they arrived at the total number that they had given for the previous question using cards or by writing the equation.

11. Whakaatuahia mai ki ngä taputapu nei, me pehea ka riro i a koe taua nama.
    (Using these cards show how you got your answer.)

    Tuhia mai he pakitau/körero nama ki te whakaatu mai i te honotanga o ngä röpü e rua nei.
    (Write down the equation which shows the addition of these 2 groups.)

Continuing with the use of the series of cards or pencil and paper, we asked the child to work our how many people in total were "at the hui" (this was the context of the gathering of people) and to show how they arrived at their answer.

12. Tokohia ngä tängata katoa ki taua hui?
    (How many people in total were there at the hui?)

13. Whakaatuahia mai ki ngä taputapu nei, me pehea ka riro i a koe taua nama.
    (Using these cards show how you got your answer.)

    Tuhia mai he pakitau/körero nama ki te whakaatu mai i te honotanga o ngä röpü katoa.
    (Write down the equation which shows the addition of these 2 groups.)

Taiohi questions were out of a total of 11. The range was from 0 (56 percent of the children), to 6 (3 percent). The mean on the taiohi set of questions was 1.14 (s.d.1.57).

All the 20 children who went back to the tëina questions scored 10 or more out of 13, with 9 of these getting all the tëina questions correct.

Below is what the taiohi children were asked to do. The child was given a pencil, paper, and some ice block sticks to use if they so wished. The context of this question was standing outside a wharenui.

> Kei waho koe i te wharenui. Ka kite koe i ngä hü kua rärangihia ki te taha o te kuaha. 18 ngä hü.
> (You are outside a wharenui. You see some shoes lined up next to the door. There were 18 shoes.)

The child was then asked the following questions, and to write down how they arrived at their first answer (question 2).

1. Tokohia pea ngä tängata i roto i te wharenui?
   (How many people might there be in the wharenui?)

2. Tuhia he pakitau/körero nama mö tënä?
   (Write down the equation for your answer.)

3. Tokohia pea ngä tängata pea mena 42 ngä hü kei waho?
   (How many people might there be inside if there are 42 shoes outside?)

4. E hia ngä hü ina 52 ngä tängata i roto?
   (How many shoes would there be when 52 people are inside the wharenu?)

The child was then given another context, time inside the wharenui.

Kei te whakareri koe i ngä moenga i roto i te wharenui. Kua whakarärangihia ngä moenga ki ngä röpü, tëtahi ki runga i tëtahi. E 8 ngä moenga ki ia rärangi. E 4 ngä röpü. Kei tëtahi rarangi, e 6 noa iho ngä moenga.

You are preparing the beds inside of the wharenui. The mattresses have been stacked up, one on top of another. There are 8 mattresses in each stack. There are 4 groups. However, in one stack there are only 6 mattresses.

The child was then asked the following questions, and to write down how they arrived at their first answer (question 6).

5. E hia ngä moenga katoa?
    (How many mattresses are there in total?)

6. Tuhia he pakitau kia whakaatu mai me pehea ka riro i a koe taua nama.
    (Write down the equation which shows how you got your answer.)

The child was presented with another scenario inside the wharenui and asked 3 questions, the third being the working out of their answers.

60 ngä hiti. Wehea ki roto i ngä putu kia reri mö te kawe ki te whare horoi käkahu. 8 ngä hiti mö ia pëke mö te whare horoi käkahu.

There are 60 sheets. Separate the sheets so that they are ready to be taken to the laundromat. There are 8 sheets in each laundromat bag.

7. E hia ngä pëke ka kï i a koe?
    (How many bags will you fill?)

Tëtahi o ngä pëke käore i te kï.
(One of the bags has not been completely filled.)

8. E hia ngä hiti mö tërä?
    (How many sheets are there in that bag?)

9. Tuhia he pakitau/körero nama hei whakaatu mai i tënä.
    (Write down the equation which shows how you got your answer.)

Ko ngä uhi përa/urunga kua purua ki roto i ngä putunga e 8. E 12 ngä uhi përa/urunga kei roto i ia putunga. Kotahi te putunga e 3 ngä uhi përa/urunga kei roto.

These pillow slips have been put into piles of 8. There are 12 pillow slips in each pile. In one of the piles there are 3 pillow slips inside.

10. E hia katoa ngä uhi përa/urunga?
    (How many pillow slips are there in total?)

11. Tuhia he pakitau/kōrero nama hei whakaatu mai i tēnā.
    (Write down the equation which shows how you got your answer.)

Tuākana questions were out of a total of 15. The range was from 0 (3 percent, or one child), to 10 (6 percent). The mean score was 4.75, s.d. 3.48.

The child who went back to the taiohi questions scored 5 out of a total of 11.

Below is what the tuākana children were asked to do. They were given a calculator (if they wanted to use one), a pencil, and a piece of paper with a scorecard from a kapa haka competition and the questions were also written on the paper for them.

	I te	Kaiwhakawā 1	Kaiwhakawā 2	Kaiwhakawā 3	Kaute tōpü mö ia mea	Tau ine waenga
Whakaeke	50	40	40.2	35	[Qu 5]	[Qu 6]
Waiata koroua	100	80	85.5	92	[Qu 5]	[Qu 6]
Waiata–ä-ringa	100	93	96.2	[Qu 3]	[Qu 5]	[Qu 6]
Haka	100	96.5	83.4	92	[Qu 5]	[Qu 6]
Whakaputa	50	43	48.5	46	[Qu 5]	[Qu 6]
Kaute tōpü	400	[Qu 1]	[Qu 2]	355		

They were asked the following questions.

1. Tātauhia te kaute tōpü mö te kaiwhakawā 1.
    (Calculate the total score awarded by judge 1.)

2. Tātauhia te kaute tōpü mö te kaiwhakawā 2.
    Calculate the total score awarded by judge 2.)

He uaua te pänui i te pepa kaute a te kaiwhakawä tuatoru.
(It is difficult to read the third judge's scorecard.)

3. He aha te kaute mö te waiata-ä-ringa?
    (What did [the third judge] award for the waiata-ä-ringa?)

4. Tuhia he pakitau/kōrero nama hei whakaatu mai ki au i tö whakautu.
    (Write down the equation which shows how you got your answer.)

5. Tātauhia ngä kaute tōpü mö ia take.
    (Calculate the total score for each item.)

6. Mä tö tätaitai kimi, me te tuhia te tau ine waenga mö ia mea.
    (Using the calculator, write down the average for each item.)

7. Whakaatu mai, pehea i puta to kaute tōpü.
    (Show how you got the total score for each item.)

CORRELATIONS BETWEEN THE TASKS AND KAIAKO RATINGS

How does a child's score for te reo Māori tasks compare with their score on the pāngarau task, or with the Papa Kupu Hono? The next page gives the correlations between each of the tasks and the kaiako ratings, with the probability that it has occurred by chance below, for each cohort.

Tēina

Correlation coefficients

	persev	rec.lang	social	curiosity	totk	ww.sc	tikanga	pāngarau
persev	1.000							
rec.lang	0.764	1.000						
social	0.476	0.475	1.000					
curiosity	-0.079	-0.177	0.166	1.000				
Kōrero	0.036	-0.175	-0.009	0.258	1.000			
Papa Kupu Hono	-0.090	-0.294	-0.013	0.103	0.224	1.000		
Tikanga	0.268	0.027	0.221	0.119	0.457	0.238	1.000	
Pāngarau	-0.018	-0.037	0.252	0.237	0.254	-0.180	0.081	1.000

p-values

	persev	rec.lang	social	curiosity	totk	ww.sc	tikanga
rec.lang	<0.0001						
social	0.008	0.008					
curiosity	0.068	0.350	0.381				
Kōrero	0.086	0.384	0.963	0.194			
Papa Kupu Hono	0.064	0.115	0.945	0.589	0.234		
Tikanga	0.015	0.889	0.241	0.532	0.011	0.182	
Pāngarau	0.092	0.844	0.178	0.206	0.175	0.315	0.655

Taiohi

Correlation coefficients

	persev	rec.lang	social	curiosity	totk	tuhi.sc	ww.sc	TIK.SC	TOTNUM
persev	1.000								
rec.lang	0.746	1.000							
social	0.345	0.407	1.000						
curiosity	0.450	0.653	0.393	1.000					
Körero	0.119	-0.183	-0.301	-0.227	1.000				
Tuhituhi	-0.128	-0.101	-0.213	-0.080	0.374	1.000			
Papa Kupu Hono	-0.145	-0.164	-0.046	-0.142	0.308	0.361	1.000		
Tikanga	0.019	-0.061	-0.361	-0.094	0.178	0.111	-0.204	1.000	
Pängarau	-0.078	-0.163	0.032	-0.117	0.226	0.233	0.253	-0.177	1.000

p-values

	persev	rec.lang	social	curiosity	totk	tuhi.sc	ww.sc	TIK.SC
rec.lang	< 0.0001							
social	0.037	0.012						
curiosity	0.005	<0.0001	0.016					
totk	0.489	0.284	0.074	0.183				
tuhi.sc	0.451	0.553	0.205	0.639	0.025			
ww.sc	0.392	0.331	0.786	0.402	0.068	0.028		
TIK.SC	0.909	0.719	0.028	0.582	0.300	0.514	0.227	
TOTNUM	0.650	0.341	0.853	0.496	0.192	0.172	0.137	0.303

Tuäkana

Correlation coefficients

	persev	rec.lang	social	curiosity	totk	tuhi.sc	ww.sc	TIK.SC	TOTNUM
persev	1.000								
rec.lang	0.787	1.000							
social	0.546	0.473	1.000						
curiosity	0.327	0.430	0.339	1.000					
totk	-0.282	-0.497	-0.095	-0.466	1.000				
tuhi.sc	-0.224	-0.396	-0.111	-0.160	0.006	1.000			
ww.sc	-0.113	-0.176	0.015	-0.215	0.149	0.488	1.000		
TIK.SC	-0.058	-0.143	0.042	-0.118	0.134	0.042	0.028	1.000	
TOTNUM	-0.075	-0.236	0.091	0.054	0.212	0.248	0.329	-0.078	1

p-values

	persev	rec.lang	social	curiosity	totk	tuhi.sc	ww.sc	tikanga
rec.lang	<0.0001							
social	<0.0001	0.003						
curiosity	0.045	0.007	0.038					
totk	0.087	0.001	0.572	0.003				

tuhi.sc	0.176	0.014	0.506	0.337	0.970		
ww.sc	0.498	0.291	0.930	0.196	0.354	0.001	
TIK.SC	0.729	0.391	0.800	0.479	0.405	0.796	0.861
TOTNUM	0.653	0.155	0.588	0.747	0.183	0.118	0.035	0.629

For *tëina* children, the only statistically significant correlations were between perseverance and receptive language ($r = 0.764$, $p < 0.0001$), between perseverance and social skills ($r = 0.476$, $p = 0.008$), between social skills and receptive language ($r = 0.475$, $p = 0.008$), and between körero and tikanga scores ($r = 0.457$, $p = 0.011$).

