

National **SCIENCE** Challenges

A BETTER START

E Tipu e Rea

This report was prepared by:

Terina Raureti Justine Camp

Tables:

Dr Rose Richards Dr Jesse Kokaua Albany Lucas

Design & Layout: Michael Lameta

> Photos: Whai Maia



This report has been prepared for Whai Maia a subsidiary of Ngāti Whātua ki Orākei based in Auckland, New Zealand. As the team from A Better Start, National Science Challenge, we have had the privilege of gaining access to, analysing and interpreting data highlighting the aspirations of whanau for their tamariki/mokopuna for the year 2018/2019. The data provided were developed from questionnaires undertaken by parents and students who identify as Ngāti Whātua ki Orākei and who filled out education grant applications available to all registered members engaged in education from early childhood centers through to tertiary level. Whānau provided information on their preferred learning centres, the types of schools their kids were enrolled in, qualification standards, the quality of the education at each level and any barriers to learning. In addition, whānau and the rangatahi were asked to identify their skills and strengths in education as well as their aspirations for Te Reo Māori (Māori language). They were asked about marae participation, future aspirations for learning and careers, and finally they provided ideas that will help improve their education pathways and move to uplift their educational aspirations.

For this research narrative, we will provide a whakapapa (genealogy) of a Māori worldview and explain why this is important for learning with the support of Kaupapa Māori Theory and Methodology. Through this literature we will then discuss the results of the data across six key themes, including experience, activities, accessibility, resources, cost and services.

We have presented these themes within the frames of Te Rapunga: The Seeking. Here we aim to outline the level of education that whānau are what types of services and support whānau want and need to further improve their education journey. The next table is Te Whāinga: The Pursuit. These tables outlined the activities whānau wanted to participate in and the skills, knowledge and experiences that whānau highlighted. Te Kukune: The Stretching, this section explored the access and barriers in relation to their reo journeys. This included the suggestions that whānau shared to improve their reo aspirations. Next is Te Hirihiri: The Energy. This is where we looked

at the cost for whānau in education and looking at suggestions on how whānau can be supported with the rising cost of education. Te Wānanga: The Knowledge and Wisdom outlined the level of Te Reo that whānau felt their tamariki/mokopuna were at in both spoken and written formats. The final kaupapa was Te Hauora: The Breath of Life. This section looked at whānau experiences including the type of learning institution they were enrolled in and the quality of those institutions.

The purpose of this report is to reflect the success of education for Ngāti Whātua, and as a result look at:

- 1. Programmes/Initiatives that chosen to invest in
- 2. Relationships/Engagement with education institutions to advocate for or about kauapapa that matters to whānau
- 3. Policy/Systemic change are there changes in the system needed

Further to understand the needs of the community so that future generations are supported to continue to strive for excellence.

In order to understand the needs of the community, it is important to first reflect on their worldview and how education is framed in a way that is unique to Te Ao Māori. Marsden (2003) stated;

A truly educated person is not one who knows a bit about everything, or everything about something, but one who is truly in touch with his centre. He will be in no doubt about his convictions, about his view on the meaning and purpose of life, and his own life will show a sureness of touch that stems from inner clarity. This is true wisdom (p. 59).

The "centre" that Marsden mentions can be interpreted as the worldview that guides the way in which we behave. This idea of the centre aligns with Ngāti Whātua ki Orākei aspiriations to grow and strengthen Ngāti Whatuatanga and its importance in underpinning whānau success in education and beyond.

A Māori worldview

A Māori worldview influences our beliefs and values as Māori (Reilly, 2008). Marsden (2003) describes a worldview as:

Worldview is the central systemisation of conceptions of reality to which members of its culture assent and from which stems their value system. The worldview lies at the very heart of the culture, touching, interacting with and strongly influencing every aspect of the culture (p. 56).

Marsden (2003) talks about "conceptions of reality." These conceptions of reality can be interpreted as creation narratives (Jackson, Mita & Hakopa, 2017). Creation narratives are pūrākau (old stories) that tell the story of how the world came to be. They enable us to understand the origins of beliefs as Māori, understand who we are, where we come from and why we behave a certain way (Reilly, 2018; Ka'ai & Higgins, 2004). Within the Ngāti Whātua data, a Māori worldview, more specifically a Ngāti Whātua worldview and their creation narratives, was suggested as the foundation for resources and

activities that students can use as a learning tool. This is backed by research on Māori success in education, because not only will it help students learn about their identity, but also influence every aspect of Māori culture strengthening their ability to develop through education (Marsden, 2003).

Lee (2005) describes pūrākau as "stories that represent the experiences, knowledge and teachings that form the pū (base) from which the rākau (tree) need in order to grow, or even survive" (p. 7-8). The term pūrākau breaks up to have the word pū, to mean base or roots, and rākau to represent a tree, describing how pūrākau are metaphorically interpreted as a tree to demonstrate the holistic thinking of Māori. This means that although stories have a base there is still space for many branches to grow or unique versions and interpretations of the story (Lee, 2005; Durie, 1985). This explanation of pūrākau explains the diversity and different forms of creation narratives that each rohe (region) have.

The most commonly known creation narrative describes the separation of Ranginui (Sky Father) and Papatūānuku (Earth Mother) to create Te Ao Mārama, the world we live in today (described as Te Ao Wairua in Table 1) (Reilly, 2018). However, for this research narrative we will explain the story of Io (supreme being), who initiated the creative process (Reilly, 2018). This pūrākau was chosen as it explains a journey of learning similar to the processes that students go through to reach a higher realm of education. It also expresses the "centre" in which Māori students need to understand in order to reach true clarity and understand the meaning and purpose of life (Marsden, 2003).

