Can te ao Māori worldviews exist within a western institute's online teaching and learning environment?

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Abstract

Tertiary institutions in *Aotearoa* (New Zealand) offer students online teaching and learning papers across a variety of disciplines. The purpose of this research was to examine whether online teaching and learning environments in a tertiary institute provide opportunities to create conditions that promote *te ao Māori* (a Māori world view) aspirations for Māori scholars. Following a critical review of selected literature on how technologies and its pedagogical implications can realise cultural, educational, political and social aspirations in an online environment (see *Chapter 2*), the ethical practices according to Kaupapa Māori theory methodology, whakawhanaungatanga and spiral discourse is outlined (see *Chapter 3*). These practices together with spiral discourse and conversation analysis, were used to analyse the factors that facilitated or hindered optimal conditions that promoted teacher and student aspirations in the online environment (see *Chapter 4*). That analysis, conducted in relation to a number of focus points, revealed that when Māori practices of tikanga and ako pedagogy were applied in this realm, Māori scholars experienced the fulfilment of personal aspirations. Participants also experienced positive outcomes when whanaungatanga, the creation of interrelationships relationships between Māori students and teachers, whānau, friends, colleagues, was a focus together with good support facilities and services, and quality resources. This research supports the conclusion that online teaching and learning environments in a tertiary institute can provide opportunities to create conditions that promote te ao Māori aspirations for Māori scholars. Further investigations are needed to unravel the types and nature of the interrelationships between ako Māori pedagogies and the student and teacher, and whanaungatanga between students and other students that facilitate conditions that promoted Māori aspirations in an online environment.

Mihi

Whakatauākī

Ehara taku toa i te toa takitahi, engari he toa takitini.

My strength is not mine alone, but due to the strengths of many.

Tihei mauri ora. Ngā mihi ki tō tātou Atua.
Ngā mihi ki ngā kaiwhakauru kōrero o ngā whānau i whakapiri mai nei ki te awhina, ki ngā kaiwhakauru tūpuna, ki ngā kuawheke.
Tēnā koutou, tēnā tatou katoa

I āu e haere whakamua nei ki te kimi maramatanga ka mihi anō ahau ki ngā kōrero o te whānau rangahau mō ā koutou awhina ki āku rangahau.
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Dedication

I dedicate this research to:

Te Whānau o

Te Hiringa i te Mahara: The Power of the Mind

To the Communities of the Schools, Teachers and Principals, I truly appreciate the dignity and respect that was shown to us and hope we received it with appropriate humility.

To the Online Facilitators, and the IT Product and Service Providers who enriched the online teaching and learning environments with your experiences and ideas.

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Glossary

Terms	Definitions
Ako Māori	Teaching and learning structures and processes
Aotearoa	New Zealand
Aroha	Love
Atua	Gods
Hākari	Feast which follows a funeral ceremony or marks another important occasion
Hapū	Sub Tribe
Hui	A formal Māori gathering
Iwi	Tribe
Kaitiakitanga	Guardianship
Kanohi kitea	Face to face
kanohi ki te kanohi	Face to face
Karakia	Prayer
Karakia whakamutunga	Final prayer
Kaumatua	Respected elders
Kawa	Māori practices and behaviours
Kaupapa Māori	A way of doing things from a Māori worldview
Kōrero	Speak
Kōrero whakamutunga	Farewells
Koretake	No good, ineffective
Kupu hou	New terms

Mahi korero	Work introductions
Mana	Supernatural influences, prestige, power, status
Mama motuhake	Respect for specialness, the right or condition of self-governance
Manaakitanga	Caring, sharing, and hospitality
Mātau	To know
Mātauranga Māori	Māori knowledge
Mihimihi kōrero	Personal introductions
Noa	Neutrality
Paerangi	Māori secondary boarding schools
Pākehā	European New Zealanders
Papakainga	The territory in which we stand
Papatūānuku	Mother Earth, the land
Taonga	Treasure
Tapu	A state of being, set apart, power potential
Te ao Māori	A Māori worldview
Te Kāhui Manutāiko	The research ethics committee
Te Pua Wānanga ki te Ao	The Faculty of Māori and Indigenous Studies
Te reo Māori	Māori language
Te Taura Whiri i te Reo Māori	The Maori Language Commission
Tika	Correct or being right

Tikanga Māori	How Māori implement practices and behaviours
Titiro	Look
Tautoko	Endorse, support
Tino Rangatiratanga	Political control by Maori people over Maori affairs
Tuakana/Teina	Relationships between an older (tuakana) person and a younger (teina) person
Tūpuna	Ancestors
Wairua	Our spiritual beliefs
Wairuatanga	Spiritual dimension
Whakamana	Empowerment
Whakapapa	The means of building relationships
Whakarongo	Listen
Whakawhanaungatanga	Construction of relationships
Whānau	Family
Whānaunga	Blood relation, kinship ties
Whanaungatanga	Relationship
Whānauwhānui	Others outside the structure of whānau, hapū and iwi
Wharekura	Secondary component of a kura kaupapa Māori

Chapter 1

Introduction: Background, research questions and research methods

1.1 Introduction

I belong to the tribe that presides on the east coast of the North Island, centred around the picturesque town of Ōpōtiki, known as Te Whakatōhea. My marae, Omarumutu overlooks the Pacific Ocean with the volcanic island of Whakaari or White Island on the horizon. My river, the Waiaua meanders around my mountain Mākeo. I am the mokopuna of Tutamure. My father was a motor mechanic, and my mother a schoolteacher. I followed the educational career of my mother completing my teaching certification at Hamilton Teachers College in 1979. Forty years in the world of education, my teaching took me around our planet teaching intermediate aged international school children in the beautiful city of Copenhagen and administrating as Principal of the International School in Singapore. I received my Masters in the Southern Californian City of San Diego. Returning to Aotearoa, I was part of a team providing Information Communication Technology professional development for teachers showing how to integrate digital technologies into their teaching practices. In 2005, I completed a Post Graduate diploma which has continued leading this academic journey at my alma mater, Te Whare Wānanga o Waikato.

My interest in the development of best teaching and learning conditions for Māori teachers and learners in online environments stems from my work as an online facilitator between 1998 and 2008. During this time Gardiner & Parata managed *Te Hiringa i te Mahara* (THM) as part of the Ministry of Education programme designed to address workload stress issues of Māori Secondary School Teachers. As an Information, Communication and Technology (ICT) Professional Development Programme, THM developed a blended model of *kanohi ki te kanohi* (face to face) hui and an online teaching and learning

programme to help teachers integrate laptop technology into their teaching, learning and administrative duties. The online plan saw the delivery of ten skills and practice-based audio conference hui, formal teaching and learning sessions, supported by email conversations, online discussion group discussions and one-on-one audio conferences. The challenge continued to be the evolvement of online teaching and learning conditions within a telecommunication audio conference environment conducive to achievement objectives set by and for the Māori Secondary School Teacher participants (Wylie, Maniapoto, Waiti, & Bolstad, 2003).

With other Māori facilitators, we investigated ways to develop a comfortable online teaching and learning environment for Māori participants. We began trialling both traditional and online successful pedagogical practices theorised by academics including Campbell (2004), Hemara (2000), Lai (2005), Perrone (2000) and Selby and Ryba (1999) to find out if these practices helped facilitate the achievement of Māori Secondary School Teachers learning aims. We looked for ways that advanced Māori to converse freely in their first language. The re-generation of *kupu hou* (new terms), through the lens of *te ao Māori* (a Māori worldview), was initiated. We advocated and performed tikanga Māori practices of *karakia* (prayer) *mihimihi kōrero* (personal introductions), *mahi kōrero* (work introductions), *kōrero whakamutunga* (farewells) and *karakia whakamutunga* (final prayer). The values of *whanaungatanga* (relationships), *manaakitanga* (caring, sharing, and hospitality) and *aroha* (love) were adopted in the environment. These values were embraced by *wairuatanga* (spiritual dimension), set through karakia at the commencement and conclusion of the hui. Reciprocal teaching and learning roles of *tuakana/teina* (relationships between an older and younger person) were championed as some participants had past experiences with technology could share these experiences. Co-joint constructions of new protocols were developed to cater for the lack of visual cues that were typically used, for example, to signal the end of speaking and the next speaker's interactions. Move forward to 2019, the development of best online teaching and learning conditions for Māori in online teaching and learning environments continues to be of ardent intrigue.

The literature related to Indigenous online teaching and learning is vast. Much of this research, however, has been conducted by non-Indigenous scholars. Australian, Canadian, and United States of American tertiary institutes can still be seen to harvest research that supports their agendas or funding schemes which enables them to continue their presence in the online teaching and learning environment. Contemporary Māori have tended to resist this type of research oppression due to dissuasion research by pioneering Māori scholars such as Russel Bishop (1995), Leonie Pihama (2001), Graham Smith (1997) and Linda Smith (2012). I pay homage to these academic pioneers who have forged pathways for this researcher to investigate Māori scholars studying in online teaching and learning environments.

Although literature by Māori, with Māori and for Māori addressing the engagement of digital technologies has been productive, literature directly addressing the research question of the provision of opportunities to create conditions that promote te ao Māori aspirations for tertiary Māori students studying in online teaching and learning environments is lean. Lee (2018a, 2018b), O'Carroll (2013) and Waitoa, Scheyvens, and Warren (2015) have conducted research investigating Māori navigating virtual spaces and new territories of social networking sites (SNS). Keegan, Keegan, and Laws (2011), Keegan, Mato, and Ruru (2015), Keegan (2007, 2017), Keegan and Cairns (2018), Keegan and Sciascia (2018), Manuirirangi (2017), Mato, Keegan, and Naera (2016) and O'Carroll (2013) have produced work primarily investigating the regeneration of te reo Māori and, cultural, political and social effects of Māori engaging with digital technologies. The experiences of te ao Māori worldviews, tikanga Māori and *ako Māori* (teaching and learning structures and processes) can be learned and gleaned from this research.

Much can be drawn from the work of Tiakiwai and Tiakiwai (2010), Waiti (2005), and Wylie et al. (2003) as their research examines Māori online initiatives involving Māori secondary schools. Research by Ferguson (2012), Laws, Hamilton-Pearce, Werahiko, and Wetini (2009) has contributed

significantly to te ao Māori worldviews, tikanga Māori and ako Māori practices in a tertiary online teaching and learning environment.

Smith (2012) and Grande (2014) encourage Indigenous scholars to become fluent, familiar and conversational in the roots of Imperial research theories. Fluency, familiarity and converseness will enable researchers to de-construct and breakdown these theories for us to create our own approaches. Māori scholars need to be aware of the place of the theory that is useful and to identify the limitations within these theories, which will provide grounds for further decolonisation of western practices enforced on Indigenous people. Bearing Smith and Grande's encouragement in mind I am heartened by the statement, "virtual worlds add much more than visual and auditory media, they provide instructors and students greater choices for collaboration, learner autonomy, creativity, and experimentation…" (Henderson, Huang, Grant, & Henderson, 2009, pp. 464), as it provides a springboard to investigate whether collaboration, learner autonomy, creativity, and experimentation facilitate or hinder the provision of optimum conditions that promote te ao Māori for tertiary Māori scholars studying in online teaching and learning environments.

1.2 Historical landscape of online environments in Aotearoa

Although the scope and variety of contexts of online teaching and learning are ever-changing, a common purpose is to communicate with other people across space and time to enhance a range of learning experiences (Campbell, 2004). There has been an on-going evolution of digital learning technologies and its associated fields. However, there has not been a consensus of definitions and terminologies. Picciano (2018) advocates that while it can be argued that distance education has evolved into online teaching and learning, he contends that online teaching and learning has created an entity that has not only been impacted by new digital instructional technologies but also has provided discussions regarding new pedagogies. For this research, the term *online teaching and learning* will be used to describe the provision of online educational experiences. The space in which these teaching and learning practices take place will be called the *online environment*.

In order to piece together the landscape of the online environment in Aotearoa, I use the research of Picciano (2018) who together with the works of Anderson (2004), Keegan (1996), Moore and Kearsley (2011), and Skinner (1958) provide a contextual timeline. To this, I add the work of Bernath et al. (2005), Campbell (2004), Taylor (2001), and Wenmoth (2004), and draw on my personal experiences to provide a complete picture of the Aotearoa context and perspective.

Picciano (2018) identifies the following chronological evolution of online teaching and learning starting with the foundational works involving distance education, through to the migration of the World Wide Web into mainstream teaching and learning and the development of digital technologies, and on into the future which is both exciting and threatening:

i) 1900 – 1960: Distance education
ii) 1960 – 1990: Multimedia and telelearning
iii) 1990s: First Wave, in the beginning
iv) The early 2000s: Second Wave, into mainstream
v) 2008 – 2013: Third Wave, MOOC phenomenon
vi) 2014 to the present: Fourth Wave, blended and MOOC

This next section provides an historical landscape of online teaching and learning with a specific focus on ako Māori, Māori pedagogies in the domain in the online environment here in Aotearoa. It should be noted that there is quite a lot of overlap between the time periods as one phase of development was introduced as another is phased out.

1.2.1 1900 - 1960: Distance education

Distance education ties together several historical threads, distance learning, telecommunications and computers. The oldest form of distance education was correspondence study (Bates, 2005). In 1906, the Calvert School of Baltimore in the United States of America was the first primary school to offer correspondence courses. Later in 1911, the University of Queensland in

Australia opened its Department of Correspondence Studies. An influential stakeholder in the development of distance education here in Aotearoa is *Te Aho o Te Kura Pounamu*, otherwise known as *Te Kura*. The original name for *Te Kura* was the New Zealand Correspondence School, which was founded in 1922, to provide lessons for isolated primary school children. Students received self-directed, paper-based study materials from instructors using the postal service and then, as instructed, returned their written assignments for evaluation, grading, and often written feedback (Bernath et al., 2005).

During the 1920s through to the 1940s, the number of students enrolled with the New Zealand Correspondence School grew. New courses were developed for different needs and governance, management and teaching structures evolved. In 1931, the first radio broadcasts were made to students, although at that stage there were no formal lessons. Through broadcasting, distance education made heavy use of a richer set of media and also enabled simpler and faster delivery (Keegan, 2005).

In terms of teaching and learning processes and structures, distance education was characterised by behaviourist and later cognitivist models of learning in which the point of control is heavily on the teacher and instructional designer (Anderson & Dron, 2011). The provision of education services in the 80s for rural students in Aotearoa was delivered predominantly as a paper-based correspondence facility. Interaction between other learners was limited and was, therefore, not incorporated into learning activities.

The Computers in Education Development Unit (CEDU) was created in 1985 to provide training and direction for educational computing in Aotearoa (Wenmoth, 2004). In 1986, a secure online electronic mail system called Starnet operated by the New Zealand Post Office delivered information to teachers around the country. By the end of 1989, the number of teachers using the new technologies had significantly risen and far exceeded the scope of the CEDU, and the unit was dis-established and obligatory recognition of these technologies was returned to the Department of Education (Campbell, 2004).

1.2.2 1960 - 1990: Multimedia and telelearning

The ever-present evolution of technologies provided broadcasting and conferencing opportunities to support students learning. Broadcasting provided a platform to deliver and integrate different media to support students learning (Keegan, 2005). The digital technologies also became the tools that built support systems for these distance learning students. The introduction of broadcasting and conferencing was a defining point in the evolution of distance education.

Te reo Māori (Māori language) regeneration during the 1970s and 1980s was a catalyst encouraging Māori to seek ways to support the language use through the medium of digital technologies. Support was offered by the Māori Language Act 1987 which led to the establishment of *Te Taura Whiri i Te Reo Māori* (The Māori Language Commission). Te Taura Whiri i Te Reo Māori recognised and promoted the notion that Māori language was a *taonga* (treasure) and was therefore guaranteed protection under the Treaty of Waitangi. Te Taura Whiri lobbied the Government to recognise its obligations to preserve the Māori language in all its portfolios including education, media and government sectors.

1.2.3 1990s: First wave, in the beginning

No one anticipated the impact of the internet or the invention in 1993 of the World Wide Web. A classroom-based approach could be observed where teachers and students explored new ways to utilise computer technologies in their classrooms to solve problems. Library based knowledge was starting to be seen as a source of second-hand knowledge; however, with the advent of new technologies, teachers did not necessarily be the deliverer of knowledge, learners could share experiences and learn from each other, learners could learn from learners (Chapple, 1991). While schools were still using email, other online communication tools were developing. At the time the internet backbone in Aotearoa was through the TuiaNet. The internet backbone provided the opportunity for schools and universities to link through audio-conferencing, audio-graphics and video-conferencing (Stevens, 1994). Bulletin boards like K12 Net and FidoNet were gaining in popularity, and digital libraries that

provided access to information as written text on paper were being developed (Campbell, 2004).

Teachers of te reo Māori created *Te Wahapū* the first nationally and internationally accessible computer-based communications system with a Māori language on-line command system. The group, a member of FidoNet, provided a forum of exchange for teachers within the area of Māori language and education and to provide an environment for schools "to exchange creative and expository writing in the Māori language" (Ropiha, 1991, p. 47). Te Wahapū operated under the aegis of the New Zealand Council for Educational Research until 1997 when the development of the World Wide Web rendered the once cutting edge Fidonet systems obsolete. Te Wahapū carried many sophisticated databases including Māori dictionaries, a comparative database of new vocabulary in all major Polynesian languages, an on-line colour-coded version of the Proto-Polynesian database with multiple display options, and databases with information on various educational topics.

In Aotearoa, an important document to be released in and around this same period was the Sallis Report. The report emphasised the importance of providing ongoing support and direction for teachers with regards to the use of computers in education (Wenmoth, 2004). In 1993, in acknowledgement of the Sallis Report, the first Information Technology Professional Development (ITPD) contracts were funded by the Ministry of Education, later to be referred to as Information and Communication Technology Professional Development (ICTPD).

1.2.4 Early 2000s: Second wave, into mainstream

Government and business sought partnerships to provide services to take advantage of emerging technologies. Again, no one anticipated the impact of the internet or the invention in 1993 of the World Wide Web. The internet would forever change business, communications and access to information. It took New Zealanders a little more than a year to gain access to the World Wide Web and when teachers saw the potential of the technology a national network of

seminars was provided by the Telecom Education Foundation (TEF) (Wenmoth, 2004).

The associations with Microsoft and Google saw a number of innovative technologies made available to Māori. After an association with Microsoft in 1998, the macron character was created and made accessible in 2003. The Microsoft Translator Hub, an online service that provides the facility for language communities to create their own machine translation tool was made available in 2013. Google's support was established in 2001 with the enabling of the Google Translator Toolkit in 2009 a resource which includes dictionaries, word lists and previous translations which assist translators to undertake translation work (Keegan, 2017).

The turn of the century saw a concerted effort by public and private sectors to provide web resources. Originating from Professor John Moorfield's Māori language to adult learner programmes primarily in universities in New Zealand since the 1980s was born Te Whanake (Māori language teaching) series. Culture Flow was an independent organisation that produced Māori language courses primarily for beginners. At the end of the 1990s, the New Zealand Digital Library Project at the Department of Computer Science at Waikato University made available a digital collation of over 17,700 Māori newspaper pages that are now available online in the Niupepa Collection (Keegan, 2017).

The provision of Māori dictionaries online also accelerated due to the Māori Language Act 1987 and the work of Te Taura Whiri i Te Reo Māori. A subscription-based collection called *Te Wakareo-ā-ipurangi* recognised Māori language dictionaries such as Williams, Ngata and *Te Matatiki* provided an excellent resource for the development of Māori dictionaries online. The sixth edition of William's dictionary, the Ngata dictionary, *Te Aka* a dictionary provided by Te Whanake series previously mentioned, *Te Papakupu o Te Tai Tokerau* and *Te Reo Pūtaiao: A Māori Language Dictionary of Science* are all available online (Keegan, 2017).

Laws, Kilgour, and Watts (2000), English and Māori word translator, *Ngā aho whakamāori-ā-tuhi*, was designed to provide single head-word translations online. This resource provided the functionality to translate between English and Māori, and many of the Māori keywords could be played so that correct pronunciation could be heard. This functionality can now be seen as features in many of the dictionaries identified above.

Although not an online Māori resource, Keegan (2017) highlights a most ambitious Māori language IT project undertaken, the localisation of Microsoft Windows XP and Microsoft Office 2003 into Māori. This project saw the translation of over 900,000 words in 180,000 separate strings. Windows Vista and Office 2007 have subsequently been localised and are available free from Microsoft. This software allows a computer user to interact totally with an operating system and some application software and only ever encounter the Māori language, an essential enhancement to the Māori linguistic landscape that should be recognised.