In each of these cases, a high score in the one area was more likely to be associated with a higher skill in the other area (and low scores in the one with low scores in the other). The correlation between perseverance and receptive language is relatively strong; the other 3 correlations are moderate.

All other pairs of skills show little evidence of any kind of relationship; a high score in, say, tikanga, is as likely to be associated with a high score in pängarau as with a low score.

For *taiohi* children, there were more statistically significant correlations between the social skills (for instance, between curiosity and the other skills), and between tuhituhi and each of körero ($r = 0.374$, $p = 0.025$) and the Papa Kupu Hono tasks ($r = 0.361$, $p = 0.028$). The correlations between receptive language and perseverance, and between curiosity and receptive language were strong. All the other significant correlations were weak or moderate. Figure 8 indicates that there was a single student who obtained a very low körero score, and recalculating the correlations without that student does produce different correlation estimates. These new estimates are typically stronger where Körero is one of the variables, and sometimes are weaker between other variables. None of the correlations changed "status" between "statistically significant" and "not significant".

For *tuäkana* children, there were more statistically significant relationships: between receptive language and both Körero ($r = -0.497$, $p = 0.001$) and Tuhituhi tasks ($r = -0.396$, $p = 0.014$), and between the curiosity rating and the Körero task ($r = -0.466$, $p = 0.003$), and between the Papa Kupu Hono and Tuhituhi ($r = 0.488$, $p = 0.001$) and the pängarau task ($r = 0.329$, $p = 0.035$). The correlations between receptive language and Körero and Tuhituhi are *negative*, indicating that higher scores on the one are associated with lower scores on the other. This is because a student with good receptive language skills will have a low score (1 = Always).

Overall, these apparent relationships should be interpreted with some caution. The fact that tasks that appeared to be correlated in tëina (körero and tikanga) showed no relationship in either cohorts 2 or 3 could be due to the fact that tëina children who were starting to learn te reo had less exposure to the knowledge required for the Tikanga task at home, but by tuäkana all children had a relatively good knowledge of Tikanga. Or, some of the "significant" correlations are the result of chance: all 3 samples are small, and any correlation with a *p*-value of between 0.01 and 0.05 may or may not indicate that the tasks are in fact correlated (they may just have seemed to be in the samples).

The relationships between the study children's scores on the tasks are shown graphically in the next 3 figures. The lack of linearity is evident in the scattergrams on the bottom left of the figures.

Figure 8

Correlations between tasks for tëina
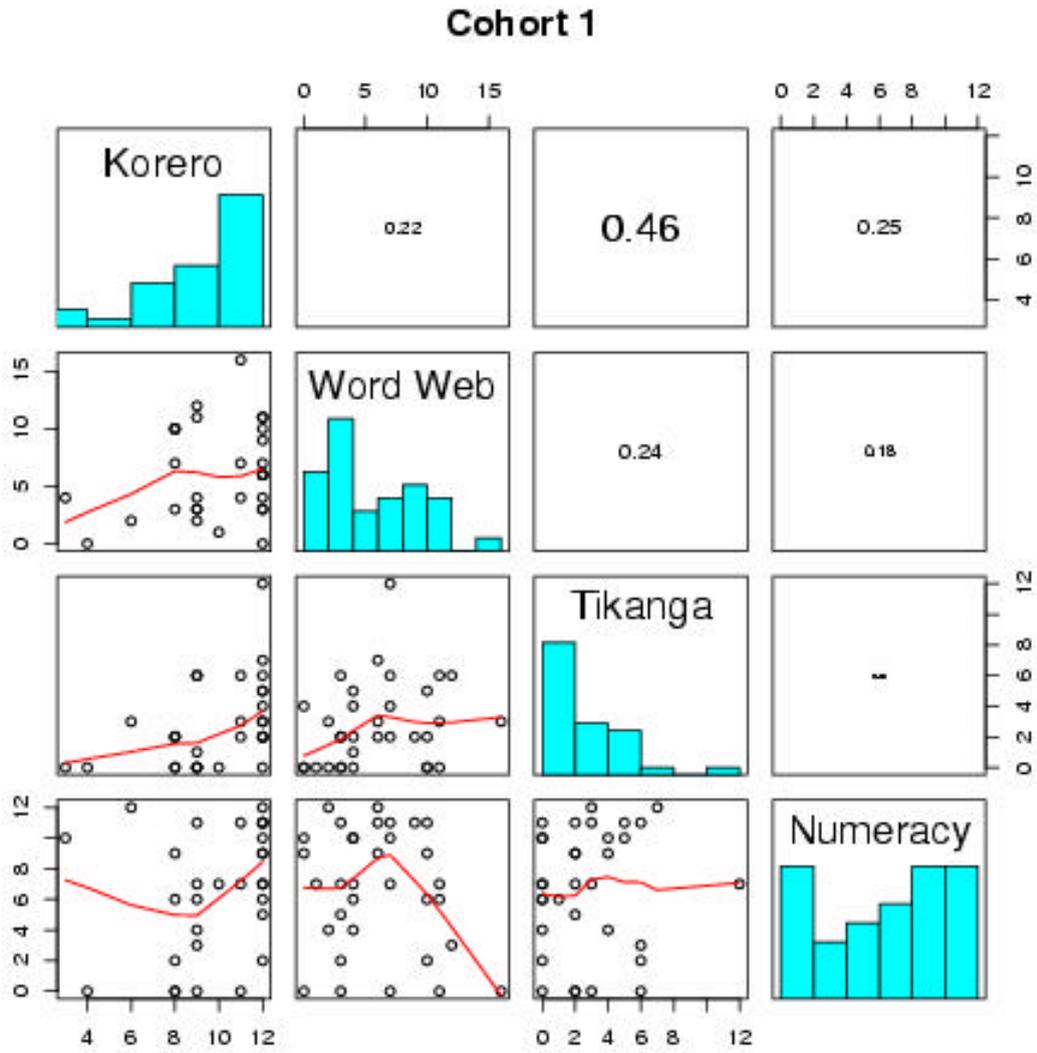
Figure 9