Io is known by a number of descriptions or extensions to his base name. For example Io-matua-kore (Io-the-parentless), Io-matua (Io-the-first-parent), Io-waiora (Io-the-fountainhead-of-life), Io-nui (Io-the-infinite-one, Io-almighty) and many others that depict his priority and importance to the other spirit beings (Reilly, 2018). According to Marsden (2003), Io eternally existed in Te Korekore (the realm of potential being) where he initiated creation through a process of genealogical recitation described in Table 1 below (Reilly, 2018).

```
Io-Matua-kore (Io-parentless)
Io-Taketake (Io-foundation)
Io-Wānanga (Io-knowledge)
Te Korekore (The Absolute Nothingness)
Te Korekore tē rawea (The Absolute Nothingness that could not be wrapped up)
Te Korekore tē whiwhia (The Absolute Nothingness that could not be bound)
Te Korekore tē tāmaua (The Absolute Nothingness that could not be fastened)
Te Kōwhao (The Abyss, and further stages of abyss)
Te Anu (The cold, and further stages of cold)
Te Pō (The night and further stages of night)
Te Mauri (Life Principle)
Te Pū (The Shoot)
Te Weu (The Taproot)
Te More (The Hair-roots)
Te Rito (The Shoots)
Te Aka (The Vine, Rhizome)
Te Rapunga (The Seeking)
Te Whāinga (The Pursuit)
Te Kukune (The Stretching)
Te Pupuke (The Enlarging)
Te Hihiri (The Energy)
Te Mahara (The Subconscious, Primordial Memory)
Te Hinengaro (The Deep Mind)
Te Whakaaro (The Consciousness)
Te Wananga (The Knowledge and Wisdom)
Te Whē (The Seed-word)
Te Hauora (Breath of Life)
Te Atamai (Shape)
Te Āhua (Form)
Te Wā (Time)
Te Ātea (Space)
Rangi-nui = Papa-tū-ā-nuku (Te Ao Wairua)
```

Table 1. Creation genealogy. Māori Marsden, 'God, Man and Universe', Michael Shirres, Te Tangata and Royal (ed.), The Woven Universe. Adapted from Reilly, 2018, p. 15.

Tāne

The combination of these initial realms leading to Te Po created 'the seed-bed of Creation' or 'the essential foundations of the universe' (Reilly, 2018). Io created the state of existence by first placing a seed in Te Kore and Te Kowhao that steadily grew as a plant driven by the mauri (lifeessence) of the first seed, going through a series of organic stages down to Te Aka (The Vine). The seed in this story can be interpreted to travel through a process of whenua ki te whenua. From the moment you are born to the moment you return to Papa-tū-ā-nuku, the journey is one of lifelong learning. The mauri of Ngāti Whātua guides the seed to ensure that they are learning in a way that makes sense to their iwi. Io initiated growth in this seed that developed through all the stages mentioned in Table 1 creating the emergence of sky and earth, and finally Te Ao Wairua (The Spirit World) (Reilly, 2018). This is similar to the emergence of rangatahi developing from kohanga reo through to tertiary education. Important about this pūrākau is the process in which the seed grew and developed guided by Io to eventually create Te Ao Mārama (the world of light). As described previously, each of these phases of creation that the seed journeyed through is used within this report to represent the different themes that emerged through this research. These include Te Rapunga (services), Te Whāinga (activities), Te Kukune (accessibility), Te Hihiri (cost), Te Wānanga (resources) and Te Hauora (experience). These are all discussed further in the following sections alongside the results that are displayed in the tables throughout this report.

In order for this report to be grounded in a Māori worldview, the results have been analysed under a Kaupapa Māori Theory and Methodology. Kaupapa Māori Theory has been described as "A Māori way of thinking and doing things which feels culturally appropriate and which takes seriously our Māori aspirations" (Smith, 2015, p. 19). It is grounded in cultural frameworks, shaped by the knowledge and experience of Māori with the aim to make a positive difference (Moewaka-Barnes, 2015; Smith, 1999). Kaupapa Māori Theory and methodology alongside its principles will be explained further throughout the themes of this report to support how the data can be used to strengthen the needs and aspirations of Ngāti Whātua.

Te Rapunga: The Seeking

Te Rapunga refers to the phase of creation that describes the seeking of knowledge. This section is about the dualism of using how they are seeking the matauranga (knowledge) of Ngāti Whātuatanga can strengthen their pursuit of all other forms of knowledge. Table 2 below describes some of the successes that students have achieved through their participation at all the levels of mainstream and kaupapa Māori education and their chosen fields of study. Here we aimed to highlight if tamariki/ mokopuna were offered access to Te Reo Māori within their learning institutions.

Table 2 addresses the highest level of education identified within this whanau cohort at Secondary and Tertiary level. The majority of the student's highest qualification was gained is Level 3 (37%) at Secondary level followed by a certificate (23%), then a University degree (12%) at Tertiary level. Important to acknowledge is that the majority of students are obtaining a qualification above high school education, meaning that most students are furthering their education beyond secondary school. 88% of students stated that they knew what they wanted to do after they completed their qualification with only 12% being unsure. A lot of students chose Other (17%) as their field of study. However, Te Reo me ngā Tikanga (15%) is a highly chosen field of study alongside Business and Administration (12%), Education (10%) and Wellbeing and Social Development

(10%). Finally, this table acknowledges that at least 57% of children are learning Te Reo Māori. Although 20% of children are not, it is possible that some of the 23% of people who left this questionnaire blank are learning Te Reo or not.

This high level of children learning Te Reo Māori could be a reason as to why there is also a high number in students choosing Te Reo Māori me ngā tikanga as a field of study.

Through this table it is clear that there are a high number of students proceeding further from high school education to study at tertiary level whilst having an idea of the career or jobs that they are looking for once they have finished studying. This is reflective of the services that Ngāti Whātua provide that enable rangatahi to further their education aspiration with 10% stating that they have completed at least a Graduate certificate or higher, alongside the opportunity to learn Te Reo Māori at a young age.

Within the data whānau mentioned ideas about services that they would appreciate that would enable their rangatahi to succeed and develop further in these qualifications mentioned in Table 2. Suggestions included providing reading and numeracy support as early as possible, having a mentoring initiative to focus on rangatahi and their individual and whānau needs. Support for whānau with children who have special needs, wānanga for whānau who are living away from the rohe such as Perth. Tutoring programmes for subjects that rangatahi are finding difficult as well as Wānanga Reo for whānau to embrace and learn Te Reo Māori specifically within the Ngāti Whātua region.