It was not until 1998 that the significance of Information Technology (IT) which then became ICT was realised at Government level in Aotearoa and the 'Interactive Education', an ICT strategy for schools was released. This document was created as a result of consultation among the education sector and the business community. It led to the establishment of several notable, national-level initiatives, including the establishment of the online resource centre for teachers - Te Kete Ipurangi (TKI), the ICTPD clusters and the recycled computers programme (Wenmoth, 2004).

As a result, the Ministry of Education funded a programme in 1998 to address work-related stress for Māori secondary school teachers, Te Hiringa i te Mahara (THM). A professional development strand evolving within THM focused on the use of digital technologies to support Māori secondary school teachers. The delivery for this strand was via hands-on workshops and audio conference online tutorials (Wylie et al., 2003).

During the second quarter of 2000, Kaupapa Awa Whakawhiti Mātauranga (KAWM) grew from THM with the need to encourage greater sharing of resources and expertise and the use of ICT to address critical education issues, such as ensuring the full secondary curriculum was available to students in *Wharekura* (Secondary component of Kura Kaupapa Māori) and *Paerangi* (Māori Boarding Schools) schools. The KAWM material was delivered via hands-on workshops and video conference online tutorials (Roberts, 2009; Waiti, 2005).

1.2.5 2008 – 2013: Third wave, MOOC phenomenon

The adoption of new technologies and a dedication to online teaching and learning has tended to be at the forefront of tertiary education providers (Taylor, 2001). However, with the advent of mobile devices combined with internet-based audio and video-conferencing technologies and a variety of online teaching and learning tools, providers of online learning have a dilemma of what online tools best fit their students' needs and teaching and learning outcomes; this dilemma is also noted in Aotearoa. In researching the background to tertiary providers in Aotearoa in September 2019, I used Statistics New Zealand to identify the New Zealand tertiary education organisations (TEOs). Eight Universities, four Colleges of Education, 16 Institutes of Technology and Polytechnics (ITPs), three Wānanga, and approximately 400 registered Private Training Establishments (PTEs) are registered. I then visited the 31 Public Tertiary Institutes' websites to find out if the institute offered online courses. All the Public Tertiary Institutes had an online teaching and learning presence.

Of significance to this area of research is the work of Laws et al. (2009), which affirmed educational delivery methods which incorporated a unique online philosophy and methodology called eWānanga. Laws' work corresponded to the international trend of "MOOC" or Massive Open Online Course which was coined in 2008 by Dave Cormier and Bryan Alexander to describe an online course led by George Siemens of Athabasca University and Stephen Downes of the National Research Council. The eWānanga approach was grounded in the Māori language and culture-based knowledge systems with web-based teaching and learning, administration, documentation, tracking and reporting systems.

eWānanga was first introduced into the landscape of Te Whare Wānanga o Awanuiārangi education as part of the delivery of Te Tohu Paetahi Mātauranga Māori Bachelor of Māori Education eWānanga in 2002 (Laws et al., 2009). The eWānanga Centre for Creative Teaching and Learning was established in 2008 by Associate Professor Dr Mark Laws to manage the 'eWānanga LMS', cultivate the 'eWānanga ethos', provide support for all online educators and students, and to undertake new emerging research and development initiatives (Ferguson, 2010).

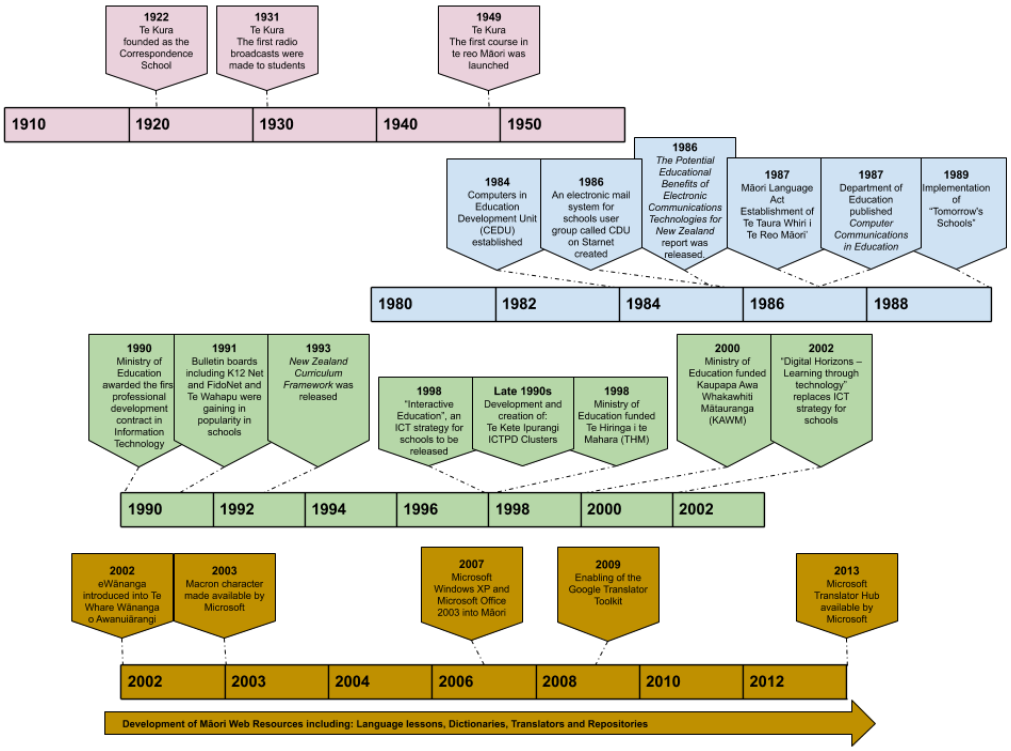

Figure 1. Historical landscape of online teaching and learning in Aotearoa

1.3 Research aim

As illustrated in *Figure 1* above and discussed in the sections above, today's landscape of online teaching and learning environments in Aotearoa has been impacted by international developments, political decisions, teacher and student 'bottom-up' driven initiatives and private sector influences. Māori has had representation on both ministerial and regulatory steering advisories, and Māori have been proactive in the development and delivery of online teaching and

learning professional development, training and digital resources to cater to the unique needs of Māori. Thus, with all this representation from ministerial and regulatory steering advisories, to institutions, teachers and students, I wanted to explore and reflect on how effective these developments in online teaching have been in promoting a te ao Māori perspective. Therefore, my overall aim of this thesis is to examine whether online teaching and learning environments can provide opportunities to create conditions that promote te ao Māori.

1.3.1 Primary question

Thus, my primary research question is:

> *How can online teaching and learning environments provide opportunities to create conditions that promote te ao Māori which encompasses cultural, educational, political and social aspirations that nurture tikanga and enhance a Māori approach to learning while studying online?*

1.3.2 Subsidiary questions

Related to the primary research question are several subsidiary questions. The following question was developed to provide a historical context to Aotearoa:

> *(i) What is the historical landscape of the development of online environments in Aotearoa?*

The following question was developed to articulate the cultural, educational, political and social aspirations of the online environment:

> *(ii) How do current online teaching and learning environments incorporate cultural, educational, political and social aspirations that nurture a Māori approach while studying online?*

The following question was developed with a cohort of students in mind (at the University of Waikato) to investigate pedagogic approaches:

> *(iii) In what ways do the Waikato University's online courses provide pedagogic opportunities to create conditions that promote te ao Māori?*

1.4 Kaupapa Māori theory

This research examined the allying relationships of Waikato University's online teaching and learning space and the capability of this space to encourage te ao Māori worldview, which encompasses cultural, educational, political and social preferences. The *Pākehā* (European New Zealanders) education system dominated the "curriculum, administration, pedagogy, governance, language, values, policy and political aspects" (Smith, 1997, p. 315) of Aotearoa education context. The epistemology of *Kaupapa Māori* (a way of doing things from a Māori worldview) provided Māori educators with a framework to create an online teaching and learning environment that promoted te ao Māori aspirations for Māori, by Māori and with Māori. This research provided an opportunity to underpin the investigation with Kaupapa Māori Theory (Smith, 1997). Kaupapa Māori Theory, being a qualitative approach to research, offered an insight into Māori engagement in an online teaching and learning environment.

Establishing this context serves to introduce some of the motivations, considerations and aspirations of Māori students and their engagement in a tertiary online course. Māori cultural, educational, political and social aspirations are not limited to academic contexts and individual success. Māori desires have much broader implications that impact *whānau* (family), *hapū* (subtribe) and *iwi* (tribe). Therefore, understanding the context of how Māori engage in online environments is critical and relevant to all scholars.

1.4.1 Whakawhanaungatanga

The terms relationship, engagement, and allying emerged in this research, which provided an opportunity to set this research in a Māori methodological framework. This research roots back to an overarching personal quest to

understand the relationships between tikanga Māori, how Māori live and the notion of digital inclusion, which Durie (1998) describes as being global citizens of the world. Focusing on the teacher and student cohort of the *MĀORI570-19A (NET) Te Mahi Rangahau* online paper, this research uses Whakawhanaungatanga metaphorically as the research methodology strategy. Bishop (1991) established in his Master of Arts in Education thesis, an understanding of a whakapapa (the means of building relationships). Bishop (1995) in his Doctor of Philosophy, reconceptualised the metaphoric relationship, what Māori understand to be whakawhanaungatanga into a methodological research framework which I will refer to as Whakawhanaungatanga.

1.4.2 Spiral discourse

Whakawhanaungatanga involves the creation of family-like relationships among the Research Whānau using collaborative storying and restorying, otherwise known as spiral discourse. Bishop and Glynn (1999a) hold fast to the belief that relationships are fundamental to all interactions. Thus, the designing and conducting of interviews centralise around the creation of a feeling of an extended family-like context, ensuring the discussions engender some learning and are continuously evaluated to ensure that all voices are being heard. Bishop and Glynn contend that to support these central practices 'all anti-deficit thinking' needs to be excluded from exchanges. They elaborated by saying that compassionate empathy is nurtured in all conversations and discussion, always taking place within a reciprocal learning context. It must be remembered that researchers are involved somatically, that is physically, ethically, spiritually, and morally, not just concerned with the methodology of the research. These relationship factors include trust, connectedness and commitment, which requires the researcher to become closer to the members of the Research Whānau. A co-joint construction allowed these practices to be carried out and created an environment where shared experiences were reflected upon (this methodological discussion is further expanded upon in *Chapter 3*).

1.5 Ethical considerations

The University of Waikato has various committees charged with ensuring that all research involving human subjects is conducted in a way that fully protects the interests of the research subjects. Members of Te Kāhui Manutāiko (The Research Ethics Committee) of Te Pua Wānanga ki te Ao (The Faculty of Māori and Indigenous Studies) have particular expertise in the ethical requirements of research involving Māori. For this thesis kaupapa, ethical processes were submitted to and approved by Te Kāhui Manutāiko to conduct a personal reflection of experiences as a student enrolled in an online course delivering a Kaupapa Māori themed study to charter my methodological journey in this thesis; conduct spiral discourse with participants of a Kaupapa Māori themed study (Ethics approval documentation is included as *Appendix A: Ethics Approval*).

1.6 Thesis organisation

Chapter Two - Critical Review of Selected Literature provides a foundation of knowledge on the research topic, identifying areas of prior scholarship to prevent duplication and give credit to other researchers. The review will examine the impact of te ao Māori on selected authors, and it will identify Indigenous, Māori and significant literature influencing online teaching and learning in Aotearoa. Finally, the review will identify the limitations of non-Māori literature, which provides grounds for further decolonisation of western practices enforced upon Indigenous people.

Chapter Three - Theory, Methodology, Methods, Research Processes and Ethical Practices explains ontological and epistemological positioning that I hold, and how this position led me to a narrative inquiry research model. It identifies some potential issues confronted when undertaking my research and justifies the selection of specific methods and their suitability for understanding online Māori scholars' beliefs and practices. The Research Process explains the processes in generating data to understand how the connections between Māori scholars and the online teaching environment promote te ao Māori aspirations for these scholars. Finally, I introduce the Research Whānau to the discussion

and describe how I maintained ethical practices during both the data generation and the drafting of the findings as well as explaining how I ensured trustworthiness throughout the research process.

Chapter Four - Research Findings. This chapter presents and discusses the findings of the research by addressing each of the research and subsidiary questions with supporting data. It offers an historical landscape of the development of online teaching and learning in Aotearoa. This is followed by the reporting of the factors that facilitate and hinder optimal conditions that support Māori teachers and learners in an online teaching and learning environment. Next, it presents tikanga Māori practices and ako Māori pedagogies that influence and are the catalyst for the provision of best conditions for Māori teachers and learners to do things. Examples from the findings from each of the three sections above are introduced.

Chapter Five - Discussions and Conclusions. These findings allow discussion that highlighted the conditions promoting te ao Māori which encompasses cultural, political and social aspirations that nurture the way Māori teachers and learners do things within the MĀORI570-19A (NET) Te Mahi Rangahau online paper. The final section provides a summary of the entire research, its limitations, and significant contributions.

Chapter 2

Review of literature on technologies and pedagogies

2.1 Introduction

In this chapter, I review selected literature on technologies and pedagogies to provide an overall context to realise cultural, educational, political and social aspirations in an online environment. The review is presented in seven themes that have been elicited from the literature in this area. It begins with a discussion on the role of quality relationships in an online environment (see *2.2*), followed by sections on teaching and learning relationships (see *2.3*), and the relationship between resources and users of resources (see *2.4*). A discussion on the role of communities, schools and institutional relationships is outlined (see *2.5*), and then a section on the importance of cultural understanding (see *2.6*). There follows a section on pedagogical practices and the role of ako Māori (see *2.7*). Finally, a section on resourcing online environments is presented (see *2.8*).

2.2 Quality relationships

Fostering relationships between effective online teachers and students is a key aspect emerging from reviewed literature (Barbour & Bennett, 2013; Garrison, Anderson, & Archer, 2001; Hoyle, 2010; Lai, 2017; Stroet & Minnaert, 2013; Velasquez, Graham, & Osguthorpe, 2013). At the commencement of the course, online students need to be contacted by their online teacher (Brinthaupt, Fisher, Gardner, Raffo, & Woodward, 2011). These attempts of connection can be made via discussion forums and introductory and weekly videos (Bangert, 2008; Garrison et al., 2001). Bangert (2008) calls this fostering an online "teacher presence". Bailey and Card (2009) argue that effective online teachers show understanding and compassion, and Hoyle (2010, p. 39) maintains that lecturers even need to "go the extra mile and do some hand-holding and advising should it be needed". Relationships between members in the online learning community have been seen as a factor that facilitated engagement and participation for students (Bangert, 2008; Gedera, Williams, & Wright, 2015; Hoyle, 2010; Lai, 2017; O'Hare, 2011). The interactions, both academic and social between fellow

students and the teacher, impact on students' motivation and active participation in an online course. Bangert (2008) highlights that when online facilitators are visible and present, online paper relationships grow stronger with the students. Hoyle (2010) advocates that to foster a sense of caring and understanding the teacher requires to be seen to be doing everything they can do to support the student.

Deci and Ryan (2010) explain that children's love of learning is spurred on by active, curious and eager engagement with their environment. It is, therefore contended that when students are eager and willing to learn, they are intrinsically motivated. Self-determination is concerned with the motivation behind the choices people make. Choices tertiary students make to enrol in online papers may be seen as self-determined, enabling students to attain personal aspirations.

Bishop and Glynn (1999a) emphasise the importance of relationships between teachers and students in traditional classrooms. The Māori term, which is used to describe the social interaction that is experienced in social groups is whanaungatanga. Whanaungatanga places emphasis on healthy relationships amongst members (Mead, 2016). This complexity of relational layers was observed between teachers and students, participants and resources and inter-communities within online teaching and learning environments (Bright, 2015).

Learner-centred teaching and learning practices remain the centre of online pedagogy and with the evolvement of an online teaching and learning environment comes the rethinking of pedagogies needed to embrace this generation of students. Student's motivations and engagement in an online learning environment are impacted by the design of that environment (Campbell, 2004; Gedera et al., 2015; Thiessen & Ambrock, 2004). Forbes (2012) supports this notion when describing a course facilitated in a computer-mediated space and the use of virtual tools that featured in the discussion forums. The ability for students to see and hear each other in real-time created active participation, which enhanced students' motivation and engagement. Also, student's motivation and active involvement in learning activities were impacted by the

building of a feeling of belonging, a sense of community (O'Hare, 2011). The teacher's presence as part of the community was a deliberate strategy employed in the Moodle design of the course. Teacher presence facilitated easy access to learning materials and enhanced fostering a community of learning. Teacher acknowledgements and feedback also seemed to have an impact on students' motivation and active participation in this online course (Gedera et al., 2015).

2.3 Teaching and learning relationships

The intricacies of online teaching are as complex if not more, when engaging students in an on-campus environment. Students may not have met each other or their teacher; visual clues are missing in online discussions; students in different time zones and monitoring individual student learning add to the complexities of online teaching. What is becoming more evident is the motivational desire of students to engage in digital teaching and learning environments (Oga-Baldwin, 2015). There is, therefore, responsibility for institutions to listen to how students wish to engage in their learning and an even bigger responsibility for online teachers and institutional administration to successfully help students navigate the minefield of digital learning.

2.4 Relationships between resources and users of resources

The availability of different kinds of digital technologies has been the catalyst for change in how we gather and process information. This change can be seen with the introduction of various policies and strategies administered in all of the education sectors of Aotearoa (Campbell, 2004; Wenmoth, 2004). For example, through the use of computer technologies, students can access a wide range of information rather than the traditional library hard copy procedures (Campbell, 2004). There has been much debate about whether the design of online teaching and learning environments or digital technologies improves learning (Ally, 2004). Ally argues that the relationship between the student and the information placed on the web becomes a learning experience only when the student follows a sequence of instructions to complete the learning activity.

Further *whakawhanaungatanga* (constructing relationships) between the teacher and student, and resources can be facilitated via the relationship building

between a librarian. The role of the librarian in supporting online teaching and learning environments needs to adapt, and the librarian needs to become a more active member of the teaching and learning process and less the provider of information (Cooper, Dempsey, Menon, & Millson-Martula, 1998). Thus, if the role of the librarian needs to change, attention to the importance of interpersonal relationships between students, teachers and librarians is required. These relationships and the advancement of specialised library information sources and discovery tools encouraged online student library engagement. The engagement challenges faced were ensuring that students and teachers knew about library resources and the need for patience by students and teachers to navigate these resources (Ferrier-Watson, 2015).

2.5 Communities, schools and institutions relationships

Whakawhanaungatanga, quality relations between teachers and students, students and students, between schools within communities, is emphasised as necessary by a handful ofresearchers including Bishop and Berryman (2006) and Tiakiwai and Tiakiwai (2010). Smith (1997) identifies whānau as a primary concept containing values and social processes. From the word, whānau, meaning family in its broadest sense, comes the related words of *whānaunga* (blood relation, kinship ties), whanaungatanga, whakawhanuangatanga and whakapapa. Bishop and Glynn (1999a) discuss the importance of whanaungatanga between teacher and student as found by Waiti (2005) and the KAWM project.

> *From our discussions with the students, it was clear that a successful video conference class relies on an excellent e-teacher, who is able to provide a variety of learning opportunities within the online classroom and with whom the students have a relationship* (Waiti, 2005, p. 56).

> *The KAWM project saw the establishment of cluster groups of schools to encourage greater sharing of resources and expertise and the use of ICT. This relationship was able to ensure the full secondary curriculums availability to students in Wharekura and Paerangi schools* (Roberts, 2009; Waiti, 2005).

Providing opportunities to create relationships and networks for teachers, students, and the wider community was exemplified in the KAWM project. Communities were invited to be involved in the Ngā Manu Kōrero organisation hui by video conferencing. Participation in the Ngā Manu Kōrero competition in 2003 again via video conferencing was encouraged, and the delivery of tautoko waiata delivered from a distance were observed during these sessions (Waiti, 2005)

> *It has helped our kids develop relationships with others. I think it has allowed our students to develop their social skills in a guided way, where we can be less obtrusive.* (Deputy principal)

> *It's nice to speak to other Māori students at other boarding schools.* (Student)

2.6 Cultural understanding

To date, the literature acknowledges the diverse range of student's experiences and knowledge. The wide range of student cultures engaging in online teaching and learning environments is also being recognised, and it is suggested that online courses need to include a variety of tasks broad enough for cultural references, interests and examples. Although there is an acknowledgement of the cultural diversity of participants in online environments the literature provides evidence that online teaching and learning practices need to seek ways to improve opportunities for people from other countries and cultures who have alternative knowledge systems (Earl, 2015).