Correlations between tasks for taiohi

Cohort 2
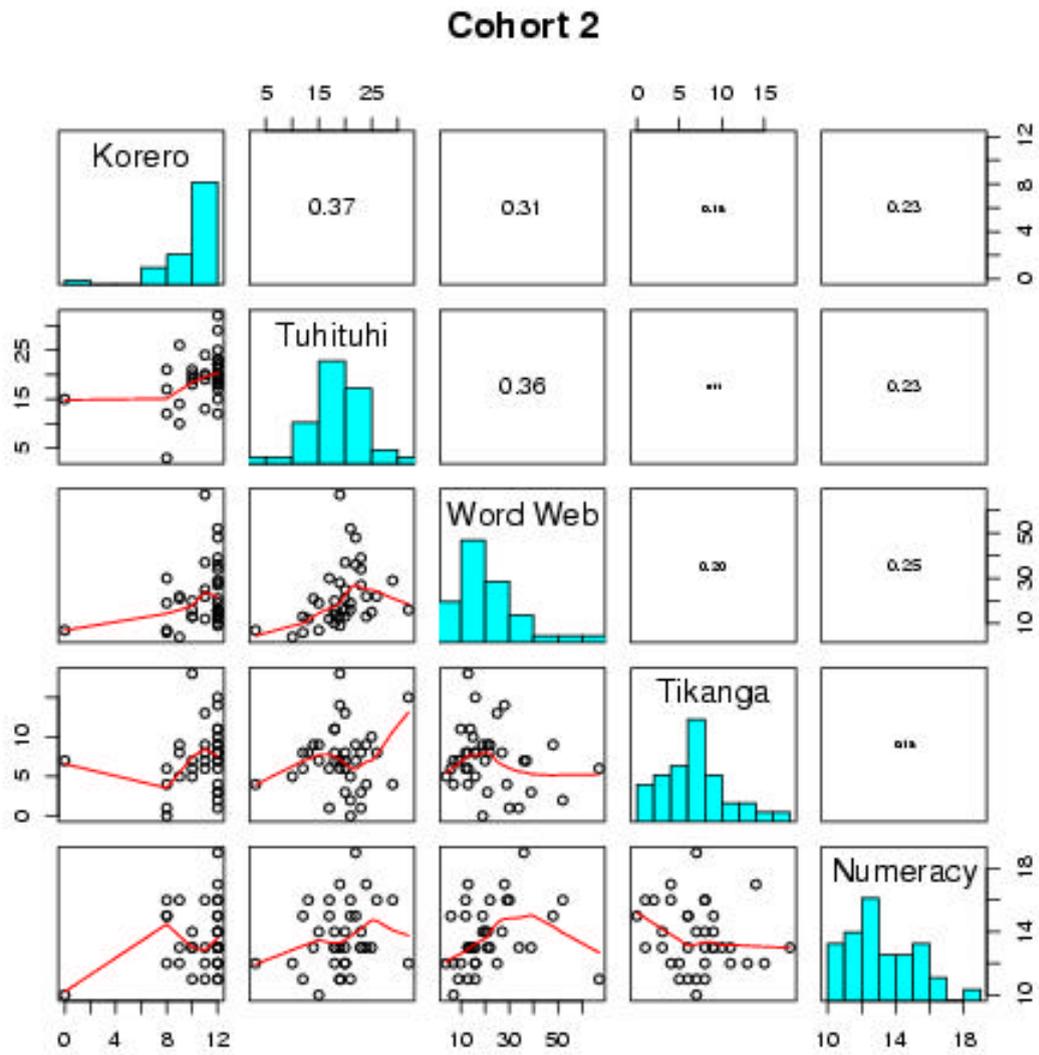
Figure 10

Correlations between tasks for tuäkana

Cohort 3
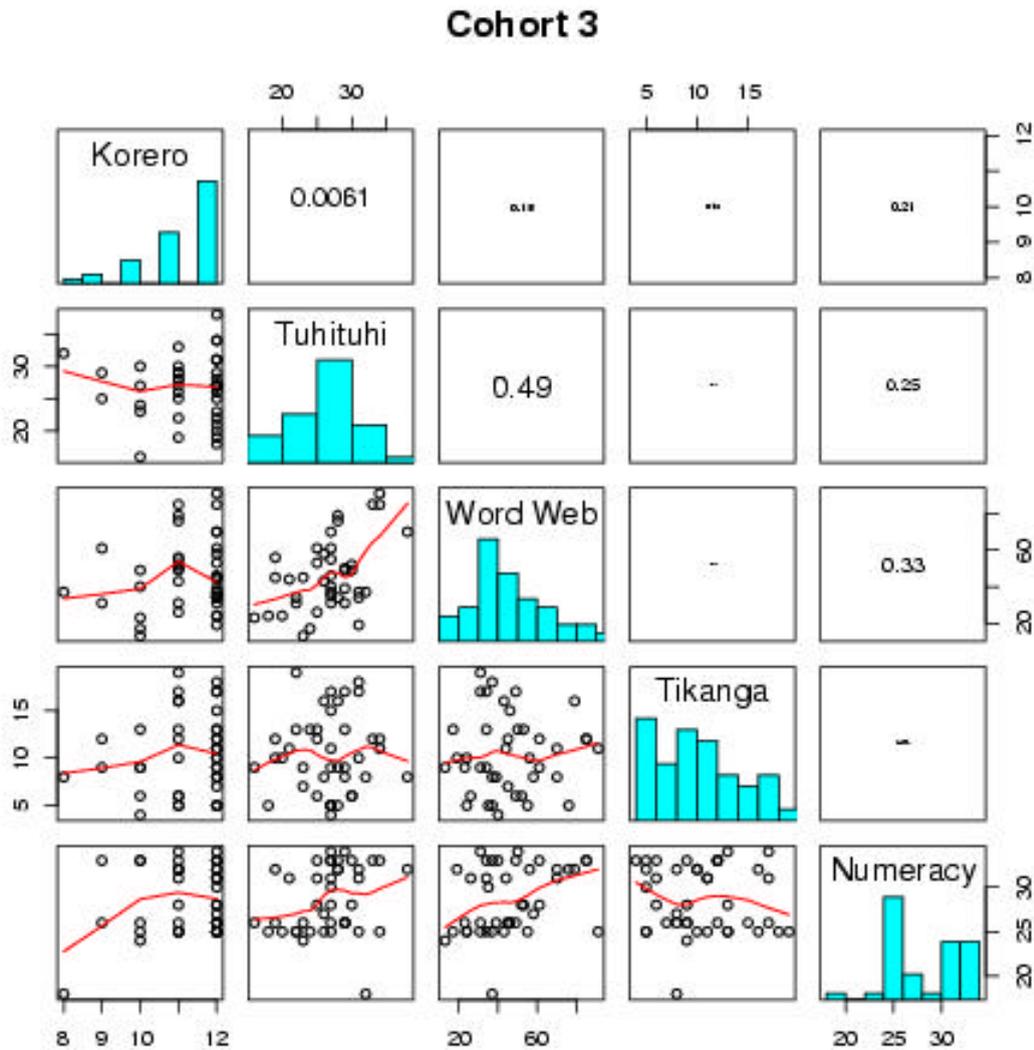
The lack of marked correlation between the tasks and ratings could indicate that they are tapping different knowledge and skills. It may also show that different children have strengths in different areas. We therefore did not combine scores for each of these tasks and ratings to arrive at an overall or composite score for purposes of our analysis of the relationship of the scores with the study children's home and educational language and cultural environments, which is the subject of the next chapter.

8. TE WHAI-WÄHITANGA ME TE MAIATANGA – NGÄ ÄHUATANGA E MÄRAMA AI NGÄ WHAKATUTUKITANGA A NGÄ TAMARIKI E AKO ANA I ROTO I TE REO MÄORI
OPPORTUNITY AND CONFIDENCE – ISSUES IN UNDERSTANDING CHILDREN'S PERFORMANCE IN TE REO MÄORI

One key aim in this study is to describe as fully as we can the place that te reo Mäori occupies in the lives of children who are making their educational journey through köhanga reo and kura kaupapa Mäori. But what has become clear to us in describing what we have found is that te reo Mäori does not reside in a single "place" outside the children's educational experience, but threads through many of their interactions with whänau, in and outside the home, and in interactions with friends, and through many of their everyday practices. The opportunities are greatest with whänau, on the marae, in Mäori hui, kapa haka groups, and, for some, their church. They are least with people – the majority in New Zealand – who speak only English. The children are bilingual: they use the language which those they are interacting with will understand.

One of the consistent findings to come from the overseas research on bilingualism and immersion education is that fluency in language comes from exposure to it in both educational setting and the wider environment (Cummins, 2000). We tried to gauge the amount that children were exposed to te reo Mäori in their wider environment, as well as the amount that they were using, particularly in the development of cognitive skills and knowledge, through reading, writing, and activities involving number. It is difficult to estimate this in terms of time (perhaps one would need people to keep daily records), and level of language.

However, in the context of criticising opponents of bilingual education whose opposition is based on the assumption that use of a minority language in education can only be at the expense of the majority language, that hours "gained" for one must mean a loss for the other, Cummins argues that while exposure is essential, there is no clear amount needed to gain or develop another language. While Cummins argues for bilingual programmes which include both languages, he notes that the real issues are:

> …the extent to which the school is making a serious attempt to promote students' L1 literacy (and awareness of language generally), and the extent to which the teacher-student interactions in the school are affirming of students' academic and cultural identities and strive to establish genuine partnerships with culturally diverse parents. In other words, what distinguishes effective from ineffective programs is the extent to which the program challenges the historical pattern of coercive relations of power. (p. 192)

Whänau of the study children had made a deliberate choice of köhanga reo and kura kaupapa Mäori. They expected their children to develop educationally in an environment which could affirm and support their identity. "Pride" and "confidence" were terms often used when they talked of the purpose of köhanga reo and kura kaupapa Mäori, and of what they saw of their child's progress. These are crucial to children's development, as Cummins notes. Doubtless, they

contribute to children's performance, which also affirms pride and confidence. Identity, language, relationships, knowledge, and skills are interwoven.

ISSUES FOR ANALYSIS

This interweaving makes it difficult to cleanly separate out the contribution of specific aspects of practice and exposure to study children's performance levels on the tasks and kaiako ratings.

In this first phase, we undertook analysis to see if we could establish relationships between children's performance levels and each of the many aspects of language use and exposure (e.g., the fluency of whānau, of kaiako) we gathered information about each child in the study. In subsequent phases of this research, we will focus on patterns of development from the base-line levels established for each cohort. Because of that focus, we may not be so hampered as this first phase analysis has been by the small numbers we have for each cohort.

There were several related issues we struck in exploring the contributions that particular practices and resources might make to the study children's performance. First, most of the overseas research on immersion education has been comparative, including immersion learners and others learning in the dominant language, or of different variations of bilingual education. We do not know of other research whose sample is drawn from entirely within a reasonably homogeneous model of immersion education.

What this means is that we found less variation in language exposure and use. We did not have substantial sized groups whose performance we can statistically analyse in terms of whether they were, or were not, doing a certain activity which should support their performance. This meant we were comparing children to some extent on particular activities which may or may not interest them as individuals, and thus we have unclear factors, which are not easily interpretable in terms of their language dimension.

We also found that the variability of performance was not great. But we do not know whether that is an artefact of our measures – the tasks and ratings – or a feature of this form of immersion education.

Further, we did not have kaiako ratings for all the children, which further diminished the sample size. This was particularly problematic for tēina.

One likely contributor to differences in children's performance in te reo Māori is one which we did not measure, and that is individual facility with language and languages.

APPROACH TO THE ANALYSIS OF CHILDREN'S LEVELS OF PERFORMANCE AND RELATED FACTORS

Our analysis investigated the relationships between the language opportunities and practices of the study children, and their homes, and their performance as measured by total scores for Tuhituhi, Pāngarau, Papa Kupu Hono, Tikanga, and Kōrero, and the kaiako ratings for spoken te reo Māori, understanding of spoken te reo Māori, written te reo Māori, and the children's social skills,

perseverance, receptive language, and level of curiosity. This gave a total of 11 performance scores for tëina children (they did not do the tuhituhi task) and 12 for taiohi and tuäkana children.

We looked at about 80 such factors, including fluency levels of whänau and kaiako, the amount of conversation at home in Mäori, the main language spoken with friends, the languages read and used in pängarau and on the computer, parental qualifications, family income, and length of time in kaupapa Mäori education. We split the children into 2 or 3 groups for each background factor so that we would have groups of sufficient size for the analysis. We analysed each cohort separately, since the cohorts had different patterns of performance, and because this study has a focus on tracking changes in performance over time.