All of the ideas that whanau suggested to uplift the aspirations of rangatahi in education are all guided by a Kaupapa Māori principle of whānau (Smith, 1999). Whānau is integral to Māori identity and culture, sitting at the heart of Kaupapa Māori (Pihama & Cram, 2002). The principle of whānau highlights the "collective responsibility" that is necessary for Māori survival, and for this research, Māori survival in education. A lot of the services that have been suggested display the need for more support for whānau and rangatahi who need guidance or assistance in their field of study. For example, a mentoring initiative and tutorials highlights the need to practice whanaungatanga within education incorporating kaiako, rangatahi and tuakana to help develop all whānau members to succeed (Pihama & Cram, 2002). The element of whanau is crucial to Māori wellbeing, meaning that it is important that rangatahi chose to go to whānau for support when it is needed (Durie, 1985). This frames why it is important that Ngāti Whātua continue to provide services that are voiced from the community and understand the needs of the community to continue to achieve highly in education.

	Early Ch	Prim	Sec	UG	Cert	PG	All		
Highest Qualification to date?									
NCEA L1	1			2	9	0	5		
NCEA L2	1			3	10	0	6		
NCEA L3				58	26	9	37		
Certificate				14	37	9	23		
Diploma	İ			14	7	9	10		
Degree				8	7	76	12		
Graduate Certificate	1			0	3	18	3		
Post graduate				2	0	78	6		
Other: Victorian Certificate of Education				2	0	0	1		
Do you know what you want to	do after	you co	mplete y	our qu	alificati	on?			
Yes				88					
No	1			12					
Fi	eld of St	udy							
Agriculture				0	3	0	1		
Architecture and Building				0	3	0	1		
Business and Administration				15	8	37	12		
Creative Arts				6	7	6	6		
Education				13	6	33	10		
Engineering and Related Technologies				0	3	0	1		
Environmental and Related Studies				4	2	6	3		
Food				0	1	0	0		
Hospitality				0	5	0	2		
Information Technology				2	4	0	2		
Natural and Physical Sciences				6	3	0	4		
Other				18	15	38	17		
Personal Services Health				4	9	0	6		
Politics and Culture				6	3	11	5		
Society				6	2	17	5		
Te Reo Māori me ngā Tikanga Māori				11	17	32	15		
Wellbeing and Social Development				8	11	22	10		
Total				100	100	200	100		
Is your child	Is your child learning Te Reo Māori								
No	20								
Yes	57								
Blank	23								

Table 2. Te Rapunga – The Seeking (Services table)

The aim of Te Rapunga was to understand the goals that students are seeking and to find ways in which Ngāti Whātua can support them. The key findings were that majority of students are achieving at least a Level 3 Secondary school education, enabling them to proceed to tertiary education. The majority of students are undertaking a field of study that is not mentioned in the questionnaire, this could be addressed in further questionnaires so that students can voice what their studies are and services can be provided to support their particular kaupapa. Evidently, Te Reo me ngā Tikanga is a highly undertaken field of study and this could be due to support and understanding of their own culture and language.

Importantly the voices of Ngāti Whātua have requested more tutoring and mentoring initiatives to help inspire and motivate students, with one participants stating;

"From my experience, an idea I believe our whānau pursuing higher levels of education would benefit from are study skills workshops. These would involve teaching different ways to study, how to study and tips when completing assignments, tests and exams. Another idea is setting up mentor positions to assist those transitioning into higher levels of education such as school leavers to university. This would be beneficial as when I completed my foundation course last year at Auckland University, it was difficult to move to another city, make new friends, familiarise myself to a new environment, be away from home and complete my studies. If these attributes are all taken care of and the student feels supported, this will contribute to the students success. Another idea is Beginner Te Reo Māori classes involving learning the reo and tikanga of our hapū."

Te Whāinga: The Pursuit

Te Whāinga is the pursuit and, in the context of this research, represents the activities and the way that Ngāti Whātua go about providing enjoyable ways for rangatahi to want to proceed in education. The suggestions and data pertaining to Te Whāinga (activities) are prominently to enforce that all whānau remain on the same kaupapa of uplifting education aspirations. Kaupapa is a principle within Kaupapa Māori Theory that ensures Māori education is held together by a collective vision (Smith, 1999; Pihama & Cram, 2002). For this research kaupapa is what underpins this research to ensure that all the outcomes of activities and initiatives are all created for the purpose of Ngāti Whātua achieving their aspirations in education.

Table 3 describes the strengths and skills of Ngāti Whātua whānau identified either for or by their tamariki. To distinguish these findings, they were put into different sections of the table (Table 3). This was a favorable table to work with as it provided positive characteristics of the community members. This table also describes the community participation level with the local marae to understand why whānau do or do not engage with their marae regularly.

Tale 3 shows that the majority of a child's strengths and skills has been recognised as those other than was listed as part of the survey (50% for early childhood and 42% for primary school).

This could be due to parents being able to select a number of options and using Other to reinforce that their child has more strengths and skills than the options provided. For Early childhood, following Other was Love of Learning (49%). This number is significant as it tends to decrease as tamariki progress through to secondary school. The fact that tamariki love learning, and this love is diminished as they age, speaks to a need for mainsteam education to address systemic racism. Love of Learning was followed by Creative (48%) and Kind and Good to others (47%).

For Primary School children, the second most common strength and skills were Kind and Good to others (41%), Respectful (37%) and Sports (29%). Similar to this, for Secondary School students 46% of results were left blank, however 45% suggested Kind and Good to others, followed by Respectful (37%) and Sports (37%).

These results show a significant shift between between Early Childhood rangatahi and Primary school rangatahi with a change in their skills and strengths. Yet, between Primary and Secondary school rangatahi, they are showing the same skills and strengths with sports coming through as a highlighted theme and love of learning no longer being present.

Marae participation shows that majority of whānau attend the marae for Tangi (36%), followed by Whānau hui (19%) and Marae hui (17%). There are still 11% of whānau, however, who stated that they have no participation in the marae.