Much of the attention has focused on the need for online teaching and learning settings to incorporate cultural understanding with a specific example of when there is a need for kanohi ki te kanohi interactions between teachers and students (Waiti, 2005). For Māori students engaging in online environments, creating opportunities to connect and forge relationships was seen as an essential factor in ensuring students did not become isolated from their learning environment (Waiti, 2005). When folding back the complex and interconnected layers of

cultural understanding, we must look at the online teaching and learning space. Literature recognises that colonialiser led reconciliations taking place in society are unavoidable. These attempts of reconciliation marginalise Indigenous people who consider that they are in a safe and emancipated environment (Morcom & Freeman, 2018). The acceptance of the inevitable colonial dominance in online teaching and learning environments is high. Thus, it has been deemed exhausting for people of colour to navigate their way through integrated spaces. Society has assigned roles, and people of colour have had to regularly check themselves to accommodate the values of whiteness in the space (Blackwell, 2018; hooks, 1992; Spivak, 1996).

There is no reason why not to expect this dominance in an online teaching and learning environment and strategies must be sought to keep Māori cultural integrity intact. It is vital to understand the involvement of cultural practices as it is crucial in understanding how ako Māori operates (Pihama, 2017; Pihama, Smith, Taki, & Lee, 2004).

2.7 Pedagogical practices

Here in Aotearoa, the study of online teaching and learning practices by non-Māori is extensive. Led by contemporary scholars such as Wright (2018), Wright and Forbes (2015) and Lai and Smith (2017) to name but a few; with da Rosa Ferrarelli (2015), Hunt and Tickner (2015) and Rose (2018), specifically investigating tertiary online environments. This Aotearoa based research adds to the abundance of research about online teaching and learning from around the world including the work of Barbour and Reeves (2009), Prensky (2003), Salmon (2004) and Kilgour (2006), and in particular the work of Anderson (2004), Anderson and Dron (2011), Siemens, Gašević, and Dawson (2015), Thiessen and Ambrock (2004) who have focused their research on tertiary online environments.

Wylie et al. (2003), Porima (2004), Waiti (2005), and Tiakiwai and Tiakiwai (2010) identified the practices of *ako Māori* (teaching and learning structures and processes), as an essential feature within online teaching and learning. The concept of *ako* is well known amongst Māori academics as detailed by Hemara

(2000), Mead (2003), Nepe (1991), Pihama et al. (2004), Smith (1997) and Smith (2015) when discussing traditional methods of teaching and learning. Smith (1997) articulated that ako Māori is the preferred Māori way of teaching and learning. Ako Māori emphasises the interrelationships of teaching and learning in that the terms 'teaching' and 'learning' are not understood as separate concepts but the same. Ako is 'learn', and ako is 'teach' (Smith, 1997). Ako Māori is a font of structures and processes that when working in harmony creates a space of teaching and learning wellbeing. Pere and Te Kohanga Reo Trust (1994) reveals these structures and processes as ako Māori.

Pere and Te Kohanga Reo Trust (1994) contend that as Māori, we are embraced by *wairua*, our spiritual beliefs. Wairua is a non-physical spirit which resides in us as we live our day to day lives. Unlike the essence of *mauri*, our life principles of inanimate and animate things, wairua remains when we depart this world. Pere's research reminds us of the importance of reciting of whakapapa and items of order. This practice helps us remember that our tūpuna and mokopuna are linked together by bloodlines. She also identifies the practice of *taonga tuku iho*, the sharing of treasures bestowed upon us by our tūpuna as essential structures and processes of ako Māori. The foundational values of *tikanga Māori* (the practices and behaviours of Māori) are significant support structures in the underpinning of ako Māori. The appreciation of *mana* (supernatural influences, prestige, power, status) and the practising of *noa* (neutrality), the returning of balance within everyday life and rituals is fostered. Tikanga Māori, rules, plans, customs and methods including the observations of the role of whanaungatanga, kinship ties, obligation and loyalty, ceremonial mourning, tangi, protection, social control and ceremonial restrictions are practised. Pere also identifies the performing of *hui* (a formal Māori gathering), the consumption of kai and the processes of *hakari* (a feast which follows a funeral ceremony or marks another important occasion) and entertainment as structures and processes of ako Māori. Pere also points out the significance of whenua and the place we have on it, including *papakāinga* (the territory in which we stand). These particular processes encompass the practice of socio-economic intervention, identifying ways to relate to our environment, ensuring the sustainability of *Papatūānuku*

(Mother Earth, the land). Finally, Pere affirms that these structures and processes are glued together with the speaking of te reo Māori. The language is a carrier of these structures and processes.

There is a need for teachers teaching in online environments to gain insights into online pedagogy. The literature emphasised the fact that ako Māori practices did not necessarily translate into the need to develop models of successful practice in online pedagogy. A successful component of the Paerangi schools and students participating in the KAWM project was the combination of both synchronous and asynchronous communication technologies. This combination has allowed a learner-centred pedagogy to sit alongside the teacher-centred pedagogy (Waiti, 2005). Training and professional development have been emphasised to ensure that teachers of online programmes understand and learn about the pedagogy of online learning and other online technologies (Tiakiwai & Tiakiwai, 2010). These key aspects explicitly link developments of new thinking about curriculum design and pedagogy. Education organisations need to recognise and respond to the opportunities that online teaching and learning present for new approaches to curriculum and pedagogy.

Reciprocity is at the forefront of the ako Māori. In kaupapa Māori settings, the shifting roles of student and teacher can be better understood in an ako Māori context, exemplified in a tuakana/teina type relationship. While generally referring to relationships and responsibilities between younger and older siblings, the notion and application of tuakana/teina in kaupapa Māori education settings acknowledges the reversal of these relationships, “the complexities and interconnectedness” of which are “key to understanding the way in which ako operates” (Pihama et al., 2004).

Whakawhanaungatanga is a pedagogic element in the font of ako Māori. Whakawhanaungatanga is the ako of constructing relationships between people and between students' cultural knowledge (Glynn, Cowie, Otrel-Cass, & Macfarlane, 2010). Supporting this statement is the work carried out by Porima (2004), where he articulates that critical success factors for Māori learners in

online teaching and learning environments are derived from the implementation of tikanga Māori. Porima (2004) furthers this conversation by stressing the importance of being able to incorporate Māori cultural concepts into online teaching and learning environments.

A further illustration exemplifying the practice of ako Māori draws attention to the concept of collaboration. Participants in the THM project practised reciprocal learning in their online teaching and learning environments. While this might be viewed as a shift in the non-Māori student/teacher relationship, in kaupapa Māori settings, such shifts are considered a usual part of cultural teaching and learning practice (Wylie et al., 2003). One teacher noted that:

> *It's the tuakana/teina thing but the other way around, the rangatahi are helping us pakeke.* (Teacher)

Ferguson (2012) located her development of e-Aorangi e-Education Model within the context of Te Whare Wananga o Awanuiārangi in Whakatāne, Aotearoa alongside online students and teachers of the wānanga. Ferguson explains that spiritual awareness and the use of cultural stories reveal Indigenous existence to the rest of the world. Cultural needs, values and beliefs are depicted in her graphic representations of the e-Aorangi e-Education Model, including structures of Wairuatanga*,* *Kanohi kitea* (face to face), *Whakamana* (empowerment)*,* te reo Māori*,* Manaakitanga*, Tautoko* (endorse, support) and *Mana Motuhake* (respect for specialness, the right or condition of self-governance). This model further exemplifies the impact of te ao Māori in the preferred online ako Māori within an online teaching and learning environment.

Wylie et al. (2003), Porima (2004), Waiti (2005), and Tiakiwai and Tiakiwai (2010) identified the practices of ako Māori within online teaching and learning research they conducted. These authors provide us with the following exemplars of te ako Māori practices and its impact on Māori studying in an online environment. *Tino Rangatiratanga* (political control by Maori people over Maori affairs) was seen to empower participants in the ICT Professional

Development Programme in the THM project. It was noted by people taking part, not only self-worth was sustained, but as a mechanism, the programme maintained and grew the stature of Māori in the eyes of other Māori and non-Māori. Cultural aspirations of tino rangatiratanga can be heard in these comments by teachers:

> *Having ICT has given me some empowerment. And no longer is the Māori department seen as a koretake. It's given us mana* (Wylie et al., 2003)

> *The kids see me as a role model. They say here's miss who can do this. It gets the kids out of the idea that all Māori teachers only teach te reo Māori* (Wylie et al., 2003)

Whanaungatanga was a practice that helped facilitate engagement by seventy-eight percent of THM respondents. These THM participants said that they used their laptop and ICT skills with whānau, hapū, iwi and the wider community. Much use was made of ICT skills in managing meetings. Some of the participants commented on how their use of ICT skills allowed them to talk about their ICT training to members of their whānau. They were able to point out the value of the THM programme to themselves professionally and personally and also pointed out the importance of learning these skills as an essential set of skills to have as whānau members (Wylie et al., 2003).

A combination of online teaching and learning and face-to-face learning is termed blended learning. However, Sharpe, Benfield, Roberts, and Francis (2006), observed three ways in which institutions use the term blended learning. First, and most predominantly, the provision of supplementary resources is shared through online environments. Second, but far fewer, the use of technology to facilitate interaction and communication and to replace other modes of teaching and learning. Third, individual differences between individual interactions with technology create opportunities for online teaching and learning. Māori researchers also maintain that cultural awareness of Māori students' needs to meet, kanohi ki te kanohi, is a vital element encouraging

engagement in an online teaching and learning environment (Ferguson, 2012; Porima, 2004; Tiakiwai & Tiakiwai, 2010; Waiti, 2005; Wylie et al., 2003). Flipped Classroom learning provides a delivery method that offers face-to-face learning and online teaching and learning. Flipped learning is when the delivery method in traditional learning is reversed. Traditional delivery of learning is reading, watching, and absorbing learning material in class, and being tasked with work to complete at home. Reading, watching and interacting with learning materials, and completing homework could define traditional delivery of learning. A flipped learning classroom provides audio or video lessons for the student to complete at home. Teachers guide students to investigate conceptual themes while in class times. Supporting flipped learning is an online discussion forum that allows students and teachers to discuss their findings (Lai, 2017).

E-Aorangi: An indigenous model for e-Education is a significant piece of research as the study outlines some of the key indicators for the successful transfer of ako Māori from the conventional to an online teaching and learning environment (Ferguson, 2012). The key indicators included many if not all the structures and processes of ako Māori revealed by (Pere & Te Kohanga Reo Trust, 1994). Ferguson identified the practices of kanohi kitea, whakamanawa, wairuatanga, te reo Māori, manaakitanga, tautoko and mana motuhake as critical elements for Māori e-Education. She also commented that women were returning to study, which revealed that whānau members were affected when mothers and wives return to tertiary study in conventional and non-conventional learning contexts. This flexibility encourages autonomy and agency in learning. A challenge with this style of learning is the creation of unrealistic expectations such as assignment deadlines. Time management structures need to be in place to support learners with poor time management skills (Lai, 2017).

It is hoped that through the combination of blended learning, learner-centred teaching practices within these online environments are still identified (Campbell, 2004). The development of positive teacher-student relationships can lead to learner-centred practices, leading to learner motivation and engagement. These learner-centred practices require a supportive online learning

environment which requires effective pedagogical practices (Lai, 2017). Lai identifies the following practices to support this position (Lai, 2017, pp. 327-331).

(i) Motivating students by providing choices

Online learning offers an opportunity for learners to choose where and when they learn. This flexibility encourages autonomy and agency in learning. A challenge with this style of learning is the creation of unrealistic expectations such as assignment deadlines. Time management structures need to be in place to support learners with poor time management skills.

(ii) Flipped learning to increase student involvement

Flipped Classroom learning is when the delivery method in traditional learning is reversed. Traditional delivery of learning is reading, watching, and absorbing learning material in class, and being tasked with work to complete at home. A flipped learning classroom provides audio or video lessons for the student to complete at home. Teachers guide students to investigate conceptual themes while in class times. Supporting flipped learning is an online discussion forum that allows students and teachers to discuss their findings.

(iii) Developing learner agency and community

Creating online knowledge-building communities, a model developed by Scardamalia and Bereiter (2006) aims to enhance learner agency, collaboration, and build knowledge-creating capability. Lai and Campbell (2018) have shown that this model is a successful template to facilitate learning and knowledge building.

(iv) Providing academic support

Lai (2017) contends that online students needed more academic support than their on-site students. Communication technologies can be used to facilitate academic support for students alleviating the difficulty of developing a closer personal relationship between the teachers and students because of

physical distance. This communication strategy has been recognised in importance when developing a class community and to support academic development.

(v) Developing a teacher-student relationship

Student online learning needs can be met with teachers practising effective pedagogies. Positive relationships developed between teacher and student has been seen to foster learner motivation and engagement. With the rapid growth of online teaching and learning around the world, research is limited to online pedagogical practices and teacher-student relationships, which provides an opportunity for further investigation.

2.8 Resourcing online environments

Over the last four decades, the development of teaching and learning resources to support traditional kaupapa Māori classroom environments have emerged. However, there is a lack of access to appropriate resources for kaupapa Māori online teaching and learning environments (Waiti (2005). Teachers in these environments have had to develop or translate resources to ensure the resources suitability in online teaching and learning (Waiti (2005).

From a students' perspective, an online teaching and learning environment provided more flexible learning opportunities and promoted greater Māori student engagement. A compelling finding highlighted in the literature pointed out the need for the designers of online teaching and learning environments to remain focused on whom the tools are designed for and not to get disconnected from the teachers and learners because of pressures forced open them by the large organisations for whom they work (Tiakiwai & Tiakiwai, 2010).

The availability of different kinds of digital technologies has been the catalyst for change in how we gather and process information. This change can be seen with the introduction of various policies and strategies administered in all of the education sectors of Aotearoa (Campbell, 2004; Wenmoth, 2004). For example, through the use of computer technologies, students can access a wide range of

information rather than the traditional library hard copy procedures (Campbell, 2004). There has been much debate about whether the design of online teaching and learning environments or digital technologies improves learning (Ally, 2004). Ally concludes that the relationship between the student and the information placed on the web becomes a learning experience only when the student follows a sequence of instructions to complete the learning activity.

The development of an ideal online teaching and learning environment would have to start from scratch, have no cost restrictions and limited resistance to change, but in reality, limited resources, the transitioning of key teachers into an online teaching, institutional policies and administration systems are just a few of the establishment barriers of an online teaching and learning environment. However, the importance to align investments with infrastructural variables is essential considerations (Davis, 2008; Morris, Xu, & Finnegan, 2005; Wenmoth, Britain, & Tame, 2015). A final underlying message from the literature is that both student and teacher not only need to know how to use these digital tools but also need to address both the when and why different digital tools can be used effectively.

2.9 Summary

This chapter reviews highlighted important factors in relation to technologies and pedagogies and how Māori goals can be realised in terms of its cultural, educational, political and social aspirations in an online environment. From the seven themes presented in this chapter, four themes have stood out in terms of how Māori might approach online teaching and learning technologies.

Quality relationships

Bishop and Glynn (1999b) emphasise the importance of relationships between teachers and students in traditional classrooms. The Māori term, which is used to describe the social interaction that is experienced in social groups is whanaungatanga. Whanaungatanga places emphasis on healthy relationships amongst members (Mead, 2016). Reviewed literature also shows up similar findings for party members in online teaching and learning environments. The

complexity of relational layers was observed between teachers and students, participants and resources, and inter-communities within online teaching and learning environments (Bright, 2015).

Cultural understanding

Te ao Māori is a Māori worldview. Te ao Māori provides a lens for Māori to look at the world, to look at how Māori think and operate in that world, to look at why things in that world happen and the way they do happen and is where individual Māori perceive their purpose in this world. This worldview not only relates to Māori and terrestrial relationships but also refers to Māori and intrinsic celestial relationships (Smith, Whatahoro, Pohuhu, & Matorohanga, 1978). Marsden and Royal (2003) also support this notion and remind us that Māori worldviews are complex and sophisticated, generated from years gone by but yet still very appropriate for us today. Understanding this cultural perspective is essential when working with Māori teachers and learners within online teaching and learning environments.

Pedagogical practices

The emerging theme from identified pedagogy is child-centred learning and relationships. Structures and processes are set in place so that child-centred learning and relationships can take place within an online teaching and learning environment. The literature supports the need for professional development for online facilitators to ensure understanding and to learn about the pedagogy of online learning and other online technologies (Lai, 2017; Tiakiwai & Tiakiwai, 2010). It is also pointed out that with the rapid growth of online teaching and learning around the world, research is limited to online pedagogical practices and teacher-student relationships, which provides an opportunity for further investigation.

Resourcing online environment

A key area identified suggests the importance of the online teaching and learning environment. Pere and Te Kohanga Reo Trust (1994) distinguishes eighteen structures and processes of ako Māori, which has been identified as the preferred pedagogy by Māori (Smith, 1997). The THM and KAWM projects have

provided examples where a number, but not all of Pere's structures and processes have been observed in online teaching and learning experiences (Waiti, 2005; Wylie et al., 2003).

Waiti (2005) pointed out the importance of the robustness of the infrastructure that supports the online teaching and learning environment. Unreliable data connections were an example of an inhibitor to active engagement for Māori teachers and learners. Wenmoth et al. (2015) supports this frustration when he emphasises the importance to align investments in ICT infrastructure to maximise the benefits of fibre connections.

The next chapter discusses the research theory, methodology and methods used in this study and the reasons for choosing this research methodology.

Chapter 3

Theory, methodology, method, processes and ethical practices

3.1 Introduction

In this chapter, I explain the ontological and epistemological positioning that I hold and how this position led me to a narrative inquiry research model. I first outline the knowledge system in which this research is based (see *3.2-3.4*), followed by a discussion regarding the theory (see *3.5*), methodology (see *3.6*) and method (see *3.7*) used to undertake this research. There follows a section on the processes (see *3.8*) and a section on maintaining ethical practices and trustworthiness (see *3.9*). Finally, a section on the research whānau is presented (see *3.10*).

3.2 Mātauranga Māori

Contemporary conversations of *mātauranga Māori* (Māori knowledge) started to occur around the 1970s. The late Eruera Stirling of Te Whānau-a-Apanui stated in an interview with Anne Salmond that mātauranga Māori is a blessing on the mind and mātauranga Māori makes everything clear and guides individuals to do the right thing (Stirling & Salmond, 1985). Stirling and Salmond's conversations reflected on the colonial system of knowledge and Stirling's appreciation of mātauranga Māori, the system of Māori knowledge.

Before this time and specifically between the years 1947 and 1958 the term mātauranga Māori was not included in the 1957 Williams Dictionary revised fifth edition alongside the root word of *mātau* - to know, to be acquainted with, to be sure of. Even though an esteemed and scholarly group assembled as a review committee for the dictionary including Sir Apirana Ngata, M. R. Jones, William Cooper, Pei Te Hurinui Jones, Canon T. Kaa, Canon P. Temuere, Bruce Biggs and after Sir Apirana's death, his son W. T. Ngata, all eminent academics and exponents of te reo Māori and Pākehā, they did not consider the term mātauranga warranting inclusion in the dictionary.

It is well recorded of what has occurred to Māori culture and mātauranga Māori under the suppression of colonialism, and as an example, I mention the following statements and conclusions from the Waitangi Tribunal Report *Ko Aotearoa Tēnei.*

> *The state system allowed for little or no accommodation of tribal narratives, whakapapa, concepts such as kaitiakitanga (guardianship) and included Māori language itself.* (Waitangi Tribunal, 2011)

> *…the State damaged mātauranga Māori and its traditional system of transmission, and it did so intentionally. That was the policy of government education for a significant period* (Waitangi Tribunal, 2011, p. 559)

However, again as the Waitangi Tribunal (2011) detailed, no matter how hard successive governments had tried to persuade Māori to abandon their culture and their way of thinking, mātauranga Māori stubbornly would not die.