We used 2 methods to explore for the differences. Firstly we used a statistical test[42] to test whether the average score for each of the achievement measures was the same for each of the levels of the background factor (an example of this would be to see if children coming from a background rich in spoken and written Mäori got the same körero mark—or any other performance result—as the other children, or whether their marks tended to be higher).

Secondly, we counted how many children at each level of the factor had an achievement level above or below the median (or "middle mark"). This enabled us to test whether there were equal numbers above and below the median for each of the levels of the factor (what you'd expect if the factor had no effect on achievement), or whether there were some levels at which the children tended to have done better, and other levels at which the children tended to have done less well. [43]

In each cohort, we found relationships for 20–30 factors with one or more of the performance measures. The small sample size means that we were hampered by large measurement errors, which means that the tests will only find really large differences to be statistically significant. Because each aspect was likely to be related to others, and captured only part of the differences that existed between individuals, we had a low "signal to noise" environment in statistical terms. The lack of relationships for most factors with most of the performance measures cannot be taken to be a definite absence of a relationship, but rather to be one which we can neither show nor discount. Similarly, caution must be taken with the relationships we did find. We have therefore reported only trends for each cohort which showed for a number of related factors and measures.

TRENDS FOR EACH COHORT

Tëina

Köhanga-level variables, those obtained from questions asked of the kaiako matua, could not be used as responses were not obtained from all kaiako matua, and some of the greatest "differences" appeared to be between the children at these köhanga, and other children.

Significant differences, or indications of possible such differences, were found for the Körero, and Papa Kupu Hono tasks, the kaiako rating of fluency in Mäori, and the Receptive language, Social skills, and Perseverance measures. They indicate that children who were using Mäori more tended

---

[42] We used the non-parametric Mann-Whitney test where there were 2 groups, or the Kruskal-Wallis test where there were 3 or more groups, as the sample sizes were very small, and the distributions of some of the achievement scores could not be assumed to be normal (in the statistical sense).

[43] We used a chi-square test to test for independence between acievement and the factor of interest.

to have higher scores for tasks which focused on language understanding and use, including listening skills (Receptive language).

Te Körero task

Children were more likely to perform at or above the median if:

- they used Mäori all the time; and

- the kaiako had a good or medium understanding of, and ability to speak, Mäori.

Papa Kupu Hono task

Children were more likely to perform at or above the median if the child spoke fluent Mäori (according to the kaiako).

Kaiako rating of fluency in Mäori

Children rated by their kaiako as having a good ability to speak and understand Mäori tended to:

- attend a köhanga at which over 40 percent of the children were first language speakers;

- use Mäori when frustrated at köhanga reo; and

- speak Mäori "all the time" (at köhanga reo, home, with friends, at the shops).

Curiosity

Children had above-average ratings for curiosity if someone at home did writing activities in Mäori with the child.

Perseverance

Children were more likely to be rated with above-average perseverance if:

- they spoke only Mäori when they woke; and

- the kaiako had only a basic understanding of Mäori.

The last association seems inconsistent with the general pattern which is showing here, and may be a "one-off" finding which is not found again in the next phases of the project.

Receptive language

Children were more likely to be rated with above-average Receptive language skills if:

- the kaiako rated the child to have medium to good understanding of and/or ability to speak Mäori;

- they did not speak English all the time at home; and

- they spoke Mäori when frustrated at the köhanga.

Social skills

Children were more likely to be rated with above-average social skills if:

- the child at least sometimes spoke Mäori when they first woke; and
- the child spoke at least some Mäori at home (generally).

Taiohi

The same basic trend was apparent: children who used Mäori at home, and with friends, as well as in the kura, were more likely to be scoring above the median on our tasks and ratings. The fluency of kura kaiako, and to a lesser extent, their parents, was also related with higher performance. The one exception was the measure of Perseverance, which may be another "one-off" finding.

Most of the factors reported showed a clear "gradient", in that the more of something that was in the child's environment, the more likely it was that the child's achievement was at or above the median. An exception to this was the length of time spent watching TV or videos, and also the length of time spent using a computer out of school hours. For both of these factors, above-average performance on the measures tended to be associated with shorter (typically under 1 hour) and longer (4 hours or more) times spent on these occupations, and below-average performance on the measures tended to be associated with moderate times spent on these activities. This could be the result of the small sample size (perhaps in the sample there happened to be a few very able children who spent longer hours in front of one or other screen with no apparent ill effects).

There are some interesting trends in relation to the Tikanga task, where children's sense of engagement and reciprocal relationships in kura is related to higher scores.

Te Körero task

Children were more likely to perform at or above the median if:

- they used Mäori when speaking on the phone;
- they spoke Mäori some or all of the time with their friends; and
- their Tumuaki was fluent in Mäori.

Tikanga task

Children were more likely to perform at or above the median if:

- they reported that they sometimes or always had relatives visit at home;
- they always enjoyed themselves at kura;
- they reported that they always got all the help they need at kura;
- the kaiako judged that they had a reasonable understanding of Mäori; and
- their kaiako was fluent in Mäori.

Tuhituhi task

Children were more likely to perform at or above the median if:

- Mäori was their first language;

- they used at least some Mäori when they first woke up;

- their Kaiako was fluent in te reo; and

- their Tumuaki had a good ability to understand te reo.

Of those who did use a computer, children who spent either a short time (under an hour) or a long time (over 4 hours) on the computer tended to achieve above-average scores.

Papa Kupu Hono task

Children were more likely to perform at or above the median if:

- they use Mäori at least some of the time when talking about numbers;

- they did not have to help out at home all the time;

- they spent under 1 hour or over 4 hours watching television or videos;

- they wrote in Mäori at home;

- they sometimes or always use Mäori when they first wake up;

- some or all of the parent's/caregiver's conversation with them was in Mäori; and

- their parent had a reasonably good ability to understand Mäori.

Of the children who used a computer, children who used Mäori for word-processing or writing stories, or who spent either a short (under an hour) or long time (over 4 hours) on the computer, tended to achieve above-average scores for the Papa Kupu Hono task.

Kaiako rating of fluency in Mäori

Children rated by the kaiako as having a good ability to speak, understand, and/or write te reo tended to:

- speak Mäori with their friends; and

- have parents who (in the opinion of the kaiako) were fluent in Mäori.

Pängarau task

Children were more likely to perform at or above the median if:

- they wrote in Mäori at home;

- Mäori was their first language;

- they sometimes or always use Mäori when they first wake up; and

- their parent(s) had a reasonably good understanding of Mäori.

Of those who used a computer, the children who used Mäori (rather than English) for word-processing or writing stories tended to achieve above-average scores.

Curiosity

Children with above-average ratings for curiosity tended to:

- read a Mäori book at least once a week;

- watch less (at most 1 hour) or more (over 4 hours) of television a day; and

- be rated by their kaiako to have at least a reasonable understanding of Mäori, and a reasonable writing performance in Mäori.

Perseverance

Children were more likely to be rated with above-average perseverance if:

- they reported that they rarely or never had relatives visit at home;

- English was their first language at home;

- they used English with their friends; and

- their Kaiako rated their ability to write in Mäori as reasonably good.

Receptive language

Children were more likely to be rated with above-average receptive language skills if:

- they did not always got help at home when they needed it; and

- the kaiako rated their ability to understand, speak, and write Mäori as reasonably good.

Social skills

Children were more likely to be rated with above-average social skills if:

- their parent(s) were fluent Mäori speakers;

- Mäori was their first language;

- they used more Mäori with their friends; and

- they used Mäori most of the time with their whänau at home.

Tuäkana

With the tuäkana cohort, we continue to see that usage of Mäori has the widest associations across the different measures used in this project. We found only one relationship between the children's performance levels, and the amount of time spent on television or computer use, suggesting that either those associations found for the taiohi cohort reflect the particular composition of that cohort, or that they become less important for older children. With the Taiohi cohort, the greater use of Mäori was associated with higher scores on the Pängarau task. With the Tuäkana cohort, we find a rather different pattern: an emphasis on the use of English. Again, this may reflect the particular composition of the cohorts.

The number of associations with the Tikanga task has grown from none found for the Tëina cohort, to the largest number for this cohort. These associations underline the importance of the use of te reo Mäori for the understanding of Mäori values and concepts.

Te Körero task

Children were more likely to perform at or above the median if:

- they did not read English at home;
- they used at least some Mäori when playing card games and counting things; and
- they watched less than an hour of TV a day.

Tikanga task

Children were more likely to perform at or above the median if:

- they used at least some Mäori when playing card games;
- they used at least some Mäori at home;
- they spoke Mäori when they first woke;
- much of the parent's conversation with the child was in Mäori;
- the main language at home was Mäori;
- they saw people at home writing in Mäori at least once a week; and
- the kaiako judged that they had a reasonable understanding of and ability to speak Mäori.

Tuhituhi task

Children were more likely to perform at or above the median if:

- their parent thought they were likely to get a tertiary education.

Papa Kupu Hono task

Children were more likely to perform at or above the median if:

- they used at least some Mäori when counting things;
- they listened to Mäori radio;
- they always got treated fairly at home; and
- they sometimes or always kept out of trouble at kura.

Pängarau task

Children were more likely to perform at or above the median if:

- they read English at home;
- they could use the phone, and use at least some English when doing so;
- they always got treated fairly at home;
- the main language at home was English; and

- the Kaiako rated them as able to write confidently in Mäori.

Kaiako rating of fluency in Mäori

Children rated by the kaiako as having a good ability to speak, understand, and/or write Mäori tended to:

- have parents who mainly spoke Mäori when they were at the kura;

- spoke Mäori when frustrated at the kura;

- had a kaiako with a good understanding of Mäori; and, for writing only

- had parents who wanted their child to continue to tertiary education.

Curiosity

Children with above-average ratings for curiosity:

- used at least some Mäori when playing card games;

- always spoke English at the shops;

- attended kura where the tumuaki reported a good level of whänau support for children's learning; and

- were judged by their kaiako to have a reasonable understanding of Mäori.

Perseverance

Children were more likely to be rated with above-average perseverance if:

- they used English when using numbers;

- they reported that they always enjoy themselves at kura; and

- over 40 percent of the students at their kura were first language speakers.