Within the data, whānau suggested activities that would be beneficial for rangatahi that contrast with their skills and strengths as well as providing ideas for ways that they can engage with the marae more regularly. Ideas were creating more sporting opportunities, Māori music classes, Homework club in age groups, Mentors within Ngāti Whātua from different careers coming to korero to the students, online learning opportunities and connecting whānau who are within the same institution.

	Early Ch	Prim	Sec	Cert	UG	PG	All			
What do you see as your child's greatest skills and strengths?										
Communicates well	38	25								
Creative	48	26								
Humour	42	27								
Go getter	40	19								
Love of learning	49	27								
Sports	21	29								
Teamwork	25	22								
Te Ao Māori	27	14								
Kind and Good to others	47	41								
Respectful	36	37								
Other	50	42								
Total	100	100								
What do you see as yo	ur great	est strer	ngths an	d skills	?	•				
Communicates well			26				48			
Creative	1		23				42			
Humour			32				59			
Go getter			20				36			
Love of learning	1		24				43			
Sports	İ		37				69			
Teamwork			32				59			
Te Ao Māori	İ		18				33			
Kind and Good to others	1		45				83			
Respectful			43				79			
Blank			46				84			
Total			225				122			
I te tau kua hipa, I tae atu koe ki te marae? Tēnā whakamārama mai. Please indicate your participation at the marae in the past year.										
Holiday programme	0	0	0	0	0	0	0			
Kore - None	0	14	9	8	8	16	11			
Kura pō	0	3	5	6	3	11	4			
Marae hui	0	16	18	14	19	38	17			
Pōwhiri	0	0	0	3	2	4	1			
Tangi/funeral	0	37	34	36	35	53	36			
Trust board hui	0	5	3	4	4	16	4			
Wānaga Reo	100	6	8	8	11	26	8			
Whānau hui (whānau hui, reunions)	0	20	21	19	18	37	19			

Table 3. Te Whāinga – The Pursuit (Activities Table)

To increase marae participation, whānau suggested socialising at the marae through events that are not tangi or formal events, rejuvenating tikanga, Te Reo workshops and holiday programmes. Table 3 suggests that there is still a high number of whānau who do not engage with the marae at all, therefore these suggestions are key to ensuring that whānau have a reason to engage at the marae for enjoyable purposes.

The purpose of Te Whāinga was to recognise the skills and strengths that rangatahi have as a way to guide activities to ensure that initiatives are created that will work to the strengths of the community. Key findings within Te Whāinga was that the Love of Learning diminishes as students continue through education. This means that collectively whānau should create initiatives that can grasp the attention and enjoyment of students going through education. Participants suggested an increase in sporting and music opportunities, as well as creating workshops, holiday and homework programmes that are located at the marae. One participant mentioned, "Hold career expo's at the Marae to help our hapū get an idea of the occupations that are out there for them." This will provide a platform for marae engagement as well as pursuing studies that can set whānau up for enjoyable careers.

Te Kukune: The Stretching

Te Kukune is the stretching phase of creation and represents the accessibility that whānau have to their education aspirations within Ngāti Whātua. Table 4 displays the barriers that whānau encounter, their level and understanding of Te Reo Māori. In the previous table (Table 2) it mentioned that 57% of children are learning Te Reo. Table 4, however, talks about the barriers that whānau are experiencing as well as the ability to korero and understand the language for all ages.

The data within Table 4 shows that majority of whānau are experiencing no barriers for their child when wanting to learn Te Reo Māori (52%). However, those who are experiencing barriers stated that the Parent's inability to speak sufficiently was a factor (17%), followed by Time/Cost barriers (12%) and Access (11%).

This means that although there are a high number of whānau who are not experiencing barriers when wanting to learn Te Reo, there are still a high number of whānau who need to be supported to achieve their Te Reo aspirations.

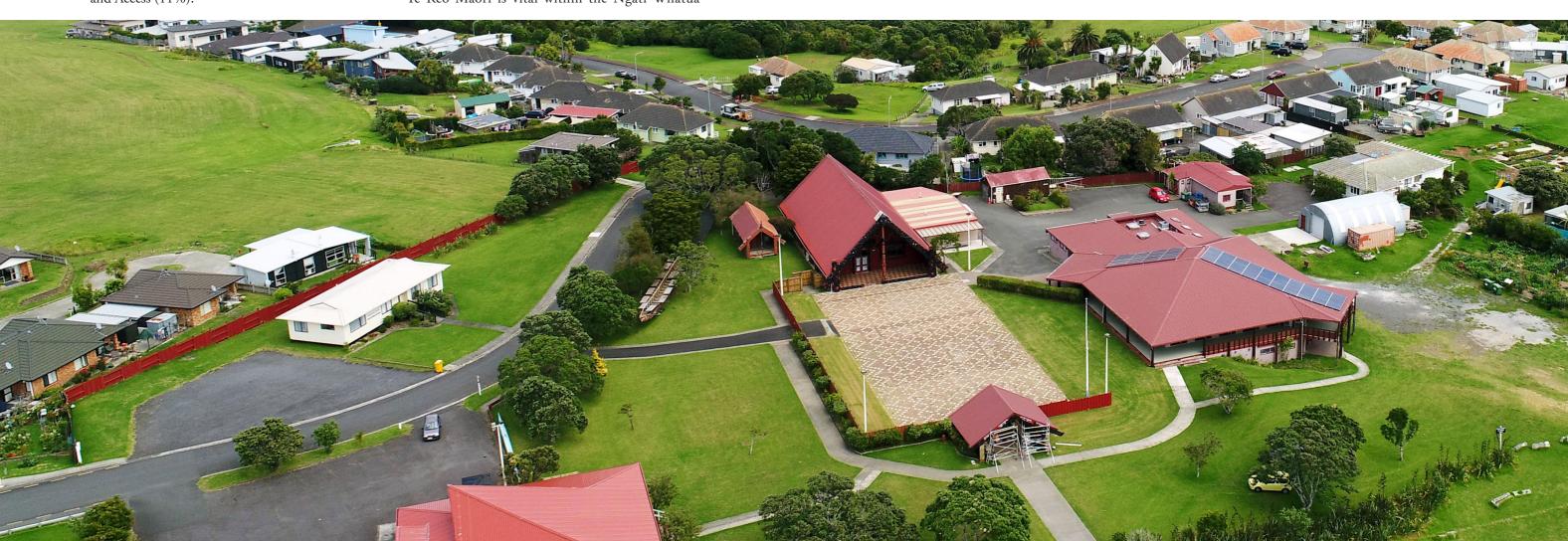
This table also implies that 56% of whānau are sometimes speaking Te Reo at home, 30% are not speaking Te Reo at home and 13% are speaking Te Reo most of the time. In terms of the level that whānau are speaking 54% stated that they are Fairly Well/Still Learning, 24% stated Not Very Well and 21% said Well/Very Well. In regards to understanding Te Reo, numbers were similar with 54% again saying Fairly Well/Still Learning, however 24% stated Well/Very Well and only 22% said Not Very Well. Throughout this data it is evident that Te Reo Māori is vital within the Ngāti Whātua