Mead (2016) contends that mātauranga Māori is not just a repository of knowledge but is looked upon by Māori as a set of tools for thinking, organising information, ethical protocols of how we take care of knowledge and an understanding of our place in mātauranga Māori. Mead continues to explain that mātauranga Māori constitutes a knowledge that helps Māori people feel comfortable within all things Māori and enables Māori to interact with others. It is a knowledge of Māori heritage and is passed on by elders to their mokopuna. Durie (2017) maintains that mātauranga Māori is always evolving and is an underlying body of knowledge that can guide practice and understanding. Durie continues by saying that mātauranga Māori is sometimes seen as ancient, trapped in a time warp, static, and scarcely relevant to modern times. However, Durie and Mead both argue that mātauranga Māori comes with people and new mātauranga Māori comes from people piecing together and placing knowledge in new places which enables the embracing of new technologies and information to make sense of the changing world. Students of mātauranga Māori should

develop an awareness that knowledge is always changing. While the values underpinning the knowledge base might be derived from ancient learnings, knowledge nonetheless changes. If it were static, as Durie contends mātauranga Māori would have diminished relevance for today. Durie reminds us of the dynamic nature of mātauranga Māori and prompts us to remember that,

> *…in ancient times, mātauranga Māori was, of necessity, an evolving form of knowledge that enabled people to survive and to live well in a changing environment - from sub-tropical living to coping with more temperate climates. Mātauranga evolved with the environmental shift and with the social development that subsequently occurred. Merely learning about 'things Māori' is not the same as being guided by an evolving knowledge system called mātauranga Māori* (Durie, 2017, p. 16).

The importance of how mātauranga Māori is taught is of significance, and this importance is highlighted in the recorded teachings of the Tohunga Whatahoro by Smith et al. (1978) in the book "The Lore of the Whare-wānanga, or, Teachings of the Māori College on Religion, Cosmogony and History". Smith et al. (1978) described how the learning was held in high esteem, and the art of teaching was taken very seriously. The importance of teaching and learning mātauranga Māori was emphasised by surrounding it with rituals, by placing the institute under *tapu*, (a state of being, set apart, power potential) therefore being under the protection of the *Atua* (Gods). Grande (2014) support this description of mātauranga Māori when they assert that ontology pays attention to the assumptions about how a researcher understands and views the world. Our onomastics advantage us as Māori, and for this research, mātauranga Māori is viewed as the ontological research philosophy, a study of what exists.

3.3 Tikanga Māori and kawa

Tikanga Māori and Kawa describes best customary, culturally proper or appropriate practices and behaviours. These practices are derived from mātauranga Māori. Practices of tikanga Māori can be viewed through multiple lenses. For example, tikanga Māori as a means of social control or ethical perceptions, tikanga Māori used when seeking to explore a normative system or

making use of mātauranga Māori while finding a practical solution to support the correct way of doing something. Standard practices such as procedures practised at birth, and when the circle of life is completed, the ritual practices of tangi are further examples of tikanga Māori. These practices of lore tend to be generic protocols practised by all Māori in Aotearoa. However, when these protocols cannot be practised, for whatever reason, the practice of kawa is put into place. An example of this is the tikanga of removing shoes before entering a wharenui. In some areas when it is very cold, kawa provides the opportunity to leave shoes on when entering a wharenui as this kawa helps to keep feet warm.

Mead (2016) asserts that tikanga Māori can be viewed from various perspectives. If it was to be viewed through the lens of a means of social control, then tikanga Māori controls interpersonal relationships, provides ways for groups to meet and interact, and helps determine how individuals identify themselves. Ceremonies relating to life itself, birth, marriage, sickness and death, are firmly embedded in tikanga Māori. If viewing tikanga Māori from ethics, or philosophical perspective, then the word tikanga itself provides a clue that tikanga Māori deals with right and wrong. ‘Tika’ means ‘to be right’ and thus, tikanga Māori focuses on the correct way of doing something. If viewing tikanga Māori as a normative system, then we take into account moral judgements when deciding the correct way of doing something. Lawyers view tikanga Māori as customary law, a set of rules prescribed by an authority recognised as binding by all members. Finally, through the lens of an economist, we may see tikanga Māori practices characterised in rehabilitation programmes where re-education based on tikanga Māori customs re-assimilated participants who wished to join.

3.4 Māori theory, methodology and method

This review looks at how Māori have been instrumental in the development and the sharing of Māori ontology and epistemology. Literature is then examined to investigate how Māori scholars have demonstrated how Māori ontology and epistemology can be put into practice. Finally, I investigate how Māori have located their research in Māori ontology and epistemology.

Te ao Māori is the lens through which Māori people view their world. Mātauranga Māori is a system from which Māori draw knowledge that creates the fabric of that world view and tikanga Māori is the organisational structure that frames the way Māori do things. It was these cultural values and beliefs that European industrialised countries initiated colonisation on. Western ideologies affirmed that they were the holders of 'civilised' knowledge and actively opposed different belief systems and have no methodologies of dealing with other knowledge systems. These problems of colonial imperialism seeded when Abel Tasman, although he did not land in Aotearoa, renamed the country. These issues were exacerbated when James Cook arrived on a scientific journey of exploration. With Cook came botanists, astrologists and other scientists who were surrounded and deeply influenced by imperial knowledge, and who cast their perceptions of Aotearoa in their writings. These problems of colonial imperialism were worsened as European settlers became the magistrates, land commission officials and so-called experts of their fields. Further contemporary reminders that imperial colonisation is still alive and healthy in Aotearoa have been observed in these illustrations (Smith, 2012). Smith expands further by saying that the statement 'a Māori problem' is used by the system when linking situations of violence, policing and drugs. Research and problem are so closely linked in a research context. This narrative of imperial cultural, educational, political and social injustices endorses the determination to continue to carry the voice of unfairness bestowed upon Māori to tell a story that will generate change for the betterment of Māori and Indigenous people (Smith, 2012).

3.5 Kaupapa Māori theory

"Kaupapa Māori theory is not so much a set of principles but a space where Māori can work in ways free of dominant cultural pressures and constraints"
(Smith, 2017, p. 70).

Kaupapa Māori has grown out of battles against Western philosophies, specifically the battle between Mātauranga Māori, Māori knowledge and the colonial knowledge system. Kaupapa Māori validates Māori knowledge, language and culture, and supports cultural values, practices, and pedagogies, including the regeneration of the extended family values and practices. Kaupapa

Māori created buy-in by Māori communities developing a shared vision. Kaupapa Māori also provided a platform to critically understand the tensions imposed by colonisation and then to position oneself to create social, cultural and economic change intentionally.

This research examines relationships between Māori and the promotion of their te ao Māori aspirations while studying in an online teaching and learning environment. These relationships will be understood through the lens of Kaupapa Māori as the relationships will be realised as lived experiences applied as culturally informed practices. Therefore, underpinning this research is a Kaupapa Māori theoretical stance that lives within Māori scholars and will guide the scholars through their journey while teaching and learning in an online environment.

Kaupapa Māori provides a space for Māori to "grow their self-development and transforming ideas and actions." (Smith, 2017, p. 70). Smith identified key principles that motivated Māori parents to seek alternative education options for their children. These principles are now fundamental to Kaupapa Māori research (Thayer-Bacon, 2005). The key principles are

1. Tino Rangatiratanga - The Principle of Self-Determination
2. Whānau - The Principle of Extended Family
3. Ako Māori - The Principle of Culturally Preferred Pedagogy

3.5.1 Tino rangatiratanga - the principle of self-determination

Kaupapa Māori theory has come from Māori seeking self-determination, tino rangatiratanga. Bishop (2003) described self-determination as the right to determine one's destiny, to define what destiny will be and to establish a means of destiny with others. This research seeks to discover what self-determining theories and actions Māori scholars make use of while studying in the Pākehā concept of an online teaching and learning environment. This research sits comfortably within a Kaupapa Māori praxis as the self-determining dialectic discourse between the Māori scholar and the online environment transforming into online teaching and learning practices (Smith, 1997).

3.5.2 Whānau - the principle of extended family

Extended family structure is a primary concept of Kaupapa Māori theory containing values and social processes. Whānau means family in its broadest sense. From the word whānau, comes other related words, including whanaunga, whanaungatanga, whakawhanuangatanga and whakapapa. The metaphorical use of the term whānau has come to refer to a collective of people working for a common end not just those of kinship or descent, but act as if they were (Bishop, 2003, 2011). This research seeks to define the relationships between the collective group of Māori scholars and an online teaching and learning environment. Whakawhanaungatanga arises through the praxis of co-joint and co-produced storying, which recognises the relationships that Māori have to one another and the world around them.

3.5.3 Ako Māori - the principle of culturally preferred pedagogy

Ako Māori is culturally inherent and will be used as the term to describe the preferred Māori way of teaching and learning (Smith, 1997). Metge (1984) pointed out that a Māori world view of ‘teaching’ and ‘learning’ are perceived as being the same. Developing this notion, Metge asserts that the term ‘teaching’ is ‘ako’ and the term ‘learning’ is ‘ako’. Ako Māori is therefore significantly different from the Pākehā notion that ‘teaching’ and ‘learning’ are distinctly separate items and activities. This research seeks to identify whether ako Māori opportunities are presented in online teaching and learning environment.

Grown from Te Ao Māori, a worldview, Kaupapa Māori theory satisfies the rigours of research and embraces the Māori researcher in a culturally safe and nurturing place. Key principles concluding the foundations of Kaupapa Māori theory (Smith, 1997) that will embrace this research are outlined here:

4. Taonga Tuku Iho - The validity and legitimacy of all things Māori, cultural aspirations

5. Kia piki ake i ngā raruraru o te kainga - Collective cultural structures and practices of whānau embrace Māori within their socio-economic circumstances.
6. The Kaupapa - Shared collective vision, aspirations and purposes of Māori communities.

3.5.4 Taonga tuku iho - the principle of cultural aspiration

Taonga Tuku Iho means the treasures from our ancestors. Kaupapa Māori theory provides a culturally defined space that sees Māori language, knowledge, culture and values as normal, valid and legitimate, and indeed are authentic guides to interactions (Bishop, 2003, 2011; Smith, 1997). In the case of this research, Kaupapa Māori theory provides a space where Māori scholars can be themselves when discussing their experiences in an online teaching and learning environment. The Principle of Cultural Aspiration delivers a guide to relationships and interactions such as manaakitanga, kaitiakitanga and *mana motuhake* (respect for specialness). The respect for *mana* (power/status) and *tapu* (power potential) is shown in the way Māori live and interact. Taonga Tuku Iho asserts the validity and legitimacy of all things Māori, registering a set of principles which allow Māori to live and interact with each other (Bishop & Glynn, 1999a). The implication for this research is the provision of a context a researcher can craft where Māori is normalised.

3.5.5 Kia piki ake i ngā raruraru o te kainga - the principle of socio-economic mediation

Kia piki ake i ngā raruraru o te kainga - The Principle of Socio-Economic Mediation. Participation in my research will bring Kaupapa Māori theory into the homes of participants and Māori communities. This research implies that families will interact to make things work and things are resolved by collective action.

3.5.6 Kaupapa - the principle of collective philosophy

Kaupapa refers to the collective vision, aspiration and purpose of Māori communities (Smith, 1997). The implication for this research is that the collective nature of this research brings Māori scholars together through a shared

and collective kaupapa involving the meeting of aspirations within an online teaching and learning environment.

3.6 Whakawhanaungatanga methodology

Driven by a personal quest to understand the term ‘global citizens of the world’ (Durie, 1998), I investigate the relationships between tikanga Māori and the notion of digital inclusion. These relationships provide an opportunity to set this research in a Māori methodological framework. This framework is underpinned by the works of Bishop (1991, 1995) where he developed what Māori understands to be whakawhanaungatanga.

Whakawhanaungatanga involves the creation of family-like relationships among the research group and using collaborative storying and restorying, otherwise known as spiral discourse. Bishop and Glynn (1999a) hold fast to the belief that relationships are fundamental to all interactions. So, the designing of interviews centralises around the creation of a feeling of an extended family-like context, ensuring the discussions engender some learning and continuously evaluate to ensure that the other voice is being heard. Bishop and Glynn contend that all anti-deficit thinking needs to be excluded from exchanges, compassionate empathy is nurtured in all conversations, and that discussion always is within a reciprocal learning context. It must be remembered that researchers are involved somatically, that is physically, ethically, spiritually, and morally, not just concerned with the methodology of the research. These factors include trust, connectedness and commitment, which requires the researcher to become closer to the members of the research group. A co-joint construct will allow these practices to be carried out and create an environment where reflections of shared experiences will occur.

3.7 Spiral discourse

Whanaungatanga provides a culturally located platform for this process of collaborative storying to take place. Storying or pūrākau, as Lee (2009) contends is not just a category of fiction and fables from the past. Pūrākau is a traditional form of Māori narrative, containing philosophical thought, epistemological constructs, cultural codes, and worldviews that are fundamental to our identity

as Māori. Bishop (1995) builds spiral discourse from grounded theory and describes the provision of opportunities for the collaborative creation of knowledge and joint interpretation of data, at the same time as ensuring that the participants' stories are authentically represented. Within such an approach, the researcher no longer determines the research process or interprets the data independent of other whānau of interest. Instead, they work collaboratively with other research participants. Again, as discussed in an early section of this chapter, members of the whānau of interest and the researcher are involved somatically in the research rather than as just a researcher concerned with the methodology or with extracting relevant information from respondents (Bishop & Glynn, 1999a).

The stories that follow demonstrate a Māori cultural means of problem-solving, in these cases addressing the need for systemic change in action. The process in which this is done can be described as spiral discourse, where over a period of time the research process involves bringing together those people who can address the concerns of the kaupapa under discussion. Robinson (1993) and Gibson (1985) express their concerns over their observation of the powerful attempting to effect systemic change and argue that spiral discourse addresses these concerns. The selection of the term spiral or koru (Bishop, 1995) not only locates the imagery in Māori cultural preferred terms but provides a metaphor for the accrual of the story, a process of reflexive storying and re-storying always returning to where the control lies, in this research, the whānau of interest. Like the unfurling of the koru fronds so is spiral discourse described as continually coming back on itself, yet at the same time moving forward. The process of spiral discourse invoked in the metaphorical processes of whakawhanaungatanga builds relationships in a cultural manner and ensures that the interests and concerns of the research participants are addressed rather than just those of the researcher.

The development of a whānau of interest by the process of spiral discourse conducted by means of invoking, metaphorically, the processes of whakawhanaungatanga that is establishing relationships in a Māori culturally

constituted manner, describes how participants drove the research and how reference was constantly made to the kaupapa as defined in terms of the interests, concerns and methods of the research participants, rather than just those of the researcher. In addition, the membership of these whānau of interest was inclusive of all people inextricably involved in the outcomes, whether they were positive or negative to the agenda, whether they were identified as 'powerful' or 'powerless'.

3.8 Research processes

This research aims to find out whether an online teaching and learning environment provides opportunities to create conditions that promote te ao Māori, which encompasses cultural, educational, political and social aspirations that nurture tikanga Māori. My future goal is to use my thesis to uncover ways of supporting teachers and learners studying in an online environment. The following sections provide details about the research process, as illustrated in *Figure 2*, including details about the selection of the case study site, the participants and the process of generating data to answer my questions.

3.8.1 Selection of research whānau

To find out whether an online teaching and learning environment provides opportunities that promote Māori aspirations the student cohort and their lead academic from the *MĀORI570-19A (NET) Te Mahi Rangahau: Māori, Pacific and Indigenous Research* graduate course were invited to participate in this research. A small number of names have been assigned to research participants, including Bishop (1991) whānau of interest. However, for the purpose of this research, I will characterise research participants as the ‘Research Whānau’ (Berryman, 2008). Being enrolled and teaching, learning and socialising during the period of MĀORI570-19A (NET) course created a metaphoric whānau of like-mindedness for this Research Whānau.

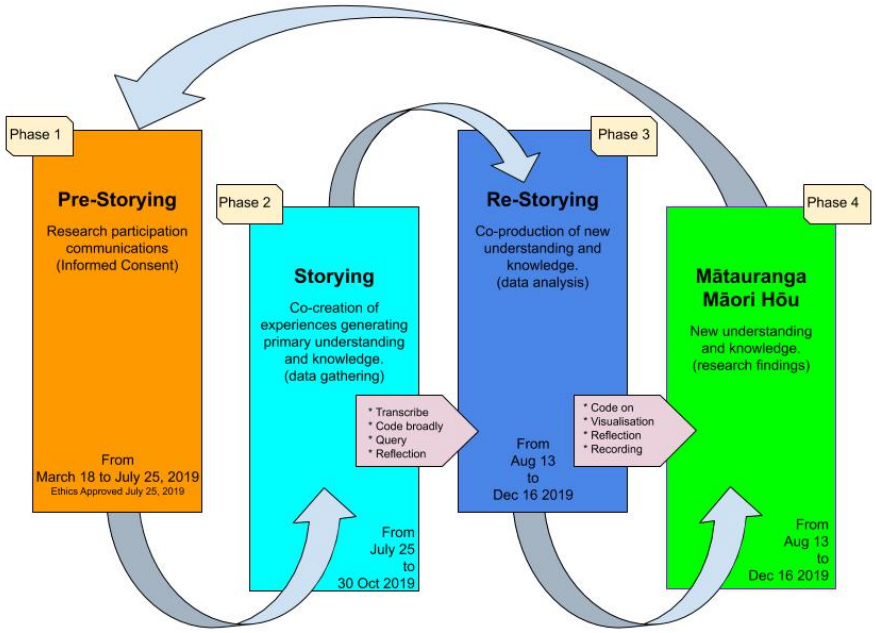

Figure 2. Research process

3.8.2 Phase 1: Pre-storying

As the research was seated in the methodology of whakawhanaungatanga, pre-interview communications provided the opportunity to get to know each other better, forging a stronger whānau-like relationship. Cultural values and Kaupapa Māori Theory key principles were adhered too, to assist in the formation of the whānau-like relationship (Cram, 2009; Creswell, 2012; Smith, 1997; Smith, 2012). This pre-storying methodology included:

1. Research Whānau were given up to two months to think about the research before they signed the informed consent form agreeing to participate in the research.
2. Research Whānau were informed of the purpose, nature, and the likely impact the research may have on them.
3. Research Whānau were informed of the procedures and what was expected of them and from the researcher during the research process.

4. Research Whānau were advised that they were allowed to ask questions and speak freely through the process of the research method of gathering information - spiral discourse.
5. Research Whānau were informed that they would receive a copy of their conversations and have their privacy respected.
6. Research Whānau were informed that their conversations were only going to be used for this thesis and any future conference presentations and academic publications.
7. Research Whānau were informed that the information collected would be kept in GoogleDrive and were to be accessed only by my supervisors and myself.
8. Research Whānau were informed that their actual names could be masked, and pseudonym selected however decided not to remain autonomous in the thesis write up and during informal conversations.

3.8.3 Phase 2: Storying

The narratives that form the basis of this collaborative story were drawn from up to three one hour recorded online video conference interviews that took place from 25th July 2019 through to 30 October 2019 and from a series of follow-up 'interviews as conversation' (Bishop, 1997) from 13th August 2019 through to the 16th December 2019. The video conferencing technologies used to record online interviews was Skype. Skype is a remote conferencing option which offers communications software that combines video conferencing, online meetings, chat, and mobile collaboration. As emphasised in the Research Information Sheet (see *Appendix B*), participation in the research was voluntary, and the construct of the interview groups were small groups of two Research Whānau or individuals created through choice and circumstance.

These interviews were supported with instant messages, emails and text chats, providing further background information of the research and organisational direction for the interviews. The conversations were semi-structured to allow for the ability to co-create stories of teaching and learning experiences around the broad themes of cultural, educational, political and social aspirations that guided and motivated us during our time enrolled in the graduate course.

3.8.4 Phase 3: Re-storying

Hui kōrero were transcribed, and broad themes were drafted, and a selection of text from the transcript was coded to the themes. Research Whānau were invited to participate in a second online video session where further collaborative "meaning-making" discussions from our first hui were drawn (Kegan, 1982). The Research Whānau started to analyse, process and theorise about these experiences, which provided the opportunity to co-produce understandings and knowledge.

3.8.5 Phase 4: Mātauranga Māori hōu

Phase 3: Re-Storying, the analysis of online teaching and learning activities, specifically discussion forum activities took place from 13th August 2019, through to the 30th October 2019. Kōrero was revisited and reviewed with reference to the broader literature, followed by further discussions with Research Whānau to ensure that 1) the individual's voice was being heard and 2) a collective understanding was shared with the new knowledge that was created (Mead, 2016).