Receptive language

Children were more likely to be rated with above-average receptive language skills if:

- they used at least some Mäori when playing board games, or telling the time;

- they could use the phone, and used at least some Mäori when doing so;

- they could work out halves and quarters and use Mäori when doing so;

- they listened to Mäori radio;

- the kaiako rated their ability to speak and write Mäori as reasonably good; and

- they attended a kura where the tumuaki was a fluent Mäori speaker.

Social skills

Children were more likely to be rated with above-average social skills if:

- they used at least some Mäori when playing board games;

- they perceived that the kaiako at kura always treated them fairly;

- they spoke Mäori all the time at kura;

- over 40 percent of the students at their kura were first language speakers; and

- the tumuaki of their kura reported a good level of whänau support for children's learning.

OVERALL TRENDS

In all 3 cohorts, from age 5 to age 11, usage of Mäori was associated with higher performance on the measures we used. There were also associations between high performance and children's opportunities to hear fluent Mäori in both their kaupapa Mäori education setting, and with whänau and friends. The associations with children's use of Mäori in recreational activities, such as playing cards, or phoning people, also shows the importance for children of having whänau and friends with whom they can speak Mäori while relaxing, and in their social life.

There are more associations between the study children's use of Mäori and higher performance for the Taiohi and Tëina cohorts, suggesting that for the children who are showing high performance levels, knowledge and fluency grow over time, and therefore support greater use. This use in turn develops further knowledge and skills. The associations between use of Mäori and the Ngä Tikanga measure underline the critical interplay between te reo Mäori and te ao Mäori.

The Pängarau measure shows almost reversed patterns of association between the Taiohi and Tuäkana cohorts. This may reflect the particular composition of these cohorts. This can be checked in the final phase of the *Te Rerenga ä te Pïrere* project, when the Taiohi cohort will be the same age as the Tuäkana cohort in this first phase, and the Tëina cohort, the same age as the Taiohi cohort were.

9. NGÄ WHAKAPUAKANGA
REFERENCES

Baker, C. (2001). *Foundations of bilingual education and bilingualism.* Clevedon: Multilingual Matters.

Benton, R. (1981). *The flight of the Amokura: Oceanic languages and formal education in the South Pacific*. Wellington: New Zealand Council for Educational Research.

Benton (1985). *The role of television in the survival of the Mäori language.* A statement to the Waitangi Tribunal in support of the claim of Ngä Kaiwhakapumau i te reo, Waiwhetu marae. October.

Berryman, M., Rau, C., & Glynn, T. (2001). Ngä kete körero: a framework for assigning levels of difficulty to existing and new Mäori reading resources. **set:** *Research information for teachers, 2,* 9–13.

Bishop, R., Berryman, M, Glynn, T., & Richardson, C. (2000). *Diagnostic assessment tools in Mäori-medium education: a stocktake and preliminary evaluation.* Wellington: Ministry of Education.

Bishop, R., Berryman, M., & Richardson, C. (2001). *Te toi huarewa. Effective teaching and learning strategies, and effective teaching materials for improving the reading and writing in te reo Mäori of students aged five to nine in Mäori-medium education.* Wellington: Ministry of Education.

Bishop. R., & Tiakiwai, S. J. (2003*). Improving the educational achievement of Mäori students in mainstream classrooms*. Presentation to Hui Taumata Mätauranga, 8 March.

Bruner, J. (1977). Early social interaction and language acquisition. In H. Schaffer (Ed.), *Studies in mother-infant interaction* (pp. 271–289). New York: Academic Press.

Cenoz, J. (2000). Research on multilingual acquisition. In J. Cenoz & U. Jessner (Eds.), *English in Europe: the acquisition of a third language* (pp. 39–53). Clevedon: Multilingual Matters.

Colmar Brunton (2000). *Children and young people's attitudes to TV programming and local content.* Report for New Zealand on Air.

Cummins, J. (1981). *Bilingualism and minority-language children.* Toronto: Ontario Institute for the Study of Education (OISE) Press.

Cummins, J. (1983). *Heritage language education: a literature review.* Ontario: Ministry of Education.

Cummins, J. (1984). *Bilingualism and special education: issues in assessment and pedagogy.* Clevedon: Multilingual Matters.

Cummins, J. (2000). *Language, power and pedagogy – bilingual children in the crossfire.* Clevedon: Multilingual Matters.

Cummins, J. & Danesi, M. (1999). *Heritage languages: the development and denial of Canada's linguistic resources.* Toronto: Our Schools/Ourselves Education Foundation/Garamond Press.

Dulay, H. & Burt, M. (1977). Remarks on creativity in language acquisition. In M. Burt, H. Dulay, & M. Finocchiaro (Eds.), *Viewpoints on English as a second language* (pp. 95–126). New York: Regents.

Durie, A. (1999). "Emancipatory Mäori education: speaking from the heart. In S. May (Ed.). *Indigenous community-based education* (pp. 67–78). Clevedon: Multilingual Matters .

Dutcher, N. (1985). *The use of first and second languages in education. A review of international experience*. Washington, DC: World Bank.

Fishman, J. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages.* Clevedon: Multilingual Matters.

Foster-Cohen, S. (1990). *The communicative competence of young children.* Harlow: Longman.

Foster-Cohen, S. (1999). *An introduction to child language development.* Harlow: Longman.

Gombert, J. (1992). *Metalinguistic development.* Chicago: University of Chicago Press.

Harding, E., & Riley, P. (1986). *The bilingual family. A handbook for parents.* Cambridge: Cambridge University Press.

Hohepa, M. K. (1999). *Hei tautoko i te reo. Mäori language regeneration and whänau bookreading practices.* Unpublished Ph.D thesis, University of Auckland.

Hohepa, M. K., & Smith, L.T. (1996). *He arotakenga pukapuka. An evaluation of Mäori-medium learning materials produced by Te Pou Taki Körero.* Report for the Ministry of Education. Auckland: Auckland Uniservices Ltd.

Holmes, J. (1984). *Bilingual education.* Victoria University of Wellington English Language Institute Occasional Publication No. 11. Wellington: Victoria University of Wellington.

Holmes, J. (1987). Providing support for the language learner. In W. Hirsch (Ed*.), Living languages: Bilingualism and community languages in New Zealand.* Auckland: Heinemann.

Keegan, P. (1996). *The benefits of immersion education. A review of the New Zealand and overseas literature*. Wellington: New Zealand Council for Educational Research.

Krashen, S. (1981). *Second language acquisition and second language learning.* Oxford: Pergamon Press.

Krashen, S. (1982). *Principles and practice of second language acquisition.* Oxford: Pergamon Press.

Krashen, S. (1985). *The input hypothesis: issues and implications.* London: Longman.

Mataira, K. T. H. (1997). *Te aho matua o ngä kura kaupapa Mäori: An interpretation of the Mäori language document.* Part of a submission to the Associate Minister of Education by Te Rünanga Nui o Ngä Kura Kaupapa Mäori, 29 September.

Mäori Education Commission. (1998). *Report to the Minister of Mäori Affairs, Report 2.* Wellington: Author.

May, S. (1999). Language and education rights for indigenous peoples. In S. May (Ed.), *Indigenous community-based education* (pp. 42–66). Clevedon: Multilingual Matters .

McKinley, S. (2000). *Mäori parents and education. Ko ngä matua Mäori me te mätauranga*. Wellington: New Zealand Council for Educational Research.

McNaughton, S. (2002). *Meeting of minds.* Wellington: Learning Media.

Ministry of Education (1993). *Te Whäriki: Draft guidelines for developmentally appropriate programmes in early childhood services.* Wellington: Ministry of Education.

Ministry of Education. (2003). *Ngä haeata mätauranga. Annual report on Mäori education 2001/2002 and direction for 2003.* Wellington: Ministry of Education, Group Mäori.

Penetito, W. (2002). Research and context for a theory of Mäori schooling. *McGill Journal of Education, 37* (1), 89–109.

Pereira, J. (2001). *Exploring validity and fairness: the assessment of Mäori immersion students in NEMP.* Paper presented at the NZARE conference, 6–9 December, Christchurch.

Rau, C., Whiu, I., Thomson, H., Glynn, T., & Milroy, W. (n.d.). *He ara angitu. A description of success in reading and writing for five-year-old Mäori-medium students.* Report to the Ministry of Education. Ngaruawahia: Kia Ata Mai Educational Trust.

Reedy, T. (1992). *Kura kaupapa Mäori research and development project, final report,* June. Wellington: Ministry of Education.

Siraj-Blatchford, I., & Clarke, P. (2000). *Supporting identity, diversity and language in the early years.* Buckingham: Open University Press.

Skutnabb-Kangas, T. (1983). *Bilingualism or not: The education of minorities.* Clevedon: Multilingual Matters.

Smith, G. (2002). *Kaupapa Mäori theory: transformative praxis and new formations of colonisation.* Paper presented at Cultural Sites, Cultural Theory, Cultural Policy: The Second International Conference on Cultural Policy Research. Wellington: Te Papa National Museum, 23–26 January.

Snow, C. E., Barnes, W., Chandler, J., Goodman, I., & Hemphill, L. (1991). *Unfulfilled expectations: Home and school influences on literacy.* Cambridge, MA: Harvard University Press.

Spolsky, B. (1989). *Conditions for second language learning: Introduction to general theory.* Oxford: Oxford University Press.

Te Puni Kökiri. (2002). *The health of the Mäori language 2001.* Wellington: author.

Te Pütahi-ä-Toi, Massey University (1999). *Te hoe nuku roa source document: baseline history.* Palmerston North: Massey University.

Vygotsky, L. (1962). *Thought and language.* Cambridge, MA: MIT Press.

Whitehead, M. (2002). *Developing language and literacy with young children* (2nd ed.). London: Paul Chapman.