community, so it is important to acknowledge that although there is more people with the ability to speak than not, there still needs to be initiatives put in place to help assist and develop those who are still learning Te Reo Māori.

Within the data, whānau mentioned many things in terms of access to Ngāti Whātua initiatives from outside of the rohe. Whānau suggested branches of childhood centres, access to wānanga from overseas and other areas of the country (Wellington and Perth), or online resources so that whānau can connect up from where they are. Throughout the data it is clear that whānau whether they are in the area, or outside the area want to connect up to the base of their identity, which is Ngāti Whātua.

Therefore, crucial to the community is allowing a process of stretching to enable those outside of Orakei to get some knowledge acquired from home.

The desire that whānau have to access activities and initiatives from outside the rohe is reflective of Tino Rangatiratanga and whānau wanting to take control over their own learning (Smith, 1999). Tino Rangatiratanga is a principle within Kaupapa Māori that has been discussed in terms of sovereignty, self-determination and independence (Pihama & Cram, 2002). This informs that Ngāti Whātua knowledge comes from Ngāti Whātua, and emphasises the need for access from outside of the rohe to ensure that those who live distantly are able to still learn from their own iwi.



	Early Ch	Prim	Sec	UG	Cert	PG	All		
If your child is not and you are wanting them to learn Te Reo Māori, what are the barriers for you?									
No Barriers Child learning Te Reo Māori	52								
Access	11								
Parents inability to speak sufficiently	17								
Availability of resources	6								
Environment	1								
Time/Cost barriers	12								
More education	1								
Motivation and Environment	1								
My son has difficulties speaking	1								
All Responses	100								
What is the level of te i Yes/Most of the time	reo Māori b	eing sp	oken at	your ho	10	48	13		
Sometimes		67	41	48	60	122	56		
Beginner/A little		0	3	2	0	0	1		
No		25	39	32	30	30	30		
All Responses		100	100	100	100	200	100		
Kei tēhea taumata koe ki te korero Māori? What is your level in terms of speaking te reo Māori?									
Well/Very Well			19	24	21	66	21		
Fairly Well/Still Learning			50	57	58	124	54		
Not Very Well			32	19	21	10	24		
All Responses			100	100	100	200	100		
Kei tēhea taumata koe ki te mārama ki te reo Māori? What is your level in terms of understanding te reo Māori									
Well/Very Well			21	27	21	66	24		
Fairly Well/Still Learning			48	56	59	124	54		
Not Very Well			31	17	20	10	22		
All Responses			100	100	100	200	100		

Table 4. Te Kukune: The Stretching (Accessibility Table)

The aim of Te Kukune was to ensure minimal barriers for whānau that want to pursue education within Ngāti Whātua. This research has suggested that a lot of whānau are out of reach and are requesting wānanga, online learning or kaupapa for distant whānau who want to connect home. Especially in terms of Te Reo, most whānau are Still Learning and sometimes speaking at home. The key finding for Te Kukune is the need for whānau outside of Orakei to have Tino Rangatiratanga over their reo and are wanting to find ways to ensure that they too can learn Te Reo from home regardless of where they are.

Te Hihiri: The Energy

Te Hihiri refers to the energy phase of creation and in the context of this research discusses the cost, issues and benefits that whānau are having in terms of money. Table 5 includes the key factors considered when choosing an education provider to express whether funding opportunities, or money barriers are prominent within education aspirations. Cost has previously been brought up as a barrier for learning Te Reo (12%). However, with the support of this research and the Kaupapa Māori principle of Kia piki ake i ngā raruraru o te kāinga (Smith, 2000), community members should be able to continue to access education opportunities.

The numbers in Table 4 show that cost is not a big factor when considering particular learning centres (24%), or primary (15%) and secondary schools (25%). However, cost is a big factor (fourth highest) when choosing early childhood centres (42%), compared to a decrease in value for primary (15%) and secondary schools (25%). Factors that proved prominent when considering learning centres were distance from home (60%), Learning environment (50%) and Staff (37%). This also reinforces the importance of the quality of education, environment and experience that is discussed in a following section (Te Hauora: The breath of life). This also enforces why it is important that whānau are able to access the quality learning centres discussed previously no

When choosing an education provider for older students most commonly considered was education providers that offered high quality teaching (74%), followed by course offerings (63%) and recommendation (43%). There were only 12% of students who stated scholarships as a factor. This can suggest that there are either not many scholarships offered to students, or that the cost is not a big factor for students when choosing their own education provider. Importantly majority of parents stated that they were at the learning centre that was their first choice (88%).

Although the numbers demonstrated that cost was not a big factor in choosing education providers, the suggestions that whānau have mentioned were highly influenced by money. Suggestions included making more affordable prices for puna, support in paying for stationary and compulsory equipment such as laptops and ipads. Full or increased subsidy for Early Childhood Education costs, and supporting costs for sporting activities and uniforms. There were requests for funding for kids with special needs, and scholarships for postgraduate studies, as well as support for struggling parents. There were also ideas to support travel costs through providing pick up and drop off services.