3.8.6 Data analysis

This research advocates collaborative knowledge claims, semi-structured narrative design, and spiralling interviewing discourse (Bishop & Glynn, 1999a). Stories of individuals online experiences were collected and analysed in NVivo. NVivo allowed me to analyse the rich text-based and multimedia information, in addition, to categorise, sort out and put the information in order, study relationships in the data, and combine examination with connecting, forming, probing and modelling.

3.8.7 Transcription

Each interview was transcribed directly into NVivo. Transcribing took up much time and took place in different phases. Phase 2 - Story referred to eight hours of interviews and Phase 3 - Re-storying referred to ten 40-minute interviews. I used Research Whānau initials as indicators to make the transcriptions comprehensive (example: V-L - Vicki-Lee Going).

3.8.8 Coding

NVivo allowed for the coding of different types of sources, in the case of this research text document. Coding allowed for the gathering of specific topics, themes and people (Corbin & Strauss, 1990). NVivo provided the functionality to bring the Research Whānau references together as a single node. Nodes are used to generate ideas and help identify patterns and theories in the research material. In essence, I read through the transcribed data numerous times and started to create tentative labels for chunks of data that summarised Research Whānau's words and phrases. *Figure 3* below shows an example of the themes created and the words and phrases allocated each theme.

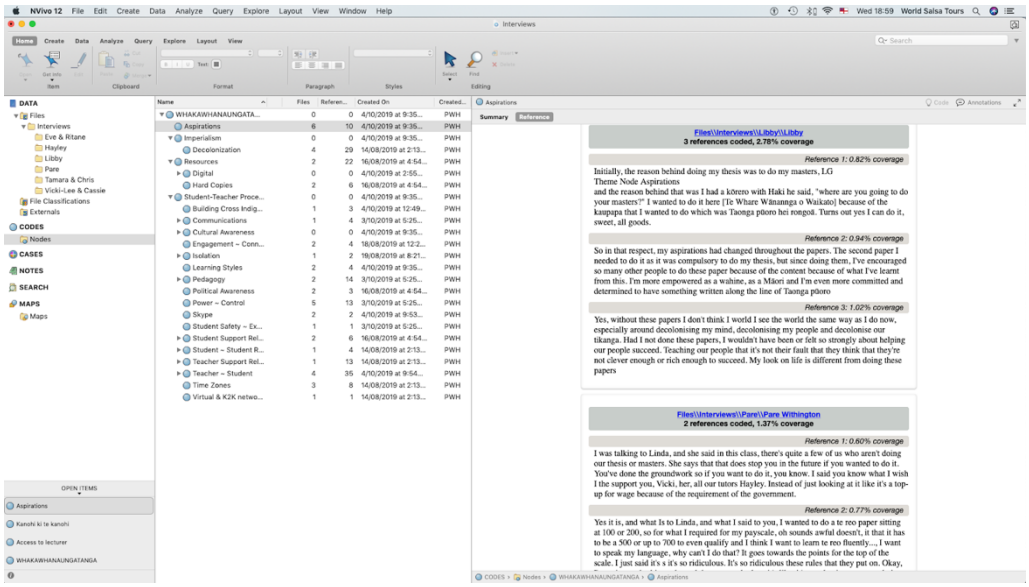

Figure 3. Codes identified in NVivo

3.6.9 Visualising, reflecting and recording

NVivo provides a suite of visualizations, the converting of data in visual formats, that helps gain deeper insights from the data. Mapping was used as the visualization tool in this research. The use of visualizations suggested commonalities, patterns, and themes that Research Whānau could compare between the transcript source (Harding, 2013). *Figure 4* highlights the themes generated from kōrero with Hayley during Phase 3: Re-Storying

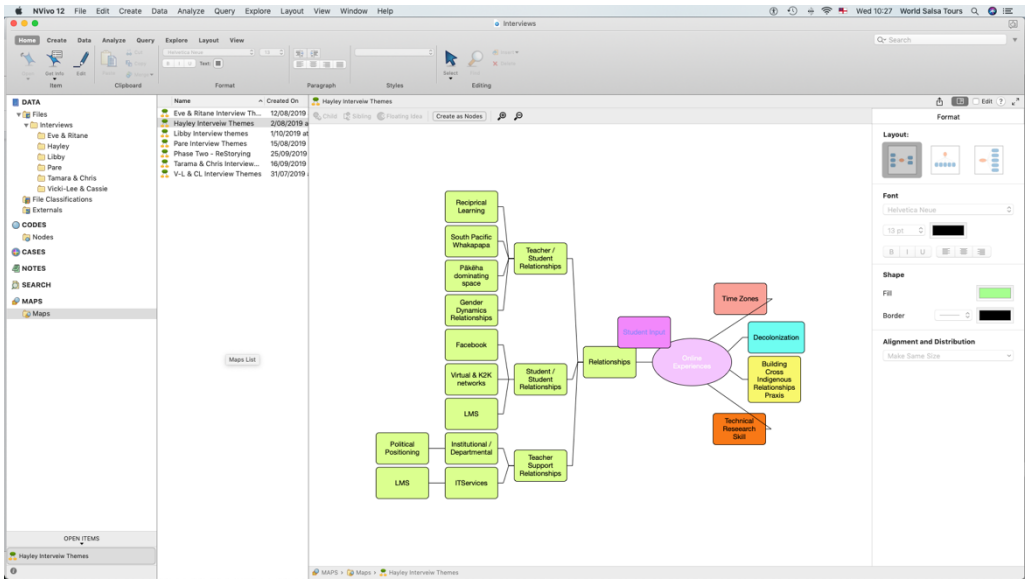

Figure 4. Themes generated by kōrero with Dr Hayley Marama Cavino

In the following section, I describe ethical issues in the research practice.

3.9 Maintaining ethical practices and trustworthiness

I reflect on Mead (2016) evaluation of the word *tikanga,* where he discusses the term in relation to ethics. Mead highlights the fact that the base word is *tika,* meaning correct or being right. This means ethical issues deal with deciding on what is considered right or wrong when researching with humans. Ethical considerations underpin Kaupapa Māori Theory research operations, guiding practices that reflect a Māori code of conduct. In qualitative research, ethics is an integral part of the research process and needs to be observed throughout the research process (Creswell, 2012; Grande, 2014). In Māori qualitative research, protocols of respect and practices of reciprocity are essential when gaining informed consent from Research Whānau (Smith, 2012). Ethical issues of right or wrong are addressed when conducting research. Thus, the research design of this project protects and seeks to enrich, empower and enlighten those who have been a part of it (Mead, 2016). Thus, all good research design includes considerations such as protecting the well-being and interests of the Research Whānau (Hammersley & Traianou, 2012).

A full application for ethical consideration from the University of Waikato was sought and granted on the 25 July 2019 by Te Manu Taiko: Human Research Ethics Committee Faculty of Māori & Indigenous Studies, Te Pua Wānanga ki te Ao, in 2019 (see *Appendix A*).

Informed consideration of research participation was paramount. Pre-interview information about the research was shared with the Research Whānau via email, Facebook instant messenger and during kanohi ki te kanohi and virtual conversations culminating in the signing of Consent Forms for Participation (see *Appendix C*). As my research was conducted with fellow participants of the graduate course, the Research Whānau were asked to consider and consent to the use of their names in this study.

Since my research is embraced by te ao Māori, from where the theory of Kaupapa Māori was born and from where the methodology of Whakawhanaungatanga has its roots, and as the research was conducted in a community consisting of Māori scholars studying in an online teaching and learning environment. I remained in te ao Māori, and I focused on Smith (2012) list of seven cultural values underscoring a Kaupapa Māori research relationship ethic. Relationships remain vital to ensuring that ethical integrity is intact. Elements of relationships were identified and explained to ensure the interests of the Research Whānau remain protected. Cram (2009) highlights the fact that maintaining respect for people is paramount while researching. Smith (2012) calls this cultural value *Aroha ki te Tangata,* which translates to, respect for people. Archibald (2008) prescribes the need to understand and respect our elder's knowledge and cultural ways, as this is essential when creating relationships with them. This genealogical connection may help to secure entry into communities and gain the support of Research Whānau.

The knowledge shared by elders provides a further element of relationships that Smith (2012) suggests, is essential. The concept of being careful within a research setting relates to Research Whānau being culturally safe. Mead (2016) reminds us that tikanga Māori will help ensure cultural safety for those involved

in the research. Smith entitles this value *Kia Tūpato*, the practice of being cautious. Cram (2009) agrees with Archibald (2008) and proposes that staying safe may mean collaborating with elders and others who can guide research processes which may help researchers to be politically astute, culturally safe, and reflexive practitioners.

Research Whānau must be understood, and their voices are heard throughout the research processes and within the research outputs. Smith (2012) advises that the researcher needs to *titiro, whakarongo me kōrero*, look, listen and then, later speak. This process helps researchers to understand people's day-to-day realities, priorities and aspirations. The researchers' understanding of the stories told by the Research Whānau also helps the researcher not trampling the mana or authority of the people. Smith entitles this principle as *kaua e takahia te mana o te tangata*.

Māori research often begins with hui (meetings) between researchers and community stakeholders to discuss the scope of and negotiate permission for, and the parameters of, a research project (Berryman, 2008; Bishop & Glynn, 1999a). *He kanohi kitea* is a form in which Research Whānau meet and engage face-to-face. Technology now provides us with alternative ways to meet and engage and now challenges the idea of face-to-face. In whatever form a hui takes place Smith (2012) value of *manaaki ki te tangata*, sharing, hosting and being generous will help develop trust and communication between the researcher and the Research Whānau. Cram (2009) supports this notion when she observes that manaaki permeates through all relationships.

The final value identified by Smith (2012) underscoring a Kaupapa Māori research relationship ethic is for researchers to remain humble. Like Bishop and Glynn (1999a), Cram (2009) suggests reciprocal learning from all interactions. The sharing of expertise between researchers and participants leads to a shared understanding that will make research more trustworthy. Researchers need to take time to understand people's day-to-day realities, priorities and aspirations.

In this way, the questions asked by a researcher will be relevant. Smith called this principle *kia mahaki*.

3.10 The research whānau

Ten participants, including myself, became the Research Whānau for this project. We represented just under 30 per cent of the participants of the online paper whose enrolment numbers were 29 (28 online students and one online facilitator, as shown in *Table 1*). The table provides information about the Māori scholars, in particular, iwi affiliations, personal online study aspirations, online background experiences and other relevant background information.

Table 1: Profile of Research Whānau

Research Whānau Participant	Age	Iwi Affiliations	Important Online Aspiration Focuses	Online Background Experiences	Other Background Information
Pare Withington. Ngāti Porou, Ngāti Rangitane. Teacher, Tauhara College, Taupo, Aotearoa.					
Online Student	60	Ngāti Porou and Ngāti Rangitane	Requirement qualification for payscale by Ministry of Education	Online courses include: B.Ed, Waikato University - 2001 MĀOR571-17B (NET): Decolonizing Methodologies: Research and Indigenous Peoples MĀORI570 (NET): Te Mahi Rangahau: Māori, Pacific and Indigenous Research Methods and Issues MĀORI514: Rangatiratanga Leadership for Māori, Pacific and Indigenous Communities Traditional, Contemporary and Futuristic Issues	Tawhina, Alternative Education, Rotorua Teacher at Tauhara College, Taupo
Elizabeth (Libby) Gray. Ngāti Rēhia, Ngāti Uepōhatu, Tama Ūpoko, Ngāti Tūwharetoa. Student Success Coordinator, Te Pua Wānanga ki te Ao, Faculty of Māori and Indigenous Studies, Te Whare Wānanga o Waikato, Aotearoa.					
Online Student	33	Ngāti Rēhia Ngāti Uepōhatu Tama Ūpoko Ngāti Tūwharetoa	Steps towards Masters	Online courses include: MĀOR571-17B (NET): Decolonizing Methodologies: Research and Indigenous Peoples MĀORI570 (NET): Te Mahi Rangahau: Māori, Pacific and Indigenous Research Methods and Issues	First-time tertiary student after 8 years out of formal education. Staff of The University of Waikato for 6 years. Māori Liaison Adviser, Future Students, Student Services

Table 1 (cont.): Profile of Research Whānau

Research Whānau Participant	Age	Iwi Affiliations	Important Online Aspiration Focuses	Online Background Experiences	Other Background Information
Eve Henderson. Nga Puhi, Tuhoe, Maniapoto, Ahitereiria. Student - Faculty of Māori and Indigenous Studies, Te Whare Wānanga o Waikato, Aotearoa.					
Online Student	34	Nga Puhi, Tuhoe, Maniapoto, Ahitereiria	Furthering education and knowledge in Māori & Indigenous Studies for Graduate Diploma	Online courses include: Te Whare Wānanga o Raukawa - Poupou Huia Te Reo and Poupou Hui Te Reo Te Hōkairangi	Previously a high school teacher in both Australia and New Zealand. Have spent 5yrs learning te reo Māori.
Dr Hayley Marama Cavino. Ngāti Whiti/Ngāti Pūkenga. Teaching Fellow, Faculty of Māori & Indigenous Studies, Te Whare Wānanga o Waikato, Aotearoa.					
Online Facilitator	45	Ngāti Whitikaupeka and Ngāti Pūkenga	Supporting young and upcoming Māori and Indigenous scholars Supporting Indigenous scholarship	MĀORI570 (NET): Te Mahi Rangahau: Māori, Pacific and Indigenous Research Methods and Issues first online facilitation experience	Living and delivering online programme from occupied Onondaga Territory (Syracuse, NY). 10 years of teacher and teaching mostly indigenous content. Teaching Fellow, Faculty of Māori & Indigenous Studies, University of Waikato. Adjunct Faculty, Native American & Indigenous Studies, Syracuse University.

Table 1 (cont.): Profile of Research Whānau

Research Whānau Participant	Age	Iwi Affiliations	Important Online Aspiration Focuses	Online Background Experiences	Other Background Information
Ritane Warahi. Ngāti Tūwharetoa. Student in the Faculty of Māori and Indigenous Studies, Te Whare Wānanga o Waikato, Aotearoa					
Online Student	29	Ngāti Tūwharetoa	Steps towards Masters	First online experience MĀORI570 (NET): Te Mahi Rangahau: Māori, Pacific and Indigenous Research Methods and Issues	Master of Arts Student
Chris Langley. Ngātiwai, Ngāpuhi, Ngai te Rangi, Tainui. Research Student in the Māori Psychology Research Unit (MPRU) in the School of Psychology, Te Whare Wānanga o Waikato, Aotearoa.					
Online Student	44	Ngātiwai, Ngāpuhi, Ngāi te Rangi, Tainui.	Enrolled in MAOR570 to access a highly regarded academic and scholar to learn and understand how to apply indigenous worldviews to research. Hoped this leads to te mana motuhake o te whānau in this academic space and other important spaces.	Completed a number of undergraduate papers online. MAOR570 was the first one that had an Indigenous focus.	Graduate student, Master of Social Science in Tikanga Māori and Māori Cultural Studies. Te Whare Wānanga o Waikato, i te Pua wānanga ki te Ao. Research Student in the Māori Psychology Research Unit (MPRU) in the School of Psychology, in the Faculty of Social Science at Te Whare Wānanga o Waikato, i te Pua wānanga ki te Ao.

Table 1 (cont.): Profile of Research Whānau

Research Whānau Participant	Age	Iwi Affiliations	Important Online Aspiration Focuses	Online Background Experiences	Other Background Information
Tamara Karu. Ngāti Tamatera, Ngāti Tara Tokanui. Midwife, Hamilton and Waikato, Aotearoa.					
Online Student	39	Ngāti Tamatera, Ngāti Tara Tokanui	Inspiration to complete postgraduate work was provided by Ngahuia Murphy, Kirsten Gable, Jolie Seed-Pihama. As research-based practitioners their work provided my clinical practice with rationale to privilege mātauranga Māori within a western maternity system. Wanted my postgrad studies to be an extension of their work and my practice.	Programme for Midwifery degree largely taught online	Bachelor of Midwifery Midwife Specialist in the Hamilton and Waikato areas.
Te Rauhina Lewis. Ngāti Kahungunu ki Wairoa, Research Assistant and Student in the Faculty of Arts and Social Sciences. Te Whare Wānanga o Waikato, Aotearoa.					
Online Student	29	Ngāti Kahungunu ki Wairoa	To learn the content, get the readings to work independently.	Online courses include: Criminology: A Sociological Introduction - SOCY311 (2018) SSRP202 - The Practice of Social Science Research	Research Assistant and student in the Faculty of Arts and Social Sciences. University of Waikato Psychology and Sociology with Honours in Sociology.

Table 1 (cont.): Profile of Research Whānau

Research Whānau Participant	Age	Iwi Affiliations	Important Online Aspiration Focuses	Online Background Experiences	Other Background Information
Vicki-Lee Going, Ngātiwai & Ngāti Kahungungu ki Heretaunga, Research Assistant with Te Mana Raraunga (Māori Data Sovereignty), Honours graduate student in Faculty of Māori & Indigenous Studies. Te Whare Wānanga o Waikato, Aotearoa.					
Online Student	51	Ngātiwai, Ngāpuhi, Te Rarawa and Ngāti Kahungunu ki Heretaunga	To complete and pass MĀORI570-19A (NET) Allow oneself to be present in this online learning portal that fully allows for Māori students to be or not be present with their online tutor	First online experience with NorthTec completing my Diploma in Applied Writing - there was no video or other interaction by the teacher and student everything was done by email and online forums only The second online experience was everything online learning should be interactive, positive	Master of Māori and Development Studies Research Assistant with Te Mana Raraunga (Māori Data Sovereignty)
Petera Hudson, Te Whakatōhea. Research Student in the Faculty of Māori & Indigenous Studies. Te Whare Wānanga o Waikato, Aotearoa.					
Online Student Researcher	61	Te Whakatōhea	Stepping stone toward doctoral studies	Studied and facilitated in a wide range of online programmes	Diploma of Teaching, Hamilton Teachers College Postgraduate Diploma in Education, Te Whare Wānanga o Waikato, i te Pua wānanga ki te Ao Master in Educational Administration, USIU, CA

Chapter 4

Research findings

4.1 Introduction

In this chapter, I present the findings related to the online teaching and learning experiences of ten Māori scholars. Focus is on the factors that contributed to optimal online conditions which allowed for the promotion of the ten Māori scholars' aspirations. This chapter also pays particular attention to whether the pedagogy of whakawhanaungatanga was a catalyst for the provision of optimum conditions that promoted te ao Māori aspirations for tertiary Māori scholars studying online. Five themes that emerged out of the interview data from the Māori scholars studying online provided a base for the findings:

1. Whakawhanaungatanga
2. Colonial Ideologies
3. Personal Aspirations
4. Whānau Networks and Support Services
5. Resources

4.2 Whakawhanaungatanga

The Research Whānau identified Whakawhanaungatanga, a Māori pedagogical principle, the building of relationships as the critical practice that influenced whether their aspirations for studying online were to be promoted. Whakawhanaungatanga helped Māori scholars navigate through the following factors:

1. Colonial Ideologies
2. Personal Aspirations
3. Whānau Networks and Support Services
4. Resources

4.2.1 Colonial ideologies

Being introduced to and creating relationships with academics and scholars who discussed colonial oppressions, who debated imperial control and who outlined theories and practices of decolonialisation was an added appeal and attraction for all of the Research Whānau to enrol in the online paper. Pare sets the scene for this section and shares the story of her colonisation before her enrolment in the online paper:

> *Teachers at Tikitiki Primary School used to take us to powhiri, our learning was to go up to the marae. Going through High School, there was nothing for Māori, things Māori were forbidden… As a learner at High School... I felt much racism, much sexism. As a Māori student, I was given the feeling that I would not amount to anything. As a Māori teacher, I was conducting a parent/teachers evening, having a conversation about a child… and I was getting the impression of "you do not know anything," from these parents. Isn't that awful, that's how I felt growing up.*

Pare finishes her story by concluding:

> *This paper is what I have needed, my soul, to make me proud of who I am. I am proud to be Māori. I am not proving my time any more. I am so blessed that even at my age, the doors of learning have opened for me and that I can embrace my Māoridom.*

Other Research Whānau have concurred with and embraced Pare's summation of emancipatory experiences recognising these feelings as underpinning their wishes to be a part of the online paper. Libby expresses her reaction to her experiences in the online paper and other decolonisation papers by saying:

> *Yes, without these papers I don't think I would see the world the same way as I do now, especially around decolonising my mind, decolonising my people and decolonising our tikanga.*

As an online facilitator, Hayley recognised her role and responsibility to enable and engage students in experiences that encouraged freedom and liberation for Māori from colonial chains and explained that:

> *So, I... felt quite a sense of responsibility for acting as a gateway to, we wanted to use our privileges and our experiences to be a transmitter and a pathway for that knowledge to flow based on our particular experiences.*

Implicit in these quotes is the suggestion that it is essential to acknowledge the historical accomplishments of Indigenous academics and scholars and non-Indigenous allies. It is also inferred that the challenges faced by Māori today because of colonisation continues to require innovative work on theory, knowledge and practice.