Wylie, C. (2001). *Making sense: Relations between literacy, television and computer use and other uses of children's time*. Paper given at NZARE conference, Christchurch, 6–9 December. Retrieved January 2003 from http://www.nzcer.org.nz/pdfs/10601.pdf

APPENDIX I

Ngä tohutohu mä ngä kairangahau
Researcher Instructions

WHAKATAU TE TAMAITI KI NGA MAHI

Ice breaker – take a few moments to make sure the child is comfortable with you.

Explain to the child that it is important that they try their best, that we are trying to find out what the child knows so that we can compare it with the next few years of results.

> Kia kaha koe ki te mahi i ngä mahi ka taea e koe, heoi anö, kaua e tino maharahara ki te kore koe e whakautu i ngä mea katoa. Ko te mea nui kia kitea ake ai töu tipu, mai tënei tau ki te tau ki ngä tau ränei e heke mai nei. Mä tënei mahi e puta ai ngä ähuatanga kia tino tautokohia ai ngä tauira, ngä kaiako me ngä mätua.

Try not to use negative words, i.e. "Käo", "ehara".

NGÄ TOHUTOHU FOR ASSESSMENT TASK # 1
NGÄ TIKANGA (5 mins)

RESEARCHER INSTRUCTIONS:

Step 1. Introduce the model picture of the marae (Picture #1) for this assessment to create the context before the child selects their kupu. <u>Commence taping now</u>. Ask questions to lead into the task:

- *Haere ai koe ki tëtahi marae?*
- *Ko wai te ingoa ö te marae?*
- *He aha ngä momo mahi ka mahia e koe ina kei te marae koe?*
- *Ko te pöwhiri tëtahi mahi ka mahia i te marae – kei whea ake? (where else does pöwhiri happen??)*

Step 2. Present the two red cards and one yellow card. Spread face down.

- *Anei ëtahi kupu e hängai ana ki te pöwhiri.*
- *Tohua kia rua ngä kari whero, ä, kia kotahi te kari kowhai, Mä täua tahi e pänui ngä kupu?*

Step 3. Lead the reading of each card separately before the child starts then ask the child to explain or give a definition of the word. Start the taping when the child begins to körero.

- *Ko ngä kupu kua tohua e koe e hängai ana ki te pöwhiri me öna ähuatanga.*
- *Ko tënei kupu ko   ? (pänuitia)*
- *Whakamäramatia tënä kupu*

Repeat with the remaining 2 cards.

Step 4. Using the same picture ask the child:

- *Mena, kei te marae koe, he aha ngä mea hei tüpatotanga ma(h)au?*

If the child gives multiple examples ask them to select one to continue.

- *He aha ai?*

Step 5. Using the same picture ask the child:

- *He aha tëtahi mahi e tika ana inä kei te marae koe?*

If the child gives multiple examples ask them to select one to continue.

- *He aha ai?*

Step 5. Use the suggested prompts to encourage the child to at least elaborate on their original description.

Äe, he körero anö täu,
Ka pai ëtahi körero anö,
Tënä, he whakaaro rerekë anö täu.

Student ID #:_____

1. Explanation of words

Record words chosen (Circle word chosen)		Score
Red card word 1 A Waewae tapu B Pöwhiri C Poroporoaki D Hariru E Tangata whenua F Manuhiri G Kaikaranga H Tari o te ora I Koha		**0** **1** **2** **3** **4**
Red card word 2 A Waewae tapu B Pöwhiri C Poroporoaki D Hariru E Tangata whenua F Manuhiri G Kaikaranga H Tari o te ora I Koha		**0** **1** **2** **3** **4**
Yellow word 1 A Tapu B Noa C Tikanga D Manaakitanga E Kawa		**0** **1** **2** **3** **4**

Score	Descriptors
0	No response/answer unknown
1	Attempts explanation but answer incorrect
2	Able to provide simple definition
3	Able to provide simple definition & relate it to the context
4	Able to provide a complex definition and relates it to the context by providing explicit examples

1. Tupatotanga…..   2. He aha ai?

Record "Tupatotanga"		Score
Example 1		0 1 2 3 4
Example 2		
Example 3		

Score	Descriptors
0	No response/answer unknown
1	Attempts explanation but answer incorrect
2	Able to provide simple definition
3	Able to provide simple definition & relate it to the context
4	Able to provide a complex definition and relates it to the context by providing explicit examples

3. Ngä mahi e tika ana…..

Record "nga mahi tika"	Record response	Score
Example 1		0 1 2 3 4
Example 2		
Example 3		

Score	Descriptors
0	No response/answer unknown
1	Attempts explanation but answer incorrect
2	Able to provide simple definition
3	Able to provide simple definition & relate it to the context
4	Able to provide a complex definition and relates it to the context by providing explicit examples

Marker ID_____

NGÄ TOHUTOHU FOR ASSESSMENT TASK # 2
TE KÖRERO (3 mins)

PURPOSE:

To assess children's oral language and ability to synthesise and present information
The picture the child chooses is used as motivation for this activity. There are 2 parts to this task.

STEP 1

Present a series of pictures to the child and ask the child to choose 1 picture.

Child selects a picture from the series, e.g.   Te Wai   –   Te Ngahere
                                                                        Te moana/waka
                                                                        Te moana
                                                marae   –   Tangi
                                                                        Te wharenui
                                                                        Kai hakari

Explain to the child:
- *Me körero mai koe mö tëtahi ähuatanga i roto i tö pikitia.*
- *Mäku e tëpa ö körero.*

Start recording now.

STEP 2

Timing for 2 mins starts when the child begins this part of the task. With reference to the picture the child has chosen ask the child:

Tëina
- *Körero mai he aha ngä mea kei te kite koe?*

Taiohi
- *Körero mai mö tëtahi wä kua kite koe, i roto ränei koe i tënei ähuatanga?*

Tuäkana
- *Mehemea e manaaki ana koe i tëtahi akonga nö tëtahi atu whenua, he aha ö whakatüpato ki a ia mö tënei ähuatanga?*

Stop timer. Stop recording.

NOTE: Record time child taken to complete task.

Kōrero **Student ID #:**

Rere ö te körero	/3	
Märama		/3
Whakahua kupu	/3	
Tangi o te reo		/3

Time taken: m s

Key

	1	2	3
• Te rere o te körero	Kötiti	Ähua pai	Rere pai te körero
• Märama	Pöhëhë	Ähua Märama	Märama pai te körero
• Whakahua kupu	Tapepe	Ähua Märama	Pai te whakahua kupu
• Tangi o te reo	Tiotio	Ähua pai	Huatau

Marker ID_____

Date marked____

167

NGÄ TOHUTOHU FOR ASSESSMENT TASK # 3
PAPA KUPU HONO (5 mins)

STEP 1:
Model the Papa Kupu Hono concept map using the demonstration picture (Picture #1) and a concept map (see example below). Walk the child through the exercise first by introducing the words according to this order so that the child gets an idea of what they have to do.

Using the model picture (Picture #1) say to the child.

- *Ka mahi tahi täua i te mahi pikitia nei, hei tauira mö ngä mahi ka mahia e koe. Ko te tikanga o tënei mahi, kei te rapu/a taua i ëtahi kupu e pä ana ki te pikitia nei.*

Write the first word in the circle. Encourage the child to give some kupu so that they understand the exercise. Emphasise that the sensible linking of words is highly valued.

- *Körero mai mö te pikitia nei, ki öu whakaaro, he aha ngä mahi ka mahia i konei?*

- *He aha ngä mea kei te kite koe?*

Probe the child's response further, trying to elaborate further on their response.

- *Kia hängai öu kupu ki te kupu tuatahi.*

Some prompts you can use:
- *Körero mai,*
- *Hömai he/ëtahi kupu*
- *He hui tëtahi mahi?*

The researcher should model <u>no more than 3 spokes</u> or up until the child understands what they should do.

The child is now ready to build their own Papa Kupu Hono.
Give them a copy of the Papa Kupu Hono model.
Then let them do their own.

STEP 2: Child uses picture from previous exercise, unless they would really prefer to use another picture. Instructions to child:

- *Kia hängai öu whakaaro ki te pikitia i whakamahia ai mö tërä atu mahi.*
- *Anei he pepa, tuhia ngä kupu.*

NB: Be aware that you might need to assist the 5 – 8 year cohort by writing the words for them.

If child is unable to write words they can dictate the words to you and you can record them in the spaces that the child indicates. Ask the child:

- *Ka taea e koe te tuhituhi?*

If they cannot write say:

- *Mäu e hömai ngä kupu, mäku e tuhituhi.*
- *E rima miniti noa iho te roa.*
- *Ko tënei pikitia e hängai ana ki te aha?*

NB: Timing starts from the time the child begins the exercise.

        Record the time if child completes within the time limit.

MARKING SHEET: THIRD ASSESSMENT TASK, PAPA KUPU HONO

Student ID #:_____

	WEIGHTING	DESCRIPTORS	# OF WORDS/ PHRASES	SCORE
HEADING	0 1	No response to category heading. For providing category heading.	**1A.**	**1B.**
WORDS	1	Dictated word/phrase.	**2A.**	**2B.**
	2	Recognisable word/phrase.	**3A.**	**3B.**
	3	Correct self written word/phrase.	**4A.**	**4B.**
		Total number of words produced Score	**5A.**	**5B.**
LINKAGES	+1	If provides a dictated word/phrase that is linked to a previous word/phrase.	**6A.**	**6B.**
	+2	If provides a recognisable word/phrase that is linked to previous word/phrase.	**7A.**	**7B.**
	+3	If provides a correct written word/phrase that is linked to a child generated word/phrase.	**8A.**	**8B.**
Picture ID #:		**Total number of words produced Score**	**9A.**	**9B.**

Additional Comments:

Record time taken:	**10A**	

PURPOSE: To assess children's writing

Researcher:

Supply students with a pencil.

Asks the student to write a story about their picture. Explain that if they wish, they may use the words from their Papa Kupu Hono. Have available their Papa Kupu Hono (Papa-hono-kupu).