	Early Ch	Prim	Sec	UG	Cert	PG	All		
What are the key factors considered when choosing a learning centre? (Check all that apply)									
Childs friends	16	22	17				20		
Class size	19	27	15				22		
Cost	42	15	23				24		
Facilities	39	32	37				35		
Family	38	35	32				35		
ERO report	9	9	15				11		
Learning Environment	53	54	41				50		
Hours	49	9	8				18		
Reputation	33	33	35				34		
Staff	50	36	28				37		
Pick up and drop off service	16	8	5				9		
Distance from home	66	62	52				60		
Decile rating	3	8	8				7		
Te reo Māori	39	29	27				31		
Total	100	100	100				773		
What are the key factors of	onsidered when (Check all that	n choos t apply)	ing an e	ducatio	n provi	der?			
Course offerings				72	59	105	63		
Family and friends have attended				25	29	10	24		
High graduate employment rate				40	32	19	32		
It was recommended to me				38	49	67	43		
Offers high quality teaching				74	73	161	74		
Scholarships				15	12	10	12		
Other				13	7	20	10		
Total				100	100	200	164		
Was the learning centre your first choice?									
Yes	83	86	77	83	90	190	84		
No	17	14	23	17	10	10	16		

Table 5. Te Hihiri – The energy (Cost Table)

Kia piki ake i ngā raruraru o te kāinga is a principle of Kaupapa Māori Theory and Methodology that addresses the issues of socioeconomic disadvantage (Pihama & Cram, 2002). It acknowledges the negative pressures to whānau in the education environment. But despite these disadvantages, this principle mediates practices and values to intervene successfully for the well-being of whānau (Pihama & Cram, 2002). This is similar to the ideas that whānau have suggested to moderate the pressures of cost within education to ensure they are still able to get access to the education of their choice.

The aim of Te Hihiri was to monitor the stresses that whānau are having with cost for education. The data showed that cost was a high factor for Early Childhood only and not proving to be a significant factor for primary and secondary school. In saying this, distance from home is the highest considered factor when choosing an education provider and this could be due to cost for travel, transport issues and the time it takes to get students to a particular education provider. Suggestions from the community to consider were funding opportunities for special kids and postgraduate students. As well as supporting costs for compulsory requirements at school and services that allowed distant travels to get to their preferred education provider.



"How is the transition made from knowledge per se, to wisdom? The swallowing of Rehutai is symbolic of how this state may be achieved. Hakutai (sea foam) and Rehutai (sea spray) are metaphors taken from a canoe en passage on the sea. The sea foam or wake generated by the canoe in motion symbolises the pursuit of knowledge as an accumulation of facts picked up along the way. Of itself such facts constitute an unorganized set of ideas unrelated to his center" (Marsden 2003, p59)

Marsdens' analogy above captures the essence of the wānanga table through the resources whānau needed to increase their reo journeys, which in turn strengthens that "centre" or their Ngāti Whātuatanga. As outlined in the introduction, this "centre" is how tamariki/mokopuna succeed in all forms of education and learning (IBID).

Table 6 states that age was a factor in the responses to kura reo as a language resource. At pre-school level 19% of whānau saw kura reo as a learning option and this makes sense given that people with pre-school aged children would attend and there are learning activities for the tamariki. The numbers at primary and secondary level were low at 9%. The numbers of interested respondents increased from tertiary level to the 20% range at undergraduate level and there

was a marked increase at postgraduate level to 124%. It is likely there is a need for a high level of Te Reo and tikanga at postgraduate level, this is the time in tertiary learning where students are able to bring together their worldview and their degree learning; Te Reo would be an essential part of that. Certainly, the anecdotal evidence at Otago University suggests that student "centred" in their Māoritanga are more successful at postgraduate level and it is often because they are steeped in their tikanga that they reach this level in the first place (Russell 2000; University of Otago, 2015).

Technology based resources were important for all age groups and this is an indicator of how technology is becoming an important knowledge transmission medium. Primary school aged parents were the group that had technology based resources at the lowest at 29% and 27%. There is still nearly a third of parents that see apps and online resources as useful. This is a space where iwi specific resources can be available to whānau eliminating geography as a barrier.

	Early Ch	Prim	Sec	UG	Cert	PG	All		
He aha ētahi rauemi Māori hei āwhina i a koe ki te ako i te reo Māori? What type of te reo Māori resources would support you to learn te reo Māori?									
Apps	45	29	32	60	49	85	36		
Books	58	38	29	62	63	104	43		
Games	48	36	30	51	39	55	37		
Reo Classes	31	19	23	47	57	122	28		
Print Material	29	17	14	35	33	46	21		
Waiata	53	31	32	50	57	122	39		
Wananga	24	12	18	38	48	150	22		
Online (Podcasts & Webinars)	37	27	27	65	49	113	34		
Kura Reo	19	9	9	28	23	124	14		
Total	100	100	100	100	100	200	100		
Kei tēhea taumata koe ki te pānui i te reo Māori? What is your level in terms of reading te reo Māori?									
Well/ Very Well			25	29	29	75	28		
Fairly Well/ Still Learning			43	54	49	115	48		
Not Very Well			32	17	22	10	24		
Total			100	100	100	200	100		
Kei tēhea taumata k What is your level in ter									
Well/Very Well			22	20	24	67	23		
Fairly Well/Still Learning			40	59	40	75	44		
Not Very Well			39	21	37	58	33		
Total			100	100	100	200	100		
	Kei tēhea taumata pānui tōu tamaiti? At which level is your child in terms of reading te reo Māori?								
Well/Very Well	100	14	33				15		
Fairly Well/Still Learning	0	42	67				43		
Not Very Well	0	44	0				43		
Total	100	100	100				100		
Kei tēhea taumata tuhi tōu tamaiti? At which level is your child in terms of writing in te reo Māori?									
Well/Very Well	100	15	33				15		
Fairly Well/Still Learning	0	51	67				51		
Not Very Well	0	34	0				33		
Total	100	100	100				100		

Table 6. Te Wānanga – The knowledge & wisdom (Resources Table)

There were also consistently high numbers across all the age ranges showing an interest in print based resources, waiata and games. Again, these can be used to strengthen connection to the iwi and improve member's overall education. The lower numbers were again in the 20 percent range. These types of resources were just as important to whānau as digital, suggesting that a mix is wanted. There were many suggestions by whānau for resources such as books, online learning, history of Orakei and Atua stories.