Respecting the tikanga of kanohi ki te kanohi

Ritane highlights his wish to incorporate into the course his need to physically meet with other paper participants. He explains that the tikanga of kanohi ki te kanohi would assist with furthering whakawhanaungatanga between participants in an online teaching and learning environment. Ritane expresses his need to sense what others are thinking. For Ritane, kanohi ki te kanohi provides a bridge for him to feel the emotional sensations of wairua. Ritane reinforces his wish by saying:

> *I think of my wairua perspective, you miss out on the warmth of the room, feeling the atmosphere of the room. Being able to connect with people through hariru, through hongi, or through hug when you first meet those people.*

Acknowledgement and respect for cultural practices are required when designing online teaching and learning courses. Ritane highlighted that his need for kanohi ki te kanohi would enhance his online teaching and learning experiences.

Remaining humble

Chris discusses his experiences working with the genre blog applications or online journaling. An assignment set asked participants to write a blog post responding to the ideas of a Māori, Pacific or Indigenous Studies thinker whose work connects with the participant's research interests. Chris shared that the research component of the assignment was not unduly arduous. However, conflicts of tikanga Māori practices emerged when it came to the submission of his blog work.

Chris outlined the conflict of tikanga Māori he experienced while preparing for the submission of his blog. Firstly, Chris felt clumsy and inexpert when writing about Dr Ranginui Walker as Chris felt his writing would not measure up to the mana of the rangatira. Secondly, Chris felt apologetic for not gaining permission from Dr Ranginui Walker's family to write the piece and finally, the pressures of placing yourself as an expert in a public forum weighed heavily on him. Chris shares:

> *When you put out a blog, you are also putting yourself as an expert with that specific kōrero that you are sharing with the rest of the world. I felt completely inadequate to be writing about such a tīpuna [Dr Ranginui Walker]. That's when that paradigm between colonial and Indigenous becomes a dangerous place for us as Māori especially when we're thinking about our responsibility to protect our world views because not always are those world views accepted by others.*

Chris' experiences involved an imbalance of power and control. Firstly, he as a Māori scholar struggling with tikanga conscience. Secondly, the pressures of assignment requirements and finally, the consequences of placing his work in a public place. Chris' experiences observed in the blog assignment reinforces the necessity to understand the way Māori scholars feel about such an exercise so to align with tikanga Māori practices inside a colonial context.

European supremacy and solid allies in Māori spaces

Not much has been written about what Māori scholars think about Pākehā being in a Māori space. The online paper was a kaupapa Māori paper, delivered by a Māori lecturer to students enrolled at Te Whare Wānanga o Waikato. Conversations around how European supremacy was informing the structures of online discussion forums during the paper started to percolate. When Research Whānau were asked: "What do you do when you are confronted with white dominance in an online discussion forum?", the responses varied, including heated concern at one end of the spectrum to an awareness of, but defiant to remain on task and not be impacted by the domination at the other end of the spectrum. The questions that need to be addressed from this kōrero were:

1. How can a person displaying this dominant positionality be made aware of their hegemonic position; and
2. What does a repositioning of power intervention look like?

Te Rauhina shared that power differentials are not limited to conventional classroom relationships alone and explained that similar struggles of power and control occurred in the online paper environment. Te Rauhina elaborates by saying:

> *It's not safe… stuff said was not relevant to the kaupapa, and it was self-centred. Straight up… there are these power dynamics things that are coming in, and the online space couldn't save us from that.*

On the reverse side of European supremacy in a Māori space, we hear the accolades and recognition of non-Māori participants in the online paper as really great allies in the processes of decolonisation. Te Rauhina shares her experience of championing a fellow non-Māori paper participant as a "solid ally".

> *She [fellow non-Māori paper participant] has had a massive breakthrough from this paper. She found a lot of areas that she was like "Ooohhh, I need*

to work on that", and you know as a Pākehā student you're going to have a totally different experience. She is a solid ally.

Summary

Research Whānau have shared varied experiences suggesting that a relationship with colonial imperialism is a feature of the Research Whānau's lives which is an aspect of the broader politics of their lives. There is an inference in the quotes that structures and practices need to be put in place to combat the oppression of European supremacy in a Māori space to ensure that Māori scholars feel culturally safe while studying online.

4.2.2 Aspirations

Research Whānau identified their te ao Māori aspirations, beginning with their initial motivations to enrol in the online paper, continuing to clarifying the growth of their aspirations by the end of the paper. Research Whānau then deliberated whether their te ao Māori aspirations were facilitated or hindered in the online environment.

Research Whānau identified personal te ao Māori aspirations as being cultural, educational, political and social. Kaupapa Māori intervention elements have been defined by (Smith, 1997). These elements have come to be known as the Key Principles of Kaupapa Māori theory. The guiding document of Kura Kaupapa Māori, Te Aho Matua, includes the Kaupapa Māori intervention elements as guiding principles (Ferguson, 2012). The Key Principles of Kaupapa Māori theory, as described in *Chapter Three,* provided a framework in which to house te ao Māori aspirations of the Research Whānau. The genius of the Key Principles of Kaupapa Māori theory is born out of the search for change factors that could develop into broader applications for learning as exemplified with the development of the guiding principles of Te Aho Matua (Smith, 1997). I contend that if Māori scholars practice the guiding principles of Kaupapa Māori theory while deliberating, contemplating or pondering personal te ao Māori aspirations, they are likely to experience successful aspirational outcomes. For this research,

the Research Whānau aspirations have been categorised into the Key Principles of Kaupapa Māori theory.

Tino rangatiratanga

Tino Rangatiratanga, allowing Māori to control their future has emerged as vital for the promotion of te ao Māori aspiration for the Research Whānau. Libby was able to articulate her determination to help create a way Māori did things in an online teaching and learning environment when she said:

> *I'm trying to think about other ways where we could change it up because this is a new space like I said before, we didn't have online back in the rā, so our tūpuna wouldn't have processed, so I guess we're kinda making it up as we go.*

Taonga tuku iho

Taonga tuku iho, a space in which Indigenous language, knowledge, culture and values are normal, valid and legitimate has also emerged as a significant te ao Māori aspiration for the Research Whānau. Chris draws attention to the opportunities offered to him through enrolment in the online paper:

> *When I think of things kaupapa Māori and having the opportunity to even do a paper such as Māori570 in a university space that speaks strictly to Indigenous aspirations, Indigenous knowledge and also explores Indigenous academics, these people that now contribute to this space... this paper gives us access, this is amazing.*

Ako Māori

Ako Māori, the culturally preferred way Māori learn emerges as a crucial element in the promotion of Research Whānau te ao Māori aspirations. Vicki-Lee describes the intangible characteristics of her online facilitator, which exuded qualities of ako Māori when she said:

> *She [online facilitator] embodied Māori, tikanga, the culture, whakawhanaungatanga, all these, she embodied it in her teaching.*

Kia piki ake i ngā raruraru o te kainga

Kia piki ake i ngā raruraru o te kainga, the implications of home and family are essential factors of consideration when discussing the promotion of Research Whānau te ao Māori aspirations. Tamara highlights her ability to pay attention to family matters, personal desires, full-time work commitments and study aspirations due to access to online teaching and learning papers:

> *As a shift worker, I do not get to decide what my roster is, and you are working nights and sleeping days. It is hard to commit to anything properly when you are working in that way. So, I was quite excited… an online paper, user-friendly provided a balance/life.*

Whānau

Research Whānau acknowledges the relationships that Māori have to one another and with the world around them. Libby outlines her feelings of responsibility and obligational relationships she has for her whānau:

> *Had I not done these papers [MĀORI570-19A (NET) and MĀOR571-17B (NET)], I wouldn't have been or felt so strongly about helping our people succeed. Teaching our people that it's not their fault, that they think that they're not clever enough or rich enough to succeed. My look on life is different from doing these papers*

Kaupapa

Kaupapa, a collective theme involving the meeting of aspirations within an online teaching and learning environment. Pare shared her wish to support a collective vision when she comments that:

> *We need the support of the collective to help us out. We can't do this journey alone, it's impossible. Māori doesn't work well in isolation.*

Summary

Tino Rangatiratanga, Taonga Tuku Iho, Ako Māori, Kia piki ake i ngā raruraru o te kainga, Whānau, and Kaupapa represent te ao Māori aspirations of the Research Whānau. Discussion by the Research Whānau then highlighted the reality that te ao Māori aspirations lived and breathed within online teaching and learning environments and with this reality came to the conclusion that te ao Māori aspirations impacted the ways Māori teachers and learners did things in online papers.

4.2.3 Students' and teachers' networks

Research Whānau has identified whānau, whakapapa, whanaungatanga and whakawhanaungatanga as dominant themes that have impacted Māori scholars while studying online. The data has been sorted into the online Students', and Teachers' Support Networks to keep the findings separate at this stage. Findings were then classified into relationship groups of:

(i) Whānau Relationships;
(ii) Teacher Relationships;
(iii) Other Student Relationships;
(iv) Support Services Relationships; and
(v) Relationships with tikanga Māori.

Research Whānau discussed relationships involving:

1. Teacher/Student ratios;
2. Emotive and formal languages use in online discussion forums;
3. Reciprocal learning;
4. Social engagement;
5. Isolation;
6. Relationships with text;
7. Relationships with spiritually;
8. Whakapapa;
9. Metaphor;

10. Building relationships;
11. Knowledge acquisition by gender; and
12. Time Zones

Student/whānau relationships

Research Whānau pointed out that student support comes firstly from whānau. Relationships built up over time with grandparents, parents, siblings, spouses, children, grandchildren, relatives, friends and colleagues make up the list of the network within Whānau support. Pare explains how her husband was an essential component in her support network when she says:

> *Sometimes, when my husband gets home, he asks, "What's for dinner", and I replied, "Okay, I'll be with you in a minute" - two hours later [laughter]. He's gone and got his own. I don't have any concerns because it's supportive for me and he's not putting any pressure on me.*

Student/teacher relationships

Research Whānau underscored the importance of student/teacher relationships while studying in an online environment. Vicki-Lee uses the terms *personalised* and *put at ease* when she described her relationship with Hayley, the online facilitator:

> *I was stressing out for nothing … it was easy to engage with her. I just felt her, you know… having that first conversation with her put me at ease for the whole paper, and it stayed that way for the whole paper.*

Low teacher/learner ratios

Research Whānau discussed how low teacher/learner ratios had been shown to promote easier whanaungatanga with the online cohort. Vicki-Lee voiced her initial thoughts about the class size of the online paper by saying:

> *My first negative thought as I logged into the paper was holy crap there are twenty-eight of us in this class!*

A fascinating discovery was made when continuing the discussion of online class sizes with Research Whānau. Vicki-Lee and Eve remarked their surprise at how quickly the online facilitator turned around the marking of set assignments considering the class size. The inferences implied with these comments is that the management structure helped negate the suggested expectation of difficulties in relationship building with the online facilitator with large class size.

Emotive and formal languages

Libby identified the necessity for the use of both emotive and formal languages in online discussion forums. Libby pointed out the ability of an online facilitator to transition between the use of emotive language and formal language helped her create a better relationship with the online facilitator that created productive and constructive online interactions. In her experience, each style of language triggered different interactions:

> *It is important the way language is used, the language the kaiako uses, how the language is written in Moodle under all the weekly tasks.*

This researcher did not have analysis structures and processes in place to examine the emotive and formal languages phenomenon experienced online by the Research Whānau and recognises this as a limitation of the research.

Reciprocal learning

Research Whānau shared the recognition that the process of learning was reciprocal; students and teachers learned from each other. Vicki-Lee shared an experience that reverses the learning model when she becomes the distributor of knowledge:

> *Hayley speaking, "I'm going to learn te reo again," she said "this was about my fourth time", [laughter] she says, "what do you recommend," she says "I've been thinking of coming back."*

Experiences of poor student/teacher relationships also contributed to emphasising the value of good student/teacher relationships. Ritane voiced his concern regarding the inability to kanohi ki te kanohi with the facilitator during the online paper. This inability to kanohi ki te kanohi with the facilitator created tension for Ritane and the possibility of an improved student/teacher relationship diminished. The online characteristic of same time/different space generated a feeling of student/teacher power and control imbalance. Ritane explains:

> *One thing that I did think was that Hayley was the teacher, and we were the students. That relationship was super obvious because of the distance we couldn't build that relationship.*

Student/teacher power and control imbalances is a vital relationship issue and will be detailed further in the next chapter, discussion.

Student/student relationships

The importance of student/student relations was identified as a support structure for Research Whānau during their online study. The need for synchronous communicative support from cohorts of the online programme was explained by Tamara when she said:

> *I had a friend who I could talk to. That was really reassuring throughout the paper that I was on the right track, and I had captured all of the kōrero that I needed to from the readings.*

Pare was able to call on a fellow student from another Institute to provide kanohi ki te kanohi support when and if required. She confirms this when she says:

When we kanohi ki te kanohi, we sit at this table, face-to-face and we talk about our online learning.

Social engagement

Te Rauhina expresses a feeling of happy satisfaction regarding social engagement with cohort:

This was great I actually networked with people as well. I sometimes, in face-to-face papers, don't do that...

Student/student support services relationships

Research Whānau identified the following support mechanisms provided by Student Support Services at Te Whare Wānanga o Waikato. These services included the Library Support Services, Information Technology Services, Māori Mentoring Units - Te Puna Tautoko, Te Toi o Matariki - Māori Graduate Excellence Programme a facility designed to support and encourage Māori excellence at the graduate and postgraduate level of studies and lastly the provision of supervision for research students.

Vicki-Lee describes her experience at a Te Toi o Matariki facilitated writing retreat:

This retreat has already surpassed my expectations and is not even day two.

Ritane expresses his appreciation for his supervisor's accessibility and availability when he says:

My supervisor up in Faculty, we'll yarn or kōrero and leave, and then I'll have another pātai, and I can always go back into his office.

Relationships with text

Research Whānau have identified relationships formed by the student and paper content as a significant association in the building of personal political cognisance. Eve declares that some of the content of the online paper has offered:

> *Indigenous perspective, wow that needs to be looked at, everything just opened up, ping ping ping, you can see how everything needs to be looked at, other than the mainstream ways.*

Te Rauhina reveals the impact that one particular text had on her personal growth when she shared:

> *I had a… real spiritual journey, real reconnection with spirituality. Then I read another book called "The Black Pacific." I was like ahhhhhh!! I'm spiritually fucked bro.*

Student/tikanga Māori relationships

Relationships with spirituality

Pare explained the importance of the cultural aspect of spiritually when studying in an online environment by revealing that:

> *Māori people are very spiritual, so when we karakia, it brings peace, peace on everyone. It makes that space safe…*

Whakapapa

Libby noted the correlation with the sharing of whakapapa and an ability to connect with online whānau when she explained:

> *Shaun Wilson talks about mihimihi te... the importance of letting others know where you're from. A Māori nei, what's your whakapapa, who do you come from, where did you grow up… So, we can make those connections.*

Metaphors

Libby identifies the use of metaphor as a tool that created further comfort for her in an online teaching and learning environment. She described how tikanga provides patterns to help transact discourse:

> *Tū atu, tū mai, the kawa, the tikanga of powhiri and whaikōrero… the traditional negotiation styles...*

Teacher support networks

Hayley, the Online Facilitator of the online paper, has identified Fellow Teacher, Teacher/Student, Teacher Support Services and Whānau Support structures as pivotal in supporting her ability to teach the online programme.

Teacher/Teacher Relationships

Hayley's genesis as the Online Facilitator of this paper was born from relationships formed with Te Whare Wānanga o Waikato friends and colleagues some years before her delivery of the online paper. Whakawhanaungatanga including social talks and chats and formal discussions uncovered a common philosophy of purpose, which Hayley describes as:

> *We were looking at ways in those conversations [what] could grow graduate work amongst Māori and Pacific scholars... how can we push to the next level if you will?*

Hayley gives consideration to the importance of the common practice of building cross indigenous relationships shared with her colleagues as they embarked on the delivery of the online paper:

> *So, in doing that mahi quite a lot of conversation and connection with Indigenous people and critical Indigenous work had happened on a global level. So, you know that's about access, it's about geography, it's about access.*

Hayley reflects that the actualisation of her facilitating the online paper was promoted through the leadership of the institutional personal and departmental structures. Hayley states:

> *Collegiality and support from other faculty, these relationships feed into my ability to teach this class.*

The origins of Hayley's online facilitation, her underpinning convictions of her and her colleagues and her professional choices significantly directed the planning and delivery of the online paper.

Teacher/student relationships

Building relationships

Living and delivering the online paper from occupied Onondaga Territory, Syracuse, New York, USA created distinctive administrative and teaching challenges. Hayley reveals that building relationships face-to-face is her preferred approach. However, working from a distance has changed this dynamic and has created new and challenging conditions. Hayley explains:

> *The way I have always worked institutionally is to form those face-2-face relationships with people. I'm not one that picks up the phone or sends an email if I can walk to your office, have a conversation with you, kanohi ki te... that was really hard actually.*

The complex role of an Online Facilitator meant that Hayley wanted to build relationships with her students and also wished to enable students to build relationships with other students. Hayley utilised a variety of online meeting configurations to try and bridge the online dynamic of distance when building and encouraging relationships with and for her students:

> *There is stuff here around the balance between group and one-on-one skype sessions as a way to try and bridge the distance. You have to figure out how to build that relationship with students while also letting them build relationships with each other...*

Hayley reminds us that the distance characteristic of an online programme adds further challenges for relations:

> *I think it's really easy for relationships to go awry when you are using electronic communication. It's hard to read tone in messages.*

Providing interventions to manage relationships in an online environment contributed further to the growth of a skill set as an online facilitator. Hayley explains:

> *It's about managing responsibilities and relationships. I had to intervene to protect the relationship that had grown...*

Hayley reminds us that an online teaching and learning environment is not shielded from power differentials in society that impact the ability of Māori to achieve te ao Māori aspirations in a Māori online teaching and learning context. Hayley opens with the comment:

> *The things that came up in this class online are the exact same things that come up when you are in a face-to-face [space].*

A challenge for Hayley was to manage the power imbalances. To help accomplish this, she needed to work behind the scenes, in one-on-one settings using online digital technologies. Not all conversations held by Hayley were as productive as the example shared below. Hayley explains:

> *In one case… and at a certain point, it's like the old saying, "you can lead a horse to water but you can't make it drink", and at that certain point, it is about damage control and intervening to make sure that the behaviour is not stopping other people from doing things.*

Knowledge acquisition by gender

A thought-provoking relationship dynamic of knowledge acquisition by gender was touched upon by Hayley. Hayley's ten years of teaching provided her with a set of structures and practices that enabled her to manage gender issues if required in her online environment. Hayley commented that:

> *I had one student who self-identified as LGBT, and we had quite a few men. I must say what I really really appreciated was that all of our men were really responsive to my conversations with them around gendering and thinking through the gendered implications of their projects.*

Teacher/teacher support relationships

Facilitating the online programme required a generic relationship building skill set. Hayley explains:

> *I've worked in institutions and academia for years and years, it's the groundwork, it's all about relationships, you have got to invest the time in getting to know people in fostering those good relationships because when you need help its those relationships that count in terms of getting the help you need in terms of ironing out the wrinkles.*

Time zones

Working alongside the Information Technology Services (ITS) was necessary for the delivery of the online programme and of even more value as Hayley was living and delivering the programme from the United States of America. Hayley explains the significance of this connection:

> *I found there were some folks in ITS that were awesome, that were really helpful… Sometimes because of the time difference, there was just a lag. Sometimes you just cannot get an immediate fix to things. So, I had to learn to be patient and to learn.*

Hayley recognised her "*limitations of teacher technical expertise*" and adds that the acquisition of a technical skillset required much effort. Hayley shared that as a new educator at Te Whare Wānanga o Waikato "*familiarity with institutional systems was a steep learning curve.*" However, she advised that:

> *Flexibility around the delivery mechanism for student work - do what works for you and what you have access to. Content/substance trumps style/process for assignments. Looking for quality of thought.*

Summary

Research Whānau shared experiences of relationships with whānau, the teacher or other students or other teachers, personnel in support services and relationships with tikanga Māori. The fostering of these relationships assisted in the promotion of Research Whānau's te ao Māori aspirations while studying online.