- *Mai i öu whakaaro, tuhia he pakiwaitara, na, mena e hiahia ana koe, whakamahia ngä kupu ö te Papa-hono-kupu nei.*

Instruct students to begin their 10 minutes of writing, using pencil. The use of erasers will be discouraged.

- *10 miniti mö te tuhi i töu pakiwaitara. Kaua whakamahia i te ukui.*
- *Tuhia ki runga ia rua rärangi, arä, ngä mea kua tohua.*

After 10 minutes, collect the pencils and give them a pen. Ask students to try to improve their writing in any way they can, this time using the pen. Give the children 5 minutes to improve their writing. Students are free to use resources from around the room to assist them with their writing, however discourage the use of asking the researcher or other children for words.

- *Hömai te pene räkau, anei he pene mäu. Inaianei, me whakatika koe i öu tuhinga.*

- *Tuhia anö tö pakiwaitara engari me whakatika ö tuhingä mä te pene.*
  E rima miniti te roa hei whakatikatanga mäu.
  Ka taea e koe te tuhi mö ngä mea kei roto i te rüma nei hei äwhina i ä koe, engari kaua e pätai mai ki äu, ki tëtahi atu ränei mö ëtahi kupu.

Try to note any resources students may use during their writing.

After 5 minutes gather in the students' stories.

NB: TAKE A 5–10 MINUTE BREAK BEFORE PROCEEDING ONTO NUMERACY TASK!!

Tuhituhi   **Student ID #:**

Surface
Total # of words
Total # of spelling mistakes

Spelling mistake: incorrectly spelt words – do not include spelling mistakes of proper nouns, words in English not counted as a mistake but not counted in the total # of words, an error is an error only once (e.g. "haere" spelt "heare" on multiple occasions throughout the text is only one mistake).

Punctuation
Full stops   /5
Macrons   /5
Capitals   /5

Key

	1 2	3	4	5	
Full stops	None	Little correct	Some correct	Mostly correct	All correct
Macrons	None	Little correct	Some correct	Mostly correct	All correct
Capitals	None	Little correct	Some correct	Mostly correct	All correct

Grammar and syntax

	Incorrect	Correct
Total # of simple sentences		
Total # of complex sentences		

Key
Definition of simple sentence: Verb + Subject + Object
Definition of complex sentence: Verb + Subject + Object + relative clause/additional phrase/VSO
Grammatical mistakes include: incorrect use of a/o, incorrect verbal phrase constructions, incorrect negation construction, incorrect use of ki/i, incorrect active/passive constructions

Deep features

Narrative sequence   /5
Total # of different words

Key
Narrative sequence (mark out of 5)
1 – narrative not/not easily understood
2 – a few unrelated story lines
3 – one story line not well linked to rest of the text
4 – one story line with a few related ideas/concepts
5 – one story line with most/all ideas/concepts related

Resources in the room children may have used during task

Marker ID _____
Date marked ____

PURPOSE:
- Probe pängarau skills and ability to use mathematical operations to problem solve.

Researcher:

Start Tëina children in the 5–8 age level at question 1.
Start Taiohi children in the 8–11 age level at question 2.
Start Tuäkana children in the 11–14 age level at question 3.

If the child produces incorrect answers to the first 2 questions, begin the child at the start of the preceding set of questions (for example, if a taiohi child gets the first 2 wrong from the second set of questions they should start from the first set of questions where tëina start from.

- The child works through the activities until such time as incorrect answers to 2 questions in a row are provided or when the child is unable to proceed.
- When testing again, the entry level for each section should begin with the question they last got correct.
- Fieldworkers should note the strategies children use to get their answers.
- Children whose entry level is at question 2 (for 8–11 age group) or question 3 (11–14 age group) <u>should automatically be credited with the marks for the preceding activities, except if they get the first 2 questions wrong</u>. Children's marks should therefore represent a cumulative score that should increase with each successive testing.

NB: Use the wording provided for each question.

NOTES
- Record the strategies children use when solving problems. Use the following coding system.

  PP   =   Used pencil and paper
  FC   =   Used fingers to count
  MP   =   Mentally performed
  UO   =   Used concrete objects
  C1–1 =   Counting one at a time
  CO   =   Counting on from a group
  Cal   =   Used calculator etc.

Present a set of cut-outs of people. Have available pen and paper.

- *Anei ngä tangata kei tëtahi hui.*
    1. *Wehea mai ko ngä tane me ngä koroua ki tëtahi röpü.*
    2. *Wehea mai ko ngä wähine, ngä pepi, me ngä kuia ki tëtahi röpü.*
    3. *Kei te röpü tuatoru ko ngä tamariki.*

Once groups have been made by child, ask for an oral response to the following questions. Remind the child to count the babies.

- *Kaute i ngä röpü e whai iho nei. Kaua e wareware ki te kaute i ngä pepi.*
    4. *Tokohia ki tënei röpü?*
    5. *Tokohia ki tënei röpü?*
    6. *Tokohia ki tënei röpü?*

Lay down 5 cards. One of the cards has to correspond to the number of people in group 1 – the others are distractors. The child can either choose a card or write the number down.

   7. *He aha te nama e whakaatu mai ana tokohia ngä tangata ki tënei röpü?*
- *Tuhia taua nama, tikina ränei te kari ko te nama kua hiahiatia ö runga.*

Rearrange the cards and insert new ones. Again, one of the cards has to correspond to the number of people in the second group. The child can either choose a card or write the number down.

   8. *He aha te nama e whakaatu mai ana tokohia ngä tangata ki tënei röpü?*
- *Tuhia taua nama, tikina ränei te kari ko te nama kua hiahiatia o runga.*

Rearrange the cards and insert new ones. Again, one of the cards has to correspond to the number of people in the third group. The child can either choose a card or write the number down.

   9. *He aha te nama e whakaatu mai ana tokohia ngä tängata ki tënei röpü?*
- *Tuhia taua nama, tikina ränei te kari ko te nama kua hiahiatia ö runga.*

Lay down 5 cards. One of the cards has to correspond to the number of people in the male group and the children's group – the others are distractors. The child can either choose a card or write the number down. Point to the male and children's group.

   10. *Tokohia ngä tängata ki ngä röpü e rua nei?*

Still using figures in the groups from question 10, ask the children the following:

- *Whakaatuhia mai ngä taputapu nei, me pehea ka riro i a koe taua nama.*

    11. *Tuhia he pakitau/kōrero nama ki te whakaatu mai i te honotanga o ngä röpü e rua nei.*

    12. *Tokohia ngä tängata katoa ki taua hui?*

    13. *Tuhia he pakitau/kōrero nama kia whakaatu mai i tënä.*

MARKING SHEET – PĀNGARAU TASK (QUESTION 1)

Child ID #:_____

QU	Scoring	A. Record Answer provided	B. Mark	C. Method (circle)
1.	1 mark for sorting out 1st group out correctly			PP MP C1–1 Cal FC UO CO
2.	1 mark for sorting out 2nd group out correctly			PP MP C1–1 Cal FC UO CO
3.	1 mark for sorting out 3rd group out correctly			PP MP C1–1 Cal FC UO CO
4.				PP MP C1–1 Cal FC UO CO
5.				PP MP C1–1 Cal FC UO CO
6.				PP MP C1–1 Cal FC UO CO
7.				PP MP C1–1 Cal FC UO CO
8.				PP MP C1–1 Cal FC UO CO
9.				PP MP C1–1 Cal FC UO CO
10.				PP MP C1–1 Cal FC UO CO
11.	1 for correct use of symbols, even if answer is incorrect			PP MP C1–1 Cal FC UO CO
12.				PP MP C1–1 Cal FC UO CO
13.	1 for correct use of symbols, even if answer is incorrect			PP MP C1–1 Cal FC UO CO
		TOTAL (OUT OF 14)		

PP =	**Used pencil and paper**	**FC=**	**Used fingers to count**
MP =	**Mentally performed**	**UO =**	**Used concrete objects**
C1–1 =	**Counting one at a time**	**CO=**	**Counting on from a group**
Cal =	**Used calculator e tc**		

Researcher:

The child is asked to provide verbal responses to your questions. You will need pens/paper and some ice block sticks. Provide them to the children according to the instructions. Give the child a written copy of the list of questions.

Give the children pen/paper. Have ice block sticks on hand in case child wishes to use these to help him work out the answer.

Ask the child,

- *Kei waho koe i te wharenui. Ka kite koe i ngä hü kua rärangihia ki te taha o te kuaha. 18 ngä hü.*

  1. *Tokohia pea ngä tängata i roto i te wharenui?*
  2. *Tuhia he pakitau/körero nama mö tënä.*

Give the children pen/paper if desired.