The purpose of Te Wānanga was to capture the ways in which whānau learn and how this research can provide information to develop resources that will strengthen knowledge not only in mainstream schooling but for their identity as well. Importantly whānau have requested Ngāti Whātua specific resources such as historical, creation narratives, worldview, tikanga and Te Reo. The need for Ngāti Whātua specific resources is consistent throughout the themes. These could be provided through books, waiata, games and pūrākau told in and outside of the classroom. It is through these resources that whānau will be able to capture the essence of their Ngāti Whātuatanga and continue to share stories of their worldview and identity.



"Hauora is the breath or wind of the spirit which is infused into the process of birth to animate life" (Marsden, 2003, p. 60). Hauora, or the breath of life represents the experiences students are having. Table 7 outlines the type of learning institutions whānau are in and the experience they are having. This is to inform whether they are having positive experiences and how this influences them to continue to further their education.

Whānau are genuinely satisfied with their education journey, the numbers decrease when it comes to excellence as the tamariki/mokopuna progress through the system. The enrollment numbers show that as tamariki/mokopuna progress through the

system, they end up predominately in mainstream schooling (60%) by high school regardless of high numbers starting at Kōhanga reo (31%). Table 5 shows the main characteristic for school choice is distance from home (over 60% in each age group). This 60% mainstream enrolment data further supports the point about a significant drop in love of learning from early childhood through secondary level. The primary choice for choosing a secondary school was because whānau are not able to choose a school based on excellence for their tamariki. That said, whānau do consider the learning environment, to be important (50% range). This is a kaupapa that could be explored further.

McFarlane (2017) suggests that Te Reo Māori diminishes as English increases yet the numbers here suggest that there is strong Te Reo access for iwi members and this access focus on Te Reo is reversing the loss within this cohort. This is a trend that would be worth looking at and examining each year to ensure the progress of Te Reo Māori within Ngāti Whātua.

Suggestions that whānau had in terms of experience included kaiako having the opportunity to get experience outside of Orākei to bring home, some wanted to be able to send their kids to puna for more reo development. Creating positive experiences through making education fun and enjoyable, hands

on mahi, practical, creative, using technology and tactile learning. Regular marae visits was mentioned to uplift Māori kaupapa positively and provide a new way of teaching NCEA that could be more relatable. There was the option of sharing work with whānau and creating educational competitions and catering to those with different learning styles. Importantly, the need for acknowledgement of academic success was mentioned. A participant stated "Other than financial aid, for me, recognition of my academic successes would make me more motivated to accomplish my goals and feel proud that my hard work is being recognised."

	Early Ch	Prim	Sec	UG	Cert	PG	All			
What kind of learning centre is your child enrolled in?										
Bilingual	4									
In-home care	9									
Kindergarden	27									
Kōhanga reo	31									
Montessori	2									
Ngā Puna Kōhungahunga (Māori focused learning centre)	6									
Pacific Island-focused learning centre	1									
Playcentre	6			<u> </u>			<u> </u>			
Playgroups	1									
Rumaki	1						<u> </u>			
Mainstream	13		<u> </u>							
Total	100									
			 	-	<u> </u>		<u> </u>			
What type of sc	nooi are	you en		n;						
Bilingual	<u> </u>		3				<u> </u>			
Kura ā iwi			1							
Kura Kaupapa Māori			4							
Mainstream	ļ		60							
Private School			7							
Rumaki	ļ		3							
Special School	ļ		1							
Wharekura			2							
Kura a iwi			0							
Mainstream			12							
Mainstream, special school, special needs services			0							
Nga Puna Kohungahunga (Māori focused learning centre), Pacific Island focused learning centre, Other: Charter School			0							
Private School			1							
Private School, Mainstream			0							
Private school, mainstream, bilingual			0							
Wharekura			1							
Wharekura, kura a iwi	İ		0							
Blank			3							
Total		Ì	100							
Are you happy with the	overall	guality	of the e	ducatio	n?					
Excellent	45	33	40		 		39			
Unhappy/Need Improvement	3	3	0				3			
Satisfied/Okay	52	64	60				59			
·							 			
Total 100 100 100 100 100 Kei tēhea taumata reo Māori tōu tamaiti? At which level is your child in terms of speaking te reo Māori?										
At which level is your cline		no or she	aning (100 141						
Well/Very Well	100	11	33				15			
Fairly Well/Still Learning	0	51	67				51			
Not Very Well	0	34	0				33			
Total	100	100	100				100			

Table 7. Te Hauora – The Breath of Life (Experiences Table)

There were very small numbers that stated that they were unhappy with the quality of their education (3%). However, it is still important to uplift the majority saying that they are satisfied (59%) to feeling that they are receiving excellent education. The principle of Ako Māori in Kaupapa Māori Theory and Methodology is what shapes education to be taught in a way that makes sense to Māori (Smith, 1999). It means that the kaiako is not always the fountain of knowledge, and in this sense, the voices of the community are what are important to understanding the education aspirations (Bishop & Glynn, 2000). Ako Māori implies that Ngāti Whātua can chose their own teaching pedagogies that make sense to the community, allowing whakapapa and whenua to be grounded in their work (Pihama & Cram, 2002).

The purpose of Te Hauora was to understand the experience students are having in education to ensure that they are able to achieve at their best potential. The main finding was that a high number of Ngāti Whātua students were enrolled in mainstream schooling regardless of whether they went to Kōhanga Reo or Kindergarden. This could reflect the need to ensure that Ngāti Whātua specific resources and initiatives are maintained outside of school so that those in mainstream schooling are able to engage in iwi specific initiatives. This is where the importance of Ako Māori becomes prominent as the community needs to continue to engage with the high numbers enrolled in mainstream schooling so that their tikanga and reo continue to strive. Importantly, acknowledging success is crucial to the experience of students.