4.2.4 Resources

All Research Whānau highlighted resources as a significant element required to help promote their aspirations while engaged in online study. The types of teaching and learning resources include:

(i) Moodle: Online Learning Management System (LMS)
(ii) Digital Resources
(iii) Communication Technologies
(iv) Library Resources

Moodle - online learning management system (LMS)

Access to teaching and learning resources is essential to support online learning. Te Whare Wānanga o Waikato has elected to build an online learning environment in Moodle. Moodle, Modular Object-Oriented Dynamic Learning Environment (Chavan & Pavri, 2004) is a software application that provides a platform to deliver educational courses, training programmes, or learning and

development programmes. Also, Moodle enables the administration, documentation, tracking and reporting of these programmes.

Navigating the online LMS

Navigation refers to the ability to steer a pathway through a network of information resources on the World Wide Web. These resources are organised as hypertext, links to other texts or hypermedia links to other media including graphics, images, and sound and video.

Vicki-Lee described her navigation experiences as "comfortable" when working within the online LMS. Vicki-Lee said:

> *So, this wasn't my first immersion into online learning systems. When I logged into it, it was easy for me to navigate because I was comfortable with Moodle.*

Tamara had studied online using a Moodle LMS during her Bachelor of Midwifery and the online paper gave her the ability to compare the web navigation interfaces of both courses and to identify features that maximised her usability of the online LMS. Tamara shares her opinion that the complexities offered in Moodle require the facilitators of an online programme to plan and to create a logical format so to make navigation easier for students working in an online LMS. Tamara explained:

> *The layout [of MĀORI570-19A (NET) Te Mahi Rangahau] was really easy. It was clear and obvious, and to go back and find what you needed had a logical order, it made sense.*

All Research Whānau engaged with the LMS. Each Research Whānau participant shared a variety of LMS engagement experiences; however, each shared experience carried one common thread that improved the students' experiences, the participant's skill and ability to navigate within the online LMS.

Navigation frustrations

Problems while submitting assignments via the online LMS further exemplifies the need to ensure that online LMS design and creation meet the needs of the students and facilitator requirements. Ritane's annoyance can be heard when he says:

> *Rather than use the Moodle. I don't know how strict... if that was ka pai or if that wasn't ka pai. Whoever designed Moodle, if that was their intention, so maybe that needs to broaden it up so we can upload bigger files or different files.*

Online LMS training

Tamara suggests that training is essential for facilitators to ensure that the complexities of Moodle are understood and that navigation by students is a positive experience. Training becomes even more necessitated for facilitators when up-dates are introduced into the Moodle application system. Tamara confirms:

> *We've been talking about the use of Moodle and the use of training, especially with the use of up-dates. If they haven't done regular training and they [facilitators] dump stuff into the paper, I become more stressed when you're trying to meet your deliverables.*

As the online paper facilitator, Hayley acknowledges that this was her first online facilitation and alternative strategies were required to support her facilitation as no formal training was offered by Te Whare Wānanga o Waikato in the use of Moodle. Hayley recalls:

> *In terms of the technology… oh my gosh, how was I, as a nana, going to be able to figure out all this technology?*

Digital resources

Relationships with technology

Research Whānau identified documents, sheets, presentations, blogs, vlogs, audio and video files and a reading list as resource material supporting the online paper. Research Whānau concurred that digital resources distributed during the online paper provided alternative formats that suited personal styles of learning. Interacting with text is an integral component of research. However, as Libby points out an audio or video recording of a topic suited her learning style and busy schedule. Libby describes:

> *One cool thing that I really enjoyed were online videos for our readings… But we had a whole heap of Youtube videos to watch… I could put that on our big screen tv, I could cook dinner for our son, eat dinner, chuck him in the shower, I could still do all that stuff and still aro to my mahi, my Youtube mahi. That's I think a practicality thing but also other forms of engagement other than just reading.*

Having a choice of media in which students can interact with when studying online allows for student autonomy, for students to choose how they might wish to learn. Libby preferred an audiovisual form of learning material and Eve preferred reading when interacting with the text. Eve states:

> *Yeah, that doesn't really work for me [watching videos], I kinda zoned out... I have to re-watch them and re-watch them, Mmm, yeah I don't know it's weird.*

Eve does suggest that having a transcript beside her as she watches the video clip at the same time may help with her understanding of the kaupapa.

The conjecture here with these quotes is that student learning styles may need to be catered to when creating resource material for an online paper.

Communication technologies

The following asynchronous communication platforms provided asynchronous forms of communication between Research Whānau participants.

(i) Discussion Forums
(ii) Email
(iii) Facebook
(iv) Instant Message

The following synchronous communication platforms allowed for interaction between participants.

(i) Video Conferencing

All these communication platforms provided opportunities to support the paper participants academic journey.

Discussion forums

The Discussion Forum in the online LMS was used predominantly at the commencement of the online programme as a forum of introductions and scheduling online gatherings for online paper participants.

Further discussion activity themes within the Forum included Miscellaneous, Assignments, Readings, Promotional, Instructional and Announcement discussions.

Scheduling online meeting dates and times with Hayley was an essential organising component to fulfil the online paper workload. This workload included 4 hours, 2 x 2 hours each Face to Face Online meetings; 4 hours, 4 x 1 hour each Small Group Reflections and Discussions Online meetings and 2 hours, 2 x 1 hour One on One Video Conference meetings. Hayley used the Discussion Forum to complete this task.

A functionality issue with the online LMS's Discussion Forum, which is addressed further in the Whakawhanaungatanga section of this chapter but is alluded to here, is one of synchronous communications. Ritane and Chris both commented that there were times when spontaneous questions needed to be addressed immediately and remarked that the online environment sometimes hinders their wishes. Hayley's geographical location prevented spur of the moment kōrero. Ritane explained:

> *I found that I had to be a lot more organised. So, if it was a spontaneous question, it's not like I could just go and see her, I had to write it down and then wait, make sure that when she's free.*

This research was limited as it was not designed to capture and analyse Discussion Forum kōrero of Māori scholars. This limitation leaves room for further research in the future.

Email, facebook and instant message

The communication technologies of Email, Facebook and Instant Message were used on a regular base by Research Whānau. Each participant used email for various kaupapa; however, the communication flow was:

(i) Communication between Student and Facilitator
(ii) Communications between Student and Student.
(iii) Communications between Student and Support Whānau.

Communication between student and facilitator

Te Rauhina expresses the ease in which she was able to communicate and find solutions with Hayley using email:

> *For the blog, I emailed her (Hayley) and said "look I've never done a blog before and I've just read other peoples, I'm really whakamā about what I didn't put in", and her response "oh if you like you can pull it, and put it back in a couple of days".*

Communications between student and students

Chris illustrated the use of Facebook as a convenient form of communication between students:

> *I thought it [Facebook] kept us in touch. Facebook is a platform that a lot of people use. It's one where we are able to stay engaged at some level. As a user of Facebook, you can post what you're willing to share with other people.*

Communications between student and support whānau

Eve commented on how she used Instant Messages to seek support when she shared:

> *I would bounce a lot more of my questions and ideas off a friend in the course, just because she was there. I could IM [Instant Message] her 24/7 and I didn't feel like I was bugging her.*

Video conferencing

Skype, a telecommunications application that specialises in providing video chat and voice calls, was used to facilitate online hui between Hayley, the online facilitator and students. Online hui included 4 hours, 2 x 2 hours each Face to Face Online meetings; 4 hours, 4 x 1 hour each Small Group Reflections and Discussions Online meetings and 2 hours, 2 x 1 hour One on One Video Conference meetings. Both Te Rauhina and Pare have already highlighted in kōrero above the use of Skype to support friends and to self-support when in need.

Library resources

Te Whare Pukapuka o Te Whare Wānanga o Waikato, Waikato University Library provides traditional scholarly facilities and services that support online students study, learning and research within a modern environment. All printed titles housed at the Library, over a million, are accessible through borrowing

facilities. For items not available at the Library, interlibrary loan provisions can be made. eResources, including eBooks and active eJournal subscriptions, can be acquired. Academic Liaison Librarians provide research consultation, thesis guidance, copyright advice, library workshops, RSS feed recommendations, and referencing instructions, delivered online and kanohi ki te kanohi.

Research Whānau shared a mixture of negative, positive and indifferent experiences involving the Library. Vicki-Lee voiced her frustration with the unavailability of course texts by asking the question:

> *Why wasn't Shaun's book [Research is Ceremony: Indigenous Research Methods] widely available? There was only one copy in the library at the time of our first meet.*

Pare shared a similar story of library book availability when she commented:

> *I went to the library, and there are only a certain amount of books in the library for the course, and they're mostly out on loan. I had to wait until they come back in or use inter-loan with other university libraries.*

The facilitator advised the online paper participants that the reading requirements for the course were substantial. Eve acknowledged that she utilised the printed title borrowing facility of the library very sparsely:

> *I felt pretty swamped with the readings we had for most of those weeks. I just focused on what was just given to us [readings].*

Summary

The Research Whānau found that:

1. A well planned, designed and created online LMSs helps to alleviate student frustrations while navigating an online environment.

2. Students and facilitators personal digital skill abilities to navigate the online LMS were critical factors in completing set online activities.
3. It was suggested that training on the use of Moodle might be a strategy to help promote Māori scholars' aspirations while studying online.
4. Several different communication technologies were utilised to help facilitate the paper, to share communications with the course facilitator, to exchange information, ideas and news between each other and to support each other's learning while participating in MĀORI570-19A (NET) Te Mahi Rangahau online paper.
5. A wide range of facilities and services the Library now offers. Further research is required to discover whether the Library facilities and services help to promote Māori scholar aspirations engaged in studying in online teaching and learning programmes.
6. There was the frustration felt by Research Whānau caused through the lack of hard copy resources available at the commencement of the paper.
7. The importance of interpersonal relationships between students, teachers and librarians was significant.

4.3 Research findings summary

This chapter outlined important findings related to the promotion of te ao Māori aspirations for Māori scholars studying in an online teaching and learning environment. The findings firstly indicated that whakawhanaungatanga, the building of relationships was required if te ao Māori aspirations for Māori scholars studying online are to be promoted. Secondly, the findings identified four elements that Māori scholars needed to build relationships with if te ao Māori aspirations for Māori scholars studying online are to be promoted. The factors are:

1. Colonial Ideologies
2. Personal Aspirations
3. Whānau Networks and Support Services
4. Resources

These findings showed that the genesis of the promotion of te ao Māori aspirations for the Research Whānau studying in an online teaching and learning environment was whakawhanaungatanga, the building of relationships. Whakawhanaungatanga is a metaphoric act of connection which manifests into the way Research Whānau behave in and with an online teaching and learning environment.

Chapter 5

Discussion and conclusions

5.1 Introduction

In this chapter, firstly highlighted is how whakawhanaungatanga had a significant role in shaping conditions that promoted te ao Māori for Māori scholars studying in online teaching and learning environments (see *5.2*). I then examined how a Māori scholar's relationships with personal aspirations (see *5.2.1*), whānau networks and support services (see *5.2.2*), colonial ideologies (see *5.2.3*) and traditional and digital resources (see *5.2.4*) helped promote te ao Māori for Māori scholars studying online. Key findings of whakawhanaungatanga, wairua and power and control are then summarised (see *5.2.5*), and conclusions proposed, with implications for ensuring online teaching and learning environments promote te ao Māori which encompasses cultural, educational, political and social aspirations that nurture the way Māori teachers and learners do things. Finally, I re-establish the parameters of the study, acknowledging limitations (see *5.3*) and offering suggestions (see *5.4*) and recommendations (see *5.5*) as to where related research may go in future.

5.2 Whakawhanaungatanga

Research Whānau identified whakawhanaungatanga as the single most critical factor that had a direct bearing on the shaping of conditions that promoted te ao Māori for Māori scholars studying in online teaching and learning environments. Research Whānau also pointed out that when positive connections existed between Māori students and whānau, friends, colleagues, including personnel in support facilities and services; and when trusting relationships were had with digital technologies and resources encountered in the online environment, direct impact on the promotion of te ao Māori aspirations of Māori scholars studying online was experienced.

During the phase of Re-Storying, Research Whānau found four themes that required the building of a relationship with which allowed each of the Research Whānau to navigate the challenges set by these themes. These themes were:

- continual considerations of personal aspirations;
- relationships with whānau networks and support services;
- relational reflective practice of colonial ideologies;
- accessibility to and skill levels in using traditional and digital resources.

5.2.1 Continual considerations of personal aspirations

Research Whānau commented that personal aspirations functioned as motivating factors which promoted and enhanced Research Whānau's engagement and active participation in the online course. Pare discussed the decolonisation of her heavily colonised past, and Chris discussed the opportunity to explore Indigenous scholars. Both discussions being examples of motivational factors identified by Research Whānau that reminds us that supporting the wishes of self-determining online students is paramount to ensure students' engagement and active participation in online courses (Campbell, 2004; Gedera et al., 2015; Lai, 2017; Oga-Baldwin, 2015).

Ferguson (2012), Waiti (2005) and Wylie et al. (2003) support the notions of:

1. Māori taking control of their future and add to the need to promote the validation of Māori language, knowledge, culture and values;
2. Champion the practise of ako Māori;
3. Aid the intertwine of family and home in the success of the student;
4. Reinforcing the relationships that Māori have to one another, and the world around them is acknowledged; and
5. Advance a collective Māori theme.

Research Whānau also identified these notions as motivational factors that helped create the promotion of aspiration of Māori scholars while studying online. *E-Aorangi: An indigenous model for e-Education* is a significant piece of research as the study outlines some critical indicators for the successful transfer of Māori pedagogical practices from conventional to a tertiary online

teaching and learning environment (Ferguson, 2012). Ferguson sees online teaching and learning as a way forward for students and educators geographically disadvantaged or those residing outside of the boundaries of the institution delivering the course. She discusses tikanga Māori practices that her research identified as crucial elements for a Māori online teaching and learning environment. Ferguson identified the tikanga of kanohi kitea, whatumanawa, wairuatanga, te reo, manaakitanga, tautoko, mana motuhake as the critical elements for successful teaching and learning for Māori students in a tertiary online environment. These elements are all fundamental to being Māori. Kanohi ki te kanohi or face-to-face communication is a facet of human behaviour. Whatumanawa a personal and universal subconscious connection with the ability to unlock the potential within. Wairuatanga, traditional spiritual beliefs and practices. Tautoko, to be visible and to support. Mana motuhake referring to Māori self-rule and self-determination. These elements paralleled with te ao Māori aspirations identified by the Research Whānau of this research and then collated within the six fundamental principles of Kaupapa Māori.

Libby was able to articulate her experience of determination, her aspiration for tino rangatiratanga which involved creating tikanga practices within an online environment, providing new ways for Māori scholars to do things online (Porima, 2004; Tiakiwai & Tiakiwai, 2010; Waiti, 2005; Wylie et al., 2003). Libby spoke about how she believed her tūpuna could not have conceived and would not have processed the concept of online teaching and learning, so it was therefore up to her and other Māori scholars to develop online tikanga. Ferguson (2012) argues that mana motuhake, a Māori term meaning a unique or separate authority or prestige, or a preferred translation by the researcher, is a unique authority or control over one's destiny. By assuming tino rangatiratanga and mana motuhake aspirations, Libby exercised more control over change processes and results (Smith, 1997).

Chris commented on how traditional or digital readings provided opportunities to create a relationship with the writer and explore and appreciate the stories bestowed upon him by Indigenous academic tuakana and tūpuna. The practice

Chris elaborated on in his shared experience is known by Māori as Taonga Tuku Iho, the practice of reflecting on gifts handed down by our ancestors. In the case of Chris, he reflects on the research contributions passed down to us by our *tuakana* (older siblings) and *tūpuna* (ancestors). Māori health models such as Te Whare Tapa Whā (Durie, 1998), the four cornerstones of Māori health, and guiding documents such as Te Aho Matua, the foundation document and driving force for Kura Kaupapa Māori, both include the practice of Taonga Tuku Iho.

Vicki-Lee describes the intangible characteristics of her online facilitator, which exuded the qualities of ako Māori. Vicki-Lee's aspiration of being taught in her preferred way was experienced while enrolled in the online paper. Literature certainly supports the positive experiences of Māori learners when the structures and processes of ako Māori are practices in an online environment. Pere and Te Kohanga Reo Trust (1994) points out that the complexity of the various elements of ako Māori works together to create an ideal space of learning. Tiakiwai and Tiakiwai (2010) discuss collaboration as a significant factor that helps create an engaging online environment. Loughran (2013), Scardamalia and Bereiter (2006), Waiti (2005), Wylie et al. (2003) and Wenmoth et al. (2015) and remind us that the focus for all educators is on the student's needs and that successful online teaching and learning is dependent on sound pedagogical approaches.

Ferguson (2012) revealed the impact that mothers and wives returning to tertiary study in conventional and non-conventional learning contexts had on their whānau. Mothers and wives returning to tertiary study aligns with the element of tikanga of kia piki ake i ngā raruraru o te kainga used in this research to describe how the implications of home and family structures within Māori socio-economic circumstances are essential factors of consideration when discussing the promotion of Research Whānau te ao Māori aspirations (Smith, 1997). Tamara highlights that as a shift worker, she found that the online paper opened up the option for her not to have to stop her life. As a shift worker, Tamara did not get to decide her roster. She found it hard to commit to anything properly when she was working days one shift and nights the next. Studying online excited Tamara as it became user-friendly, providing a balanced work/life

perspective. Tamara's experience is an exemplar of how Smith (1997) described the elements of intervention as principles to be used in broader learning applications. The online paper alleviated the marginalisation of the family that is typically created by time dependence of regular class timetables for Tamara. Online course design provided flexible teaching and learning times for Tamara meaning family time could be planned and scheduled.

The kaupapa of supporting other online course participants to complete the programme was a collective vision experienced and observed by Pare. The Ministry of Education (2003) released the Government's vision and strategy document that recognised the challenges faced by New Zealanders using online teaching and learning environments and suggested that a shared vision of the kind of learning environment we want to create was required. Like Pare, some of the individual aspirations of the Research Whānau were promoted in the online teaching and learning environment as supporting fellow students and creating an online environment that was safe and culturally friendly.

The literature illuminated many of the findings involving Māori scholar aspirations to enrol in the online paper. However, there is a shortfall in research involving the online facilitator's professional aspirations involving employment structure offered by institutions. The online facilitator noted that as a contracted employee of the tertiary institute, this status provided her with more freedom around what type of trajectory she as a facilitator has in academia. She explained further that as a contracted employee, she had the freedom to manage her time according to her own needs which mattered in terms of how the course was experienced.

Tertiary institutes contractual arrangements in Aotearoa are governed heavily by employment legislation. Māori students and teachers have struggled with the universities at several levels including culture, language, institutional bureaucracies, staffing and resources (Pihama, 2017). This research was not designed to investigate academic struggles in tertiary institutes, however, the internal governance context in which online facilitators work has shown to have

an impact on how the teacher can facilitate or hinder the promotion of te ao Māori aspirations of Māori scholars studying online and is worthy of further research.

5.2.2 Relationships with whānau networks and support services

Research Whānau spoke about relationships developed between themselves and their teachers and fellow students, whānau, friends, and colleagues including personnel in support services and highlighted that these relationships were the most influential relationships that promoted te ao Māori aspirations of Māori scholars studying in an online teaching and learning environment.

Pare explains how her husband was an essential component in her support network while studying online and Vicki-Lee underscored the importance of the student/teacher relationship while studying in an online environment. Tamara discussed the importance of student/student relations during her online study and Ritane expressed his appreciation for his supervisor's accessibility while working online. Hayley acknowledged that her relationships with colleagues fed into her ability to teach online. Hayley recognised the complexity of building relationships with her students, encouraging relationships between students and other students. Hayley revealed the importance of her relationship with Information Technology Services (ITS) personnel when developing the LMS.

Bishop and Berryman (2006) and Tiakiwai and Tiakiwai (2010) emphasises the importance of quality relations between the teachers and colleagues, teachers and students, students and students, and between schools within communities. The KAWM project was developed to forge relationships between schools so to encourage greater sharing of resources and expertise and the use of ICT (Roberts, 2009; Waiti, 2005). Providing opportunities to create relationships and networks for teachers, students, and the wider community was exemplified in the KAWM project.