  3. *Tokohia ngä tängata pea mena 42 ngä hü kei waho?*

  4. *E hia ngä hü ina 52 ngä tängata i roto?*

Give the children pen/paper if desired. Ask the child,

- *Kei te whakareri koe i ngä moenga i roto i te wharenui. Kua whakarärangihia ngä moenga ki ngä röpü, tëtahi ki runga i tëtahi. E 8 ngä moenga ki ia rärangi. E 4 ngä röpü. Kei tëtahi rärangi, e 6 noa iho ngä moenga.*

  5. *E hia ngä moenga katoa?*

  6. *Tuhia he pakitau kia whakaatu mai me pehea ka riro i a koe taua nama.*

Give the children pen/paper if desired. Ask the child,

- *60 ngä hiti. Wehea ki roto i ngä putu kia reri mö te kawe ki te whare horoi käkahu. 8 ngä hiti mö ia peke mö te whare horoi käkahu.*

  7. *E hia ngä pëke ka kï i a koe?*

- *Tëtahi o ngä pëke käore i te kï.*

  8. *E hia ngä hiti mö tërä?*

  9. *Tuhia he pakitau/körero nama hei whakaatu mai.*

Give the children pen/paper if desired. Ask the child,

- *Ko ngä uhi përa/urunga kua purua ki roto ki ngä putunga e 8. E 12 ngä uhi përa/urunga kei roto i ia putunga. Kotahi te putunga e 3 ngä uhi përa/urunga kei roto.*

  10. *E hia katoa ngä uhi përa/urunga?*

  11. *Tuhia he pakitau/körero nama hei whakaatu mai.*

MARKING SHEET – PĀNGARAU TASK (QUESTION 2)

Child ID #:_____

QU	Scoring	A. Record answer	B. Mark	C. Method (circle one)
1.				PP MP C1–1 Cal FC UO CO
2.	1 for correct use of symbols, even if answer is incorrect			
3.				PP MP C1–1 Cal FC UO CO
4.				PP MP C1–1 Cal FC UO CO
5.				PP MP C1–1 Cal FC UO CO
6.	1 for correct use of symbols, even if answer is incorrect			
7.				PP MP C1–1 Cal FC UO CO
8.				PP MP C1–1 Cal FC UO CO
9.	1 for appropriate use of symbols or words even if answer is incorrect			
10.				PP MP C1–1 Cal FC UO CO
11.	1 for appropriate use of symbols or words even if answer is incorrect			

Answers recorded in the Pukapuka Whakaki

TOTAL (OUT OF 11)

PP =	**Used pencil and paper**	**FC =**	**Used fingers to count**
MP =	**Mentally performed**	**UO =**	**Used concrete objects**
C1–1 =	**Counting one at a time**	**CO =**	**Counting on from a group**
Cal =	**Used calculator etc**		

179

Researcher:

Child is to be given marking schedule from a kapa haka competition (example below). Using the table below ask the child a series of questions. Give the child a written copy of the list of questions, pen and a calculator.

Give the child a pen and, a paper if desired. Ask the child,

- *Ka taea e koe te whakamahi he pepa, he tātaitai rānei, mena e hiahia ana koe.*
- *Anei ngā pepa kaute a ngā kaiwhakawā mö tētahi röpü i whakataetae kapa haka i tu i te marae.*

- *Ina pätai atu au he pätai, tuhia tö whakautu ki runga i te pepa.*

Researcher is to tell the child where each answer goes.

	I te	Kaiwhakawä 1	Kaiwhakawä 2	Kaiwhakawä 3	Total score for each item	Tau ine waenga
Whakaeke	50	40	40.2	35	[Qu 5]	[Qu 6]
Waiata koroua	100	80	85.5	92	[Qu 5]	[Qu 6]
Waiata–ä–ringa	100	93	96.2	[Qu 3]	[Qu 5]	[Qu 6]
Haka	100	96.5	83.4	92	[Qu 5]	[Qu 6]
Whakaputa	50	43	48.5	46	[Qu 5]	[Qu 6]
Kaute töpü	400	[Qu 1]	[Qu 2]	355		

1. *Tätauhia te kaute töpü mö te kaiwhakawä 1.*

2. *Tätauhia te kaute töpü mö te kaiwhakawä 2.*

- *He uaua te pänui i te pepa kaute a te kaiwhakawä tuatoru.*

3. *He aha te kaute mö te waiata–ä–ringa?*

4. *Tuhia he pakitau/körero nama hei whakaatu mai ki au i tö whakautu.*

NB: Provide the child with the correct answer for question 3 of score sheet for judge 3 if incorrect answer provided for question:

5. *Tätauhia ngä kaute töpü mö ia take.*

6. *Mä tö tätaitai kimi, me te tuhia te tau ine waenga mö ia mea.*

7. *Whakaatu mai, pehea i puta tö kaute töpü.*

MARKING SHEET – PĀNGARAU TASK (QUESTION 3)

Child ID #: _____

QU	Scoring	1. Record Answer	2. Mark	3. Method (circle one)
1.				PP MP C1–1 Cal FC UO CO
2.				PP MP C1–1 Cal FC UO CO
3.				PP MP C1–1 Cal FC UO CO
4.	1 for correct use of symbols, even if answer is incorrect			
5A.				PP MP C1–1 Cal FC UO CO
5B.				PP MP C1–1 Cal FC UO CO
5C.				PP MP C1–1 Cal FC UO CO
5D.				PP MP C1–1 Cal FC UO CO
5E.				PP MP C1–1 Cal FC UO CO
6A.				PP MP C1–1 Cal FC UO CO
6B.				PP MP C1–1 Cal FC UO CO
6C.				PP MP C1–1 Cal FC UO CO
6D.				PP MP C1–1 Cal FC UO CO
6E.				PP MP C1–1 Cal FC UO CO
7.	1 mark for correct explanation even if answer is incorrect			
	TOTAL OUT OF 15			

Answers recorded in the Pukapuka Whakaki

PP =	Used pencil and paper	FC =	Used fingers to count
MP =	Mentally performed	UO =	Used concrete objects
C1–1 =	Counting one at a time	CO =	Counting on from a group
Cal =	Used calculator etc		

Researcher:

Read out the next series of questions. Provide the child with a pen, paper, calculator and a pricing table. Researcher should indicate which parts of the table to complete at each question. Also provide the children with a written set of the questions. Provide the children with the resource materials.

- *Mena e hiahia ana koe, whakamahia he tätaitai, he pene me he pepa, hei äwhina i a koe.*

Ask the child the following:

- *Kei te äwhina koe ki te peita köwhaiwhai mö te wharenui.*

- *Kotahi te papa köwhaiwhai, anei ngä mea ka hiahiatia. 400 ritamanomano o te peita mä. 1 rita o te peita whero. 1 ¾ rita o te peita pango.*

   1. *Kia hia te nui o te peita mö ngä papa köwhaiwhai e rua.*

   2. *Whakaatu mai pëhea i puta tö kaute töpü.*

- *Me tätaitai mëana e hiahia ana koe.*

   3. *E hia te nui o ia peita hei peita kia 12 ngä papa?*

- *Ki te peita 10 o ngä papa:*
  4 rita o te mä.
  10 rita o te peita whero.
  20 rita o te peita pango.

- *Mä ngä utu e whai nei koe e äwhina. Me tätaitai mëana kei te hiahia koe.*

		Kore Täke Hokohoko (GST excluded)	
		Toa 1	Toa 2
Peita mä	1 x 4 rita	$ 95. 72	$ 102.50
Peita pango	1 x 10 rita	$ 260. 50	$ 255.30
Peita whero	1 x 10 rita	$ 272. 50	$ 255.30
	Utu	[Qu 4]	[Qu 4]
	Tapirihia Täke Hokohoko	[Qu 5]	[Qu 5]
	Utu töpü	[Qu 7]	[Qu 7]
		10% whakahekenga utu	0% whakahekenga utu
Utu töpü		[Qu 8]	

   4. *He aha te utu töpü mö ngä peita katoa? Wehea te Täke Hokohoko (GST) mai ia toa.*

- *Mahara ake, kia 2 ngä 10 rita tïni peita pango.*

182

5. *Tätautia te Täke Hokohoko (GST) mö ia Toa.*

6. *Whakamärama mai i tö whakautu.*

7. *Tätautia te kaute töpü o ia Toa.*

- *He hekenga utu kei te whakahaeretia e te toa 1. Ä tërä wiki 10% te heke iho o te utu mö ngä peita katoa.*

8. *E hia te utu ka tau mai.*

9. *Whakaatu mai pëhea i puta tö whakautu.*

10. *He pai ake ngä utu o tëhea Toa?*

MARKING SHEET – PĀNGARAU TASK (QUESTION 4)

Child ID #:_____

QU	Scoring	1. Record Answer	2. Mark	3. Method (circle one)
1.				PP MP C1–1 Cal FC UO CO
2.	1 mark for a correct explanation even if the answer is incorrect			
3A.				PP MP C1–1 Cal FC UO CO
3B.				PP MP C1–1 Cal FC UO CO
3C.				PP MP C1–1 Cal FC UO CO
4A.	1 mark for correct process but incorrect answer 2 marks for correct answer			PP MP C1–1 Cal FC UO CO
4B.	1 mark for correct process but incorrect answer 2 marks for correct answer			PP MP C1–1 Cal FC UO CO
5A.				PP MP C1–1 Cal FC UO CO
5B.				PP MP C1–1 Cal FC UO CO
6A.	1 mark for correct process but incorrect answer			
6B.	1 mark for correct process but incorrect answer			
7A.				PP MP C1–1 Cal FC UO CO
7B.				PP MP C1–1 Cal FC UO CO
8.				PP MP C1–1 Cal FC UO CO
9.	1 mark for correct explanation even if answer incorrect			
10.	1 mark for correct answer			PP MP C1–1 Cal FC UO CO
	TOTAL (OUT OF 16)			

Answers recorded in the Pukapuka Whakaki

PP =	**Used pencil and paper**	**FC =**	**Used fingers to count**
MP =	**Mentally performed**	**UO =**	**Used concrete objects**
C1–1 =	**Counting one at a time**	**CO =**	**Counting on from a group**
Cal =	**Used calculator etc**		

Have the task materials laid out so that the children can clearly see what they have available as you describe the task. Present the children with a large sheet of brown paper, felts, pens, pencils, small squares of paper for annotations (caption writing), a glue stick and a stapler.

Prompt re the children of Täne and Papatüänuku – Creation Story:

- *Ko wai e möhio ana ki te pakiwaitara mö Rangi me Papatüänuku, me ä räua tamariki?*
- *He mahi ä röpü tënei. E rua ngä taonga hei hanga / hei mahi tahitanga mä koutou.*
  Tuatahi he taonga täkaro.
  Tuarua he mea whaipainga mö roto i te whare.

- *Tuatahi, me whiriwhiri ko tëhea ka mahia e koutou.*

- *Tuarua, he pepa paku kei konä hei tuhi i ëtahi whakamärama ki runga, hei whakapaipai ränei i te taonga nei.*

- *Täpiritia ngä takoha ä Papatuanuku me te kaha o Täwhirimatea hei äwhina.*

- *Na! me oti i ä koutou i roto i te häwhe häora, arä, toru tekau mïniti.*

Give them 2 minute warning to complete their task.

NB: This task is to be simultaneously marked by all researchers (marks will be cross–checked).