Conclusion

This research has provided an explanation of the needs and aspirations of the Ngāti Whātua community through the key themes Te Rapunga, Te Whāinga, Te Kukune, Te Hihiri, Te Wānanga and Te Hauora.

These themes emerged from a creation story of Io described at the beginning of this report to represent the key needs of the community that were expressed through questionnaires. These needs included services, activities, accessibility, cost, resources and experience. The results of the questionnaires were analysed and grouped into themes so that we were able to clearly express the needs of the community.

The six key outcomes from community feedback via questionnaires were:

- 1. More mentoring and tutoring opportunities,
- 2. More activities and events held at the marae to keep whānau engaged in education and the community,
- 3. In addition to events, develop wānanga or online learning opportunities so that whānau outside of Ōrakei are still able to engage in education.
- 4. Financial assistance so that children do not have limited schooling options.

5. More resources, for example, Ngāti Whātua specific resources, such as whānau based pūrākau, reo books, online learning tools, waiata, karakia, moteatea and creation narratives that come from Ngāti Whātua. These resources will enable whānau near and far to engage in Ngāti Whātua approaches to learning and provides appropriate resources for those enrolled in mainstream schooling to maintain their identity.

6. Finally, recognition of success is important to the community to keep students motivated and feel proud of their accomplishments.

There is a clear passion for Te Reo within Ngāti Whātua with many opportunities and activities provided to ensure minimal barriers for whānau still wanting to learn. It is also evident that community members are currently able to access quality education through initiatives that are already implemented. A key concern is that whānau are only satisfied with the quality of education. However, there were many suggestions for ways that this can be uplifted to create an excellent experience in the theme, Te Hauora, through the process of Ako Māori. This means that Ngāti Whātua are able to use this research to hear the voices of the community and create initiatives that will be valued by students and whānau.

Given the findings from this report, there is an opportunity to reflect on three areas of interest for Ngāti Whātua, firstly the Programmes/Initiatives that are chosen to invest in, Relationships/Engagement with education institutions (including advocacy for or about kauapapa that matters to whānau) and Policy/Systemic change (are there

changes in the system needed).

Furthermore, to understand the needs of the community so that future generations are supported to continue to strive for excellence.

Given the six outcomes above it would seem that creation of Ngati Whatua programmes and resources is a sound investment, it will not only build connection but will provide a platform to improve all aspects of

to improve all aspects of education and success in life.

Resources and access to resources often money is another barrier whanau have when it comes to access to quality education, and this data was no exception to that. This is an ongoing issue that requires systemic change, but in the meantime one aspect of this was remedied for the 2019 application, in that whānau were given a choice between grant money or a device.

As the majority of registered iwi members live in the rohe potae o Ngati Whatua, the iwi is well positioned to champion school choices for whanau, This analysis highlighted that the main reason for the choice of school was based on where whanau lived, thus it isn't really a choice. Given the drop in satisfaction for whanau, tamakriki/mokopuna it is worth exploring ways in which whanau can chose where they can attend schools so that it is based on excellence, opportunities and culturally relevant. This can be done at both the local level with the schools and directly with the Ministry of Education. The iwi chairs forum provides an opportunity to work with other iwi where members of Ngati Whatua reside within their rohe to improve their experience of education also.

This report was grounded by a Māori worldview and guided by Kaupapa Māori Theory and Methodology to ensure Ngāti Whātua are able to continue to create a positive space in education in a way that makes sense to their iwi.

References

- Bishop, R., & Glynn, T. (2000). Kaupapa Māori messages for the mainstream. Professional Development, 4-7.
- Durie, M. (1985). A Māori Perspective of Health. Social Science & Medicine, 20(5), 483-486.
- Jackson, A.-M., Mita, N., & Hakopa, H. (2017). *Hui-te-ana-nui: Understanding kaitiakitanga in our marine environment*. University of Otago, Te Koronga, School of Physical Education, Sport and Exercise Sciences. National Science Challenge Sustainable Seas Ko Ngā Moana Whakauka.
- Ka'ai, T. M., & Higgins, R. (2004). Te Ao Māori. Māori world-view. In T. M. Ka'ai, J. C. Moorfield, M. P. Reilly, & S. Mosley (eds.), *Ki te Whaiao. An introduction to Māori Culture and Society* (pp. 13-25). Auckland, NZ: Pearson Education.
- Lee, J. (2005). Māori cultural regeneration: Pūrākau as pedagogy. *Indigenous (Māori) pedagogies: Towards community and cultural regeneration*. Stirling, Scotland: Centre of Research in Lifelong learning Internationl Conference.
- Moewaka-Barnes, H. (2015). Kaupapa Māori: Explaining the ordinary. Kaupapa Rangahau: A Reader, 29-33.
- Marsden, M. (2003). *The Woven Universe. Selected writings of Rev. Māori Marsden.* The Estate of Rev. Māori Marsden.
- Pihama, L., & Cram, F. (2002). Creating Methodological Space: A Literature Review of Kaupapa Māori Research. *Canadian Journal of Native Education*, 30.
- Reilly, M. (2018). Te Tīmatanga mai o te Ao: The Beginning of the World. In M. Reilly, S. Duncan, G. Leoni, L. Paterson, L. Carter, M. Rātima, & P. Rewi (eds.), *Te Kōparapara* (pp. 12-29). Auckland: Auckland University Press.
- Russell, K. J. (2001). *Landscape: Perceptions of Kai Tahu i mua, aianei, a muri ake* (Doctoral dissertation, University of Otago).
- Smith, L. T. (1999). Decolonising Methodologies: Research and Indigenous peoples. London: Zed Books.
- Smith, G. (2015). The Dialectic Relation of Theory and Practice in the Development of Kaupapa Māori Praxis. *Kaupapa Rangahau: A Reader*, 17-27.
- University of Otago, (2015) Treaty of Waitangi reports Māori student success