There has been some discussion about whether it is the design of the online teaching and learning environment or the use of particular technologies that improve learning (Ally, 2004). This research has observed a correlation between

the relationships between the online teacher and student and the participation and engagement of the student during learning activities. However, like other studies (Ferguson, 2012; Lai, 2017), this research highlighted the limited range of literature about pedagogical practices and relationships between Māori students and online facilitator. This research was also limited in its design to capture data regarding teacher and student online relationships with Support Services.

The literature review introduced the blended or mixed modality of learning concept (Sharpe et al., 2006). Research Whānau also identified with this pedagogy by highlighting their wish for kanohi ki te kanohi classroom engagement with their online facilitator and fellow students. Chris acknowledged the importance of a physical meeting, the opportunity of being in the same room as other people, as it provides for him a more genuine environment when sharing ideas.

Ritane, however, suggested that blending an online gathering and face-to-face meetings were not only to deliver instructional content online as in traditional classroom settings but more so as a tool to acknowledge cultural understanding and to provide a bridge for Ritane and his fellow students to feel the emotional sensations of wairua. Pere and Te Kohanga Reo Trust (1994) explains that as Māori, we are embraced by wairua, our spiritual beliefs. Wairua is a non-physical spirit which resides in us as we live our day to day lives. Literature acknowledges the cultural diversity of participants in online teaching and learning environments. It provides evidence that online teaching and learning practices need to seek ways to improve opportunities for people from other countries and cultures who have alternative knowledge systems (Earl, 2015). However, literature regarding the relationships between a blended learning pedagogy in an online teaching and learning environment and the enhancement of tertiary Māori scholars' emotional sensations of Wairua is very minimal.

Eve commented on the satisfaction she felt with the amount of access she had to the online facilitator. She elaborated that she enjoyed the feedback and enjoyed

how Hayley gave her feedback. Eve voiced her surprise of how quick Hayley's turn around on marking was. Kanohi kitea, visibility and access of the facilitators by students in the online teaching and learning environment was seen as an essential element for creating whanaungatanga between the students and the teacher (Ferguson, 2012).

5.2.3 Relational reflection of colonial ideologies

Pihama (2017) suggests that colonial imperialism is the root of Māori scholar struggles at tertiary institutions. The struggles for Māori scholars studying in Te Whare Wānanga o Waikato stem from conflict between mātauranga Māori and the colonial knowledge system which is deeply rooted in the hereditary genes of the institution (Pihama, 2017). Mead (1996) calls this context a deliberately colonial imposed fragmentation. Te Rauhina shared her experiences of deliberately colonial imposed fragmentation in the online teaching and learning environment as a cautionary narrative with a perspective of putting things in place that could offset these feelings of dominance. Te Rauhina acknowledged the discomfort she experienced due to colonial impositions. Te Rauhina commented that colonial impositions are dangerous for people of colour. This imposition minimises and silences, and when people of colour are silenced, it reaffirms their place that other voices of society tell us we are in (Blackwell, 2018). Te Rauhina attested that the online paper should not have been a place that was dangerous for Māori scholars; it should be a place of uplifting.

Hayley asked the question if Māori scholars are confronted with the imposition of colonial imperialism in face-to-face classes at tertiary institutions, then why would we not expect the same things in an online teaching and learning environment? Hayley explained that her classes tended to attract Pākehā students. The MĀORI570-19A (NET) Te Mahi Rangahau online paper was no different. Hayley described that she found herself in a situation that could directly address the repositioning of power of students in her online class. Colonial impositions experienced in the online environments are the same as the experiences that are informed by white dominance in hooks' (1992) example of confrontation of racism at a conference she attended. As a ten-year contracted part-time teacher, Hayley has been dealing with these similar experiences in her

conventional classes. Hayley explains that her management strategy to address the repositioning of power is to work with students behind the scenes in one-on-one conversations around the concept of privilege. She emphasised that this was the case for all her Pākehā students in the online paper. Hayley admits that different students require different degrees of conversation. Hayley acknowledges that she has been fortunate as she has had some excellent Pākehā students in her class, students that sometimes found themselves in awkward situations and had to work hard to move out of their discomfort. By approaching the topic in this way, students can understand the concept of privilege as it affects all members of society, and they can work to be allies to help in the deconstruction of western ideologies not just to Indigenous peoples but to all marginalized peoples (Smith, 2012; Spivak, 1996).

Pare shared her experiences regarding navigating her way through the colonial ideologies and undergoing personal emancipatory breakthroughs. Pare explained this by her embracing the commentary of Sandy Grande (2014) when Grande suggests being fluent, familiar, and conversational in the roots of Western theories so that we can dismantle and break down these theories for us to create our approaches. Pare's immersion in the works of contemporary Indigenous scholars including Archibald (2008), Bishop (1991), Pihama (2001), Smith (2012), Smith (1997) and Wilson (2008) have been the catalyst for her liberating advancements. Libby explained that her connections with the ideologies of colonialism and with the aid of reflective practice, her outlook on life have changed and she would not have been so committed to creating opportunities of success for her whānau.

Hegel's theoretical construction of Master-Slave dialectic was re-lived by Tamara and Chris when they recount their struggles during the completion of a MĀORI570-19A (NET) Te Mahi Rangahau online paper blog assignment (Fanon, 1968). Students were asked to write about an Indigenous studies thinker whose work connected with their research interests. Tamara related to a power/control dynamic she felt when asked to place a piece of writing online in a public space. She felt that she had not given the piece of writing enough

attention, and therefore the compulsion of submission into the public space created a relationship of control. Chris also felt similar relational emotions when he recalled his experience of humility when working on the same assignment. The feeling of inadequacy to write about an esteemed personality and then to follow the instructions of placing the writing in a public forum created a power/control struggle that weighed heavily upon both Research Whānau.

Grande (2014) and Smith (2006) discuss the utilisation of both Indigenous and non-Indigenous allies to grow support when strengthening positionality on Indigenous sovereignty issues. Smith provides an example in Aotearoa where social media networks are being used to mobilize Indigenous movements, as well as build momentum for these projects with non-Indigenous allies. The agenda of language regeneration here in Aotearoa has seen the promotion of te reo Māori by non-Indigenous allies. Te Rauhina discusses her experiences of championing fellow non-Māori course participants as a "solid ally" explaining that a Pākehā student was going to have a different experience in a kaupapa Māori environment of teaching and learning. Morcom and Freeman (2018) suggest that the transitioning between niinwi, "we but not you," and kiinwa, "you all but not us," to kiinwi, "you and us (together)," provides a conscious ally-building platform in education. Transitioning goes a long way to describe the process that Te Rauhina commented on that the non-Māori ally identified areas of discomfort while enrolled in the online paper and worked hard to understand her discomfort.

5.2.4 Accessibility to and skill levels in using traditional and digital resources

A correlation between whakawhanaungatanga and traditional and digital resources and the online facilitator was observed during this research. Messages of instruction by the facilitator supported traditional and digital resources placed in the LMS for students. These conversations assisted the student to navigate assignment activities (Ally, 2004). It can be argued that communication technologies are a platform to carry out kōrero, whether it be written, audio or video. This kōrero provided the forum for whakawhanaungatanga to take place. This research supported the idea that whanaungatanga between teachers,

students and Academic Liaison Librarians is a bridge to the various traditional and digital resources available through the Library support services.

Literature supported the need for professional development to assist online teachers in the effective integration of the variety of digital technologies available to support online teaching and learning. As Pare pointed out, identifying the need for personal competence and comfort with possible technical challenges is vital to assist with effective online teaching and learning (Anderson, 2004; Lai, 2017; Tiakiwai & Tiakiwai, 2010; Waiti, 2005; Wylie et al., 2003). Lai (2017) pointed out that more recently, a mentoring programme in Aotearoa had been set up to support online teachers where participants shared ideas and explored new pedagogical practices.

Research Whānau also suggested that initial student training interventions were warranted to ensure efficiency in LMS navigation. Research Whānau commented further that skill-building of technical capability for themselves as students tended to be individual upskilling or through informal learning with friends and colleagues during online or kanohi ki te kanohi get-togethers. Te Rauhina was the only Research Whānau to take up the offer of research software training by Library Support Services.

The online environment is a teaching and learning space created in a predominantly European setting, providing the opportunity to deliver a kaupapa Māori paper, by Māori lecturers for Māori scholars. The digital technologies used in online delivery are born from colonial hereditary information as their development and creation came from colonial based software businesses. An interesting finding in this research has been the suggested reconstruction of colonial hereditary informed technologies so that the technologies become aware of the relationships practised by Māori scholars. Literature is scarce regarding relationships between students and the teaching and learning resources which warrants further research (Ferguson, 2012; Lai, 2017).

Research Whānau shared a mixture of positive, negative and indifferent experiences with the library. Eve commented that she did not feel the need to visit the library during the online paper and this no library visit was born out by Ferrier-Watson (2015) who remarked on the infrequency of physical and virtual visitations to the library. Eve's decision not to visit the library was brought about by a substantial online reading list repository provided by the online facilitator. The dynamic of studying from a distance necessitated a closer relationship with Academic Liaison Librarians and Library support services. Relationships were built to help facilitate software training, tutelage in reference styles, reference inquiries and acquisition of books through the library loan system and interloan processes. Literature involving online Māori student relationships with Library support services is limited. For Library support services to assist learners to develop digital, critical and information literacies, further research is required to identify interventions that "capture the hearts and minds of these students to assist them in developing digital smarts in order to become effective 21st-century learners" (Ferrier-Watson, 2015, p. 141).

5.2.5 Whakawhanaungatanga, wairua and power and control

Whakawhanaungatanga

The research found evidence that whakawhanaungatanga between the teacher and students, the teachers' and students' whānau networks, and the teachers and students who had confident relationships with digital technologies and resources encountered in the online environment, created conditions that promoted te ao Māori. However, two significant gaps in the literature, of not only Māori studying online but across the entire spectrum of tertiary students studying online, were identified during this research (Ferguson, 2012; Lai, 2017):

1. There is a limited range of research about pedagogical practices and relationships between Māori students and the online facilitator; and
2. That the literature is limited, focusing primarily on the relationships between student and students while studying online.

Wairua

The literature discusses the use of blended or mixed and flipped forms of online teaching and learning (Lai, 2017). The notion is to optimise learner-centred practices, which in turn leads to learner motivation and engagement. Research Whānau identified with these practices and commented on the importance of how a blended approach of online teaching and learning and kanohi ki te kanohi gatherings provided the opportunity of being in the same room as other people, as it provided a more genuine environment when sharing ideas. It was, however, Ritane who started a conversation around the blended teaching and learning environments, supporting the importance of people meeting at the same time in the same place but not necessarily for the same purpose. Ritane submitted that these kanohi ki te kanohi gatherings were required to provide a bridge for himself to feel the sensation and connection to wairua. Much is discussed by Māori scholars regarding the essences of wairua (Durie, 1998; Mead, 2016; Pere & Te Kohanga Reo Trust, 1994; Smith, 2012), but very little is known or understood around linking the emotional sensations of wairua and the motivation and engagement of a Māori participant in an online teaching and learning environment.

Power and control imbalances

Hayley asked the question if Māori scholars are confronted with the imposition of colonial imperialism in face-to-face classes at tertiary institutions, then why would we not expect the same things in an online teaching and learning environment?

Some Research Whānau identified a distinct power and control imbalance between themselves and the online facilitator compounded by the inability to kanohi ki te kanohi because of the facilitator living in a 17-hour time zone. This situation was exacerbated by the inability of the student to feel the emotional sensations of wairua. This inability to feel the emotional sensations of wairua impacted motivation and engagement in an online teaching and learning environment for the Māori scholar. Very little is known or understood around linking the feel of the emotional sensations of wairua and Māori scholar

motivation and engagement in an online teaching and learning environment. This scenario provides a specific kaupapa requiring further research.

Libby commented on how an online facilitator was able to use written discourse in social media technologies to help keep an equal balance of power and control. The online facilitator was able to nurture empathy, exclude anti-deficit exchanges and create a reciprocal learning context (Bishop & Glynn, 1999a; Ivanic, Clark, & Rimmershaw, 2000). This research was limited in its design to collect data regarding this experience. The literature review identified non-Indigenous research involving effective written discourse theory. However, limited research has taken place involving the utilisation of productive written discourse in using social media forums with Māori scholars studying online.

It is essential to look for contributions from this research and Hayley's question provided a stepping stone to develop a theoretical framework that provides strategies for online facilitators to address the repositioning of power of students in an online class. Classical and contemporary researchers have continued to debate colonial power and control oppression (Bishop, 1991; Fanon, 2005; Freire, 1993; Smith, 1997; Smith, 2012). However, little can be found regarding the establishment of strategies to address these oppressions in an online teaching and learning environment. As we have seen with the popularity of online courses, traditional teaching and learning pedagogies cannot be transferred directly into an online teaching and learning environment (Lai, 2017). The same should be said that developing strategies to address the repositioning of power and control in online teaching and learning environments are born from the historical debate of the same oppression in society but not necessarily identical.

5.3 The limitations of this study

This research represented just under 30 percent of an online class of 29 participants. This research cohort is a limitation in that it is a small student group studying online and more specifically represented only one online facilitator. This limitation provides, however, the potential for further research around Māori students studying online and online facilitators.

The second limitation involved the kōrero carried out in asynchronous and synchronous communications technologies, Discussion Forums, Email, on Facebook and Instant Messenger between Māori scholars and their network whānau could not be collected and therefore not analysed. All Research Whānau commented that support from their Whānau Networks and Support Services was influential in the attaining of their aspirations. This data from Discussion Forums, Email, Facebook and Instant Messenger may have provided further written discourse relevant to the support of Māori scholars studying online. Data from Discussion Forums, Email, Facebook and Instant Messenger may have provided relevant information allowing further examination of the use of emotive and formal written languages in social media technologies to help keep an equal balance of power and control between the student and the teacher.

The third limitation involved tertiary institutes contractual arrangements in Aotearoa which are governed heavily by employment legislation. Māori students and teachers have struggled with the universities at many levels including culture, language, institutional bureaucracies, staffing and resources (Pihama, 2017). This research was not designed to investigate academic struggles in tertiary institutes, however, the internal governance context in which online facilitators works has shown to have an impact on how the teacher can facilitate or hinder the promotion of te ao Māori aspirations of Māori scholars studying online and is worthy of further research.

5.4 Contributions of this thesis

This research has been about ten Māori scholars studying in the MĀORI570-19A (NET) Te Mahi Rangahau: Māori, Pacific and Indigenous Research graduate online paper. The research showed the significance of whakawhanaungatanga between the teacher and students; between teachers' and students' whānau networks; and when the teacher and students had confident relationships with digital technologies and resources encountered in the online environment, created conditions that promoted te ao Māori which encompasses cultural, educational, political and social aspirations that nurture the way Māori scholars studying in online teaching and learning environments.

This research provided further affirmation of the work carried out by Ferguson (2012), Porima (2004), Laws et al. (2009), Waiti (2005) and Wylie et al. (2003), of the correlation between positive relationships nurtured and increased participation and engagement by Māori scholars while studying online. By attending to student and online facilitator experiences, this study lends more insight into online teaching and learning for Māori scholars compared to research designed to analyse written discourse posting of students in social media.

5.5 Recommendations for further research

This research confirms that Māori scholars studying online are not protected from the impositions of colonial imperialism that face students in on-campus classes held at tertiary institutions. This research highlights the need for and opens up further research opportunities to answer the questions:

1. How can a person displaying this dominant positionality be made aware of their hegemonic position; and
2. What does a repositioning of power intervention look like?

This research uncovered the need for further cultural awareness when designing an online teaching and learning environment for Māori scholars. Ritane highlighted his need for kanohi ki te kanohi gatherings to provide a bridge for himself to feel the emotional sensations of wairua. Much research has been completed on helping to define elements of wairua. This research provides an opportunity to research for further knowledge and understanding around linking the feel of the emotional sensations of wairua and Māori scholar motivation and engagement in an online teaching and learning environment. With the rapid growth of online teaching and learning around the world, research is limited to online pedagogical practices and teacher-student relationships, which provides an opportunity for further investigation.

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Appendices

Appendix A: Ethics approval

1

Te Kāhui Manu Tāiko
Human Research Ethics Committee
Te Pua Wānanga ki te Ao
Faculty of Māori and Indigenous Studies

Private Bag 3105
Hamilton 3240
Phone: 64-7-838 4737
E-mail: fmis@waikato.ac.nz

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

A Dichotomy: Can a Māori worldview, exist within a western institute's online Student Learning Management System?

Consent Form for Participants

I have read the **Participant Information Sheet** for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study at any time, or to decline to answer any particular question in the study. I agree to provide information to the researchers and agree our kōrero is confidential and your name will not be used, unless it is considered necessary which will be indicated by yourself.

I consent / do not consent to have my name used in this study. (Delete what does not apply)

I agree to participate in this study under the conditions set out in the **Participant Information Sheet**.

I would like my information: (circle option)
a) returned to me
b) returned to my whānau
c) other (please specify) _____

I consent / do not consent to the information collected for the purposes of this research study to be used for any other research purposes. (Delete what does not apply)

Participant's Signature: _____

Participant's Name: _____

Date:

Appendix B: Research information

Te Kāhui Manu Tāiko
Human Research Ethics Committee
Te Pua Wānanga ki te Ao
Faculty of Māori and Indigenous Studies

Private Bag 3105
Hamilton 3240
Phone: 64-7-838 4737
E-mail: fmis@waikato.ac.nz

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

A Dichotomy: Can a Māori worldview, exist within a western institute's online Student Learning Management System?

Research Information Sheet - Interview

Tēnā koe,

Ko Petera Whanai Hudson ahau
Kō Mākeo rawa kō Maungarangi nga maunga
Kō Waiaua rāua kō Otara nga awa
Kō Omarumutu rāua kō Terere nga marae
Kō Ngati Ruatakena rāua kō Ngati Ngāhere nga hapū
Kō Nuhutere rāua kō Mātaatua nga waka
Whakatohea te iwi

I am conducting research seeking to investigate whether the Waikato University's Online Student Learning Management System (SLMS) provides opportunities to create conditions that promote te ao Māori (Māori worldview) which encompasses cultural, political and social aspirations that nurtures the way Māori teachers and learners do things?

The aim of this research project is to gain perspectives from our leading academic, Dr Hayley Cavino and us, her student cohort. This research aims to explore teaching and learning practices whilst in Waikato University's online LMS to establish the factors that facilitate or hinder optimal conditions that promote cultural aspirations that nurtures the way Māori teachers and learners do things.

In seeking verification of the research aim this research will:

1. Identified factors that facilitated or hindered optimal conditions that promoted aspirations for Māori scholars by,
    a. investigating whether tikanga Māori, influences the way Māori teachers and learners do things in an online environment, and
    b. asking participants to consider whether the pedagogical factor of relationship is a catalyst for the provision of optimum conditions for Māori teachers and learners to do things.

As this research is examining the allying relationships of Waikato University's online teaching and learning space and the capability of this space to encourage a Māori worldview, which encompasses cultural, political and social preferences, this research provides an opportunity to underpin the research with Kaupapa Māori Theory.

Our research will utilise a research methodology reconceptualised by Russell Bishop, known by Māori as whakawhanaungatanga. Whakawhanaungatanga provides a space of family-like context where collaborative

Appendix C: Consent form for participation

1

Te Kāhui Manu Tāiko
Human Research Ethics Committee
Te Pua Wānanga ki te Ao
Faculty of Māori and Indigenous Studies

Private Bag 3105
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THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

A Dichotomy: Can a Māori worldview, exist within a western institute's online Student Learning Management System?

Consent Form for Participants

I have read the **Participant Information Sheet** for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study at any time, or to decline to answer any particular question in the study. I agree to provide information to the researchers and agree our kōrero is confidential and your name will not be used, unless it is considered necessary which will be indicated by yourself.

I consent / do not consent to have my name used in this study. (Delete what does not apply)

I agree to participate in this study under the conditions set out in the **Participant Information Sheet**.

I would like my information: (circle option)
a) returned to me
b) returned to my whānau
c) other (please specify) _____

I consent / do not consent to the information collected for the purposes of this research study to be used for any other research purposes. (Delete what does not apply)

Participant's Signature: _____

Participant's Name: _____

Date